Almond Working Group

INC 3D ONLINE CONFERENCE
The Nut & Dried Fruit Global Online Forum
May 25-27, 2021

INC international Nut&DriedFruit

Panel

- Chair: **Brian Ezell**, Vice President, Wonderful Pistachios & Almonds, USA
- Panel:
  - **Laura Gerhard**, Director of Strategic Planning and Marketing, Blue Diamond Growers, USA
  - **Craig Duerr**, Vice President, Global Sales & Marketing, Campos Brothers Farms, USA
  - **Paul Thompson**, Managing Director, Select Harvests, Australia
  - **Antonio Pont Jr.**, President, Crisol de Frutos Secos, Spain
  - **Raju Bhatia**, Founder and Managing Partner, California Agri Nuts Corporation, India

Program

- 1. Presentation of Panel
- 2. Presentation of INC Official Statistics Table
- 3. Panel Discussion by Major Producing Region
  - CY'20 & CY'21 Crop Size, Acreage, & Demand
  - Almond Market Demand Spotlight – India
  - Almond Market Supply Spotlight – Spain & Portugal.
- 4. CY'20 General Demand Factors – All Markets
- 5. Almond Industry – Challenges for 2021 & Beyond
- 6. Drought & Water Supply Outlook for California
- 7. Q&A
- Wrap-up and Thank You's!

Antitrust Statement: The fundamental purpose of this session is for the participants to discuss different aspects of the nut and dried fruit industry. It is the policy and practice of the INC Foundation to conduct all its meetings and activities in strict compliance with antitrust and competition laws. There shall be no discussions of competitively sensitive information, including but not limited to prices, rates, coverage, market practices, claims settlement practices, customers or any other competitive aspect of an individual company's operation. INC participants to this meeting commit not to enter into any agreements between undertakings, decisions by associations or undertakings and concerted practices which may affect trade and which have as their object or effect the prevention, restriction or distortion of competition within the internal market. Each participant is obligated to prevent any discussion from falling outside these bounds.

INC Official Statistics: Almonds CY'20 & CY'21

INC 3D Online Conference - May 2021

Updated Figures as of 5/21/21

ESTIMATED WORLD ALMOND PRODUCTION

Kernel Basis · Metric Tons

	2020/2021				2021/2022			
COUNTRY	BEG. STOCK	CROP	TOTAL SUPPLY	ENDING STOCK	BEG. STOCK	CROP	TOTAL SUPPLY	ENDING STOCK
USA*^ (MM lbs)	**450**	**3,046**	**3,496**	**635**	**635**	**3,136**	**3,771**	**612**
USA* (MT)	204,117	1,381,570	1,585,686	288,031	288,031	1,422,466	1,710,497	277,599
SPAIN	6,000	115,633	121,633	25,000	25,000	109,216	134,216	21,650
AUSTRALIA	6,000	111,100	117,100	8,000	8,000	123,000	131,000	10,000
PORTUGAL	0	12,000	12,000	0	0	15,000	15,000	0
TURKEY	500	16,500	17,000	500	500	17,000	17,500	500
IRAN	0	6,000	6,000	0	0	4,000	4,000	0
TUNISIA	0	16,000	16,000	0	0	16,500	16,500	0
MOROCCO	0	14,000	14,000	0	0	13,000	13,000	0
CHILE	850	11,000	11,850	650	650	12,000	12,650	0\
ITALY	0	10,000	10,000	0	0	8,500	8,500	0
GREECE	0	7,000	7,000	0	0	4,000	4,000	0
OTHERS	0	30,000	30,000	0	0	30,000	30,000	0
WORLD TOTAL	**217,467**	**1,730,803**	**1,948,269**	**322,181**	**322,181**	**1,774,682**	**2,096,863**	**309,749**

WORLD CONSUMPTION (T. Supply - End. Stock)	**1,626,088**	**1,787,114**

Sources: Almond Board of California, USDA NASS, Almond Board of Australia, AEOFRUSE and DESCALMENDRA, Aegean Exporters' Association, Greek Nuts & Fruits Trade Association and other INC sources.

*USA crop reflects the 2021 NASS Subjective estimate of 3.2 billion less 2% Loss and Exempt.

^USA 2020/21 ending stock/(2021/2022 beg. stock) estimated as of 5/17/21.

California Almond Industry – Key Supply & Demand Figures

CY 2020 Final Crop outlook = 1.41MM MT/(**3.1Bn Lbs**.) on 502,834 bearing hectares/ (**1.242MM bearing acres**).

CY 2020 YTD Demand Performance vs. CY 2019

Through April 2021 - Shipment Demand up +19.65% (+165,971 MT/**365.8MM Lbs**.)
Total Committed & Shipped Volume up +25.0% (+268,149 MT/**591MM Lbs.)**
Outlook Shipments = 1.29M MT/(**2.86 Bn/Lbs.**) = (up +20.6% or +221,869 MT/**489MM Lbs.).**

Estimated Carry-out CY'20 volume = 288,113 MT/(**635MM Lbs.)**

CY 2021 Subjective Estimate = (1.451MM MT/**3.2Bn Lbs**.) on 538,462 bearing hectares /(**1.33 MM bearing acres**). Yield/acre only down -4% vs. CY'20.

NASS Objective Estimate to be released on July 12, 2021

Australian Almond Industry – Key Supply & Demand Figures

CY 2020 Final Crop outlook = 111,100 MT/(**245M Lbs.)** on 37,902 bearing hectares/**(93.6K bearing acres).**

CY 2020 Demand Performance

Shipment Demand = 109,100 MT up +3.0% or +3,036 MT/(**6.7M Lbs.)** vs. CY'19.

76,710 MT was Exported in CY'20 up only +0.2% or +154 MT/(**+339K Lbs.)** vs. CY'19.
29,508 MT was sold Domestically in CY'20 up +10.0% or +2,882 MT/(**6.35 MM Lbs.)** vs. CY'19.

Carry-out CY'20 volume = 8,000 MT/(17.6MM Lbs.).

CY 2021 Estimate = 123,000 MT**/(271M Lbs.)** on 44,522 bearing hectares/**(110K bearing acres).**

Total bearing hectares for 2021/22 season are up +6,620 bearing hectares**/(16.3K bearing acres).** This is a +17.4% increase over the 2020/21 crop year.

Spanish Almond Industry – Key Supply & Demand Figures

CY 2020 Final Crop outlook = 115,633 MT**/(255M Lbs.)** on 586,990 bearing hectares**/(1.42MM bearing acres).**

CY 2020 Demand Performance

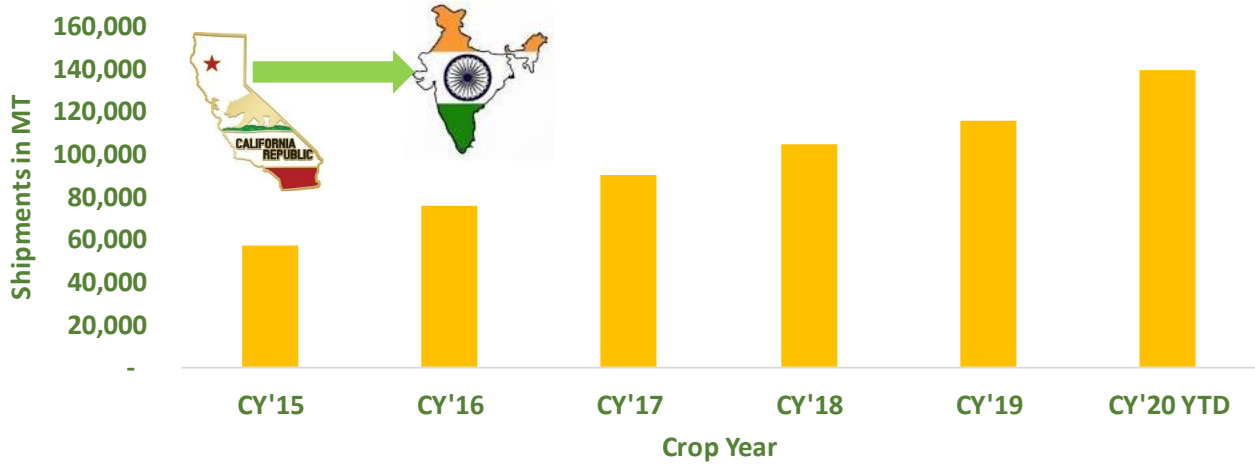
Shipment Demand = 96,633 MT up +16% or +15,933 MT/**(35.1MM Lbs.)** vs. CY'19.
54,832 MT was Exported in CY'20 up +10% or +5,483 MT/**(12.1 MM Lbs.)** vs. CY'19.
41,801 MT was sold Domestically in CY'20 up +25.0% or +10,450 MT/**(23.0 MM Lbs.)** vs. CY'19.
Carry-out CY'20 volume = 25,000 MT**/(55.1 MM Lbs.).**

CY 2021 Estimate = 109,216 MT/**(241M Lbs.)** down -6% on 607,644 bearing hectares/(**1.5MM bearing acres).** Spring frost affected some growing areas in 2021.

Total bearing hectares for 2021/22 season are up +20,654 bearing hectares/**(51K bearing acres).** This is a +4% increase over the 2020/21 crop year.

Almond Market Demand Spotlight

India



	California Shipments - Kernel Wt. Equiv in MT					YTD Thru April '21	
	CY'15	CY'16	CY'17	CY'18	CY'19	CY'19	CY'20
Inshell	53,299	71,937	87,596	102,979	114,775	88,071	138,747
Kernels	4,074	3,868	2,929	1,988	1,274	979	1,065
Total	**57,373**	**75,805**	**90,525**	**104,967**	**116,049**	**89,050**	**139,812**
Growth vs. Prior Yr.							
Inshell	6%	35%	22%	18%	11%		58%
Kernels	-32%	-5%	-24%	-32%	-36%		9%
Total	**2%**	**32%**	**19%**	**16%**	**11%**		**57%**

Total Shipment Growth from 2015 to YTD 2021 = 82,439 MT 144%

	California Shipments - Kernel Wt. Equiv in MM Lbs.					YTD Thru April '21	
	CY'15	CY'16	CY'17	CY'18	CY'19	CY'19	CY'20
Inshell	117	159	193	227	253	194	306
Kernels	9	9	6	4	3	2	2
Total	**126**	**167**	**200**	**231**	**256**	**196**	**308**

Total Shipment Growth from 2015 to YTD 2021 = 182 MM 144%

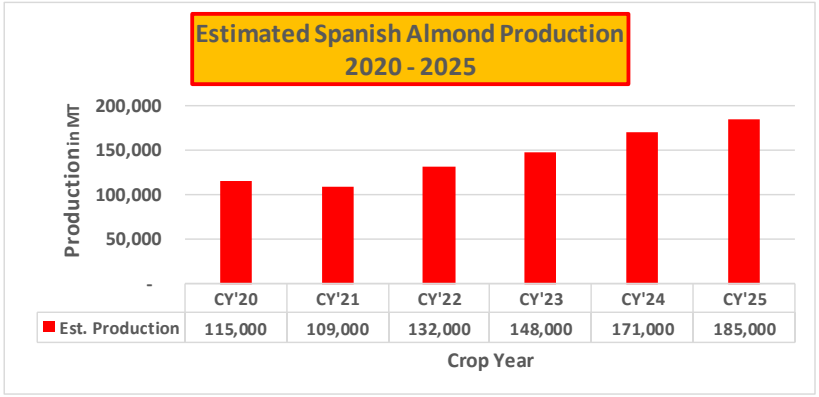
Almond Market Demand Spotlight – India

- **Almond Demand Growth Despite Covid!**
  - Government labels Almonds Immunity Booster/Encourages consumption.
  - Lower CY'20 prices make Almonds more affordable to all.
  - Uniform GST for Almonds levels the playing field and opens new distribution
  - Increase in On-line Sales (+57%) & in Tier 2 and Tier 3 cities.
  - Unorganized Mom & Pop stores still responsible for most Almond Sales (75%). But volume in large Retail (18%) and Ecommerce (7%) growing rapidly.
  - Mechanized Inshell cracking continues to grow creating efficiencies without compromising kernel quality.
- **Challenges Ahead**
  - Covid 19 case surge since early March causing very high death rate & more lockdowns/restrictions. Starting to see new cases drop as more vaccines become available.
  - Regulation Issues – FSSAI, GST(Customs), Labeling, Certificate of Origin landscape.
  - Impact to Demand Growth if prices rise back to normal levels.
- **Outlook**
  - As Population and prosperity continue to grow in India along with continued focus on healthy snacking, consumption potential by 2025 = 227,000 MT (500 million pounds)!

Almond Market Supply Growth Spotlight – Spain & Portugal

Spanish Crop Demand Outlook - in MT

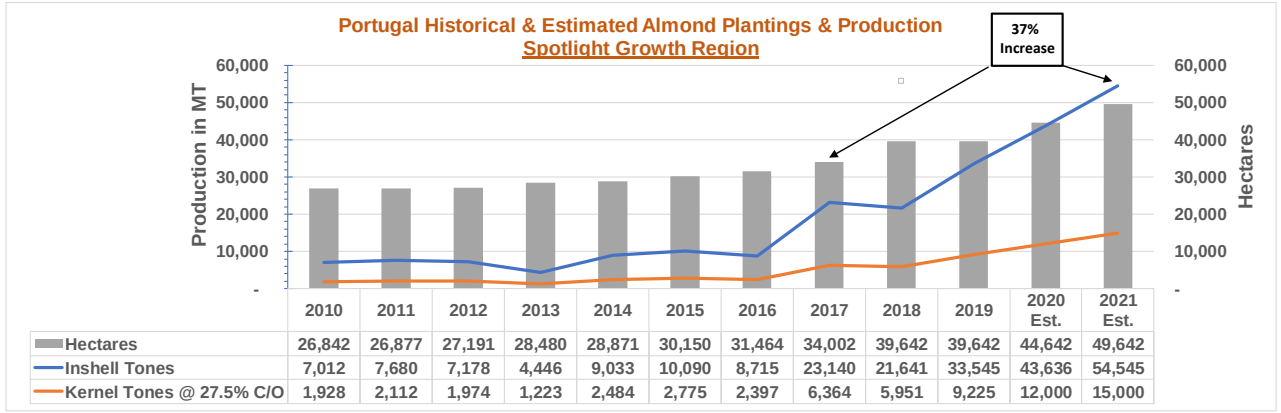
	2020/ 2021	2021/ 2022	Growth In MT	Growth In %
Export Demand	54,832	60,315	5,483	10%
Domestic Demand	41,801	52,251	10,450	25%
Total Demand	96,633	112,566	15,933	16%



Spanish Crop Production - 2021/22 Estimate

In MT's	CY21/22 Hectares	CY21/22 Tones of Alm	% of Total Hectares	% of Total Production	Tones/ Hectare
Dry Farm Hectares	517,603	54,608	85%	50%	0.11
Irrigated Hectares	90,041	54,608	15%	50%	0.61
Total:	607,644	109,216			0.18

In Lbs.	CY21/22 Acres	CY21/22 Lbs. of Alm	% of Total Acres	% of Total Production	Lbs./ Acre
Dry Farm Acres	1,278,997	120,356,032	85%	50%	94
Irrigated Acres	222,491	120,356,032	15%	50%	541
Total:	1,501,488	240,712,064			160



CY'20 General Demand Factors – All Markets

- **Lower almond market prices** did spark very strong demand growth as predicted over the past year (+20% vs. CY'19 for U.S.). But higher prices are expected moving forward due to:
  - Smaller U.S. Almond Crop in 2021 Crop (a crop below 3.0Bn is expected by Industry).
  - California's "Extreme" drought will negatively impact the size of both the CY'21 & CY'22 crops.
  - Low prices of the past 12 months not sustainable for California growers @ CY'20 water costs and definitely not sustainable at CY'21 water costs which today are 4 times higher than in CY'20.
- **U.S. Tariff Issues** remain in place for both China & India with no resolution on the horizon. However, today's lower prices have mitigated the impact to this point
- **New Product Introductions using Almonds** once again lead all other nuts in 20/21. This continues to create a very strong base of demand that will result in higher sustainable prices in the future.
- **We continue to see strong growth in Non-Dairy milk alternatives** (like almond milk, yogurts, ice cream) in all markets. Almond Flour and Butters are also growing along with Almond Snacking in "Key" EU Markets.

CY'20 General Demand Factors – All Markets… continued

- **The demand for "Plant-Forward" food** & vegan diets in all markets should continue to add even stronger demand growth.
- **Covid 19 Impacts** seen over the past year should subside as vaccines continue to be rolled out across all markets. The Impacts to Almond demand in 20/21 and the outlook for the coming year 21/22 are as follows:
  - **Snacking** – growth rate flat to up only a few percent in most markets despite lower prices.
    - 21/22 Outlook: As shopping and Travel/Hospitality/Leisure opens up, we expect much stronger growth rates in this category.
  - **Ingredient & Baking** – Very strong growth rate seen in 20/21 due to more consumers cooking at home.
    - 21/22 Outlook: We expect continued strong demand growth, but not as high of the growth rate seen in 20/21.
- **Smaller CY 21/22 crop sizes for competing tree nuts** should move their prices higher in the coming year which will provide room for higher almond prices.

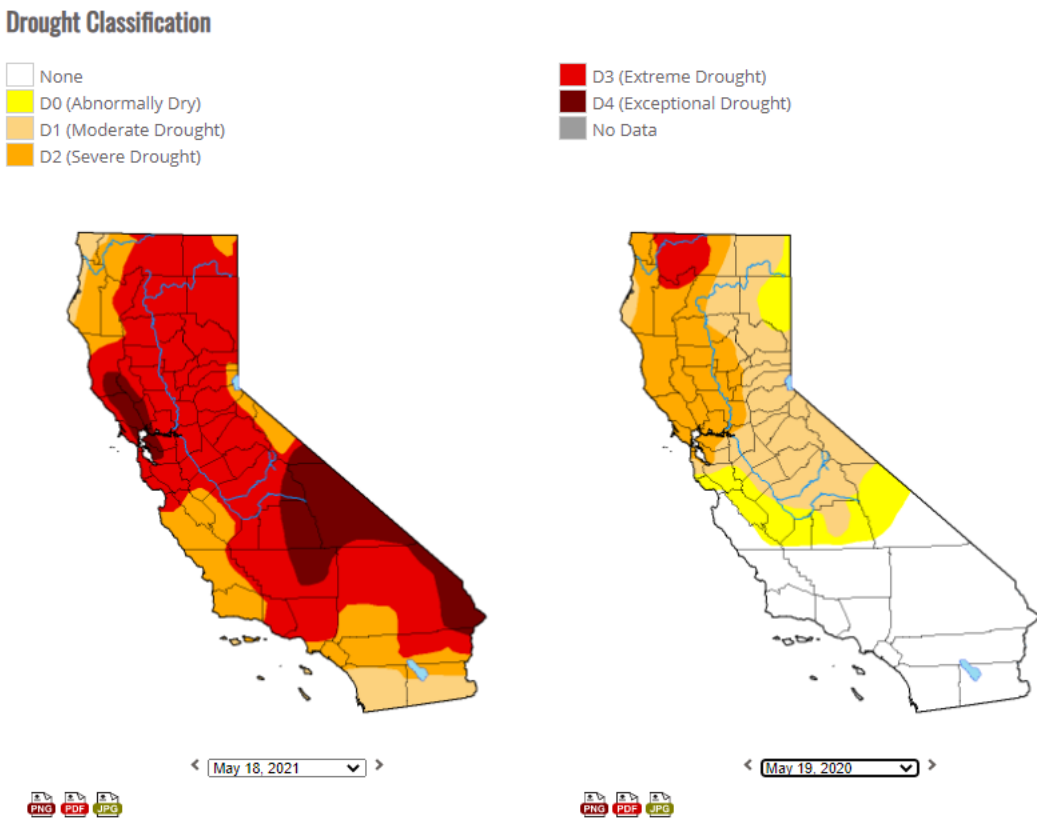
Almond Industry – Challenges for 2021 & Beyond

- **Although the impacts of the Covid 19 pandemic are improving, there are fundamental longer-term impacts that will take time to resolve or require permanent change. These include:**
  - Shipping Container and Vessel availability & Skyrocketing Expense (Domestic OTR an issue as well, especially cost).
  - On-line & Mobile Shopping vs. brick & mortar stores.
  - How to adapt/achieve effective consumer Marketing & P/R that reaches the large group of on-line & mobile shoppers (including Millennials) who have chosen streaming programing vs. traditional cable networks/print ads. How do influence to buy more and keep Almond's top of mind when it come to healthy snacking and ingredients?
  - Cost of Material – Labor, Lumber/(Pallets), Electronics, and Machinery cost rising rapidly.
- **California currently in "Extreme Drought" with reduced groundwater supplies in the future due to SGMA.**
  - Current Impacts – Increased acreage removals, reduced new plantings, and extremely high water costs. Expecting lower yields & smaller nut size distribution for the 2021 crop.
  - Future Impacts – SGMA likely to retract almond acreage and supply growth. If the 21/22 Water Year (November – April) is again below normal, almond supply and acreage will be severely impacted.

Almond Industry – Challenges for 2021 & Beyond…continued

- **Very low almond prices & grower returns over the past year are impacting growers** in all growing regions of the world **and are not sustainable**. This will greatly impact future growth of acreage and supply without correction in the coming year.
- **Ever-changing and more restrictive regulatory requirements** continue to negatively challenge/impact growers and handler's ability to supply almonds in a reliable and profitable way.
- **Sustainability: Industry Impact (Positives & Negatives)** for both growers and processors. Is the cost to conform too high?

The California Drought is Bad!



Statistics Comparison

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
2021-05-18	0.00	100.00	100.00	94.31	73.33	15.91	384
2020-05-19	41.80	58.20	46.67	20.84	2.97	0.00	129
Change	41.80	-41.80	-53.33	-73.47	-70.36	-15.91	-255

California Rainfall Indexes				
	North 8-Station	Central 5-Station	South 6-Station	All Regions Combined
2020/21 YTD (Oct 1st 2020 - May 17th, 2021)				
YTD Index Inches	22.9	18.2	9.6	50.7
Season Normal for this Date	49.2	38.3	27.0	114.5
as % of YTD Normal	47%	48%	36%	44%
Full Water Year Avg:	51.8	40.2	28.8	120.8

If No Additional Rain in May
50.7
115.3
44%
120.8

California Snowpack - Water Equivalent				
	North	Central	South	Average
2020/21 YTD (Oct 1st 2020 - May 17th, 2021)				
In Water Equivalent Inches:	0.7	0.5	0.5	0.5
Season Normal for this Date	17.5	12.5	25.0	12.5
as % of Normal YTD:	4%	4%	2%	4%

Snowpack on This Date LY
1.8
12.5
11%

Only Water Year 1923/24 was a drier year for California on a Combined Index basis (50.59 inches). When you consider the total amount of permanent crop acreage that exists today (Nuts & fruits) along with the difference in population then vs. now, the seriousness of this year's drought clearly comes into focus.

California Reserviors holding -5.6 million less Acre/Ft vs. LY!

Major California Water Storage Reservoir's Levels as of May 16th, 2021

Reservoir	Total Capacity	% of Capacity as of May 16th									Storage level in Millions of acre feet as of May 16th								
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2013	2014	2015	2016	2017	2018	2019	2020	2021
Shasta	4.552	78%	51%	56%	93%	96%	90%	95%	78%	47%	3.551	2.322	2.549	4.233	4.370	4.097	4.324	3.551	2.139
Trinity	2.448	85%	51%	44%	58%	95%	78%	96%	77%	53%	2.081	1.248	1.077	1.420	2.326	1.909	2.350	1.885	1.297
Orville	3.538	83%	52%	47%	96%	74%	69%	96%	69%	40%	2.937	1.840	1.663	3.396	2.618	2.441	3.396	2.441	1.415
New Melones	2.420	57%	35%	20%	26%	86%	84%	83%	78%	59%	1.379	0.847	0.484	0.629	2.081	2.033	2.009	1.888	1.428
Folsom	0.977	73%	58%	57%	86%	84%	95%	94%	76%	38%	0.713	0.567	0.557	0.840	0.821	0.928	0.918	0.743	0.371
San Luis	2.039	48%	45%	58%	42%	99%	80%	74%	70%	47%	0.979	0.918	1.183	0.856	2.019	1.631	1.509	1.427	0.958
Don Pedro	2.030	73%	54%	41%	73%	82%	94%	90%	85%	68%	1.482	1.096	0.832	1.482	1.665	1.908	1.827	1.726	1.380
Millerton	0.520	72%	54%	36%	60%	65%	86%	81%	79%	48%	0.374	0.281	0.187	0.312	0.338	0.447	0.421	0.411	0.250
Exchequer	1.025	56%	29%	11%	54%	70%	91%	88%	75%	44%	0.574	0.297	0.113	0.554	0.718	0.933	0.902	0.769	0.451
Pyramid	0.171	93%	92%	93%	93%	93%	92%	93%	92%	93%	0.159	0.157	0.159	0.159	0.159	0.157	0.159	0.157	0.159
Castaic	0.325	87%	71%	34%	59%	95%	89%	94%	91%	71%	0.283	0.231	0.111	0.192	0.309	0.289	0.306	0.296	0.231
Pine Flat	1.000	48%	36%	23%	59%	62%	89%	76%	77%	39%	0.480	0.360	0.230	0.590	0.620	0.890	0.760	0.770	0.390
Total:	21.045	71%	48%	43%	70%	86%	84%	90%	76%	50%	14.991	10.163	9.144	14.664	18.042	17.664	18.882	16.062	10.470
Snowpack as a % of Normal as of 5/16/21:		6%	7%	2%	34%	200%	17%	129%	11%	4%									
Snowpack: Avg. snow water equivalent inches:		0.8	1.0	0.3	5.2	30.1	2.5	18.9	1.8	0.5									

= Lowest over the past 9 years

= CVP Reservoirs (San Luis is both CVP & DWR)

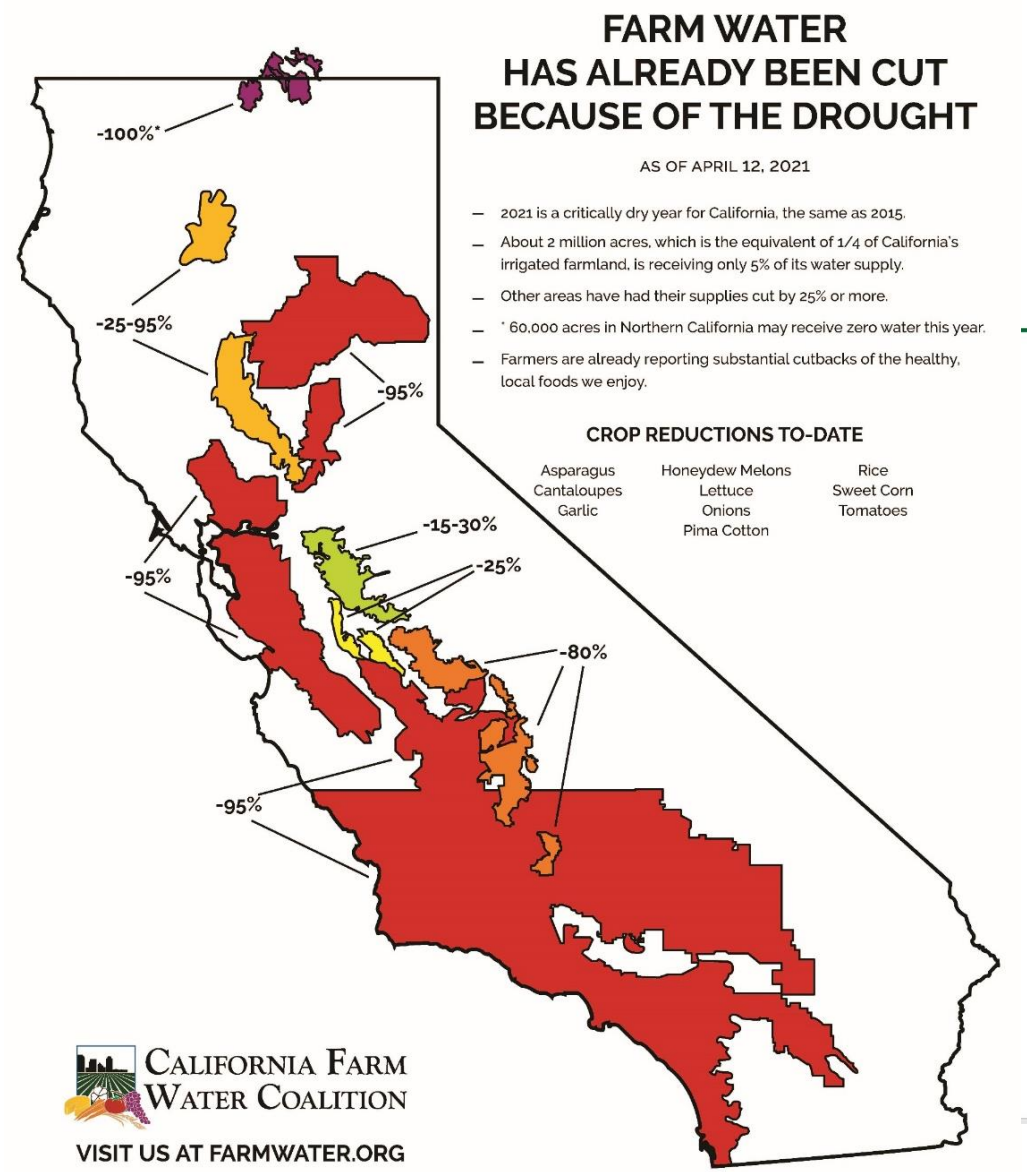
Current vs. Same Time Last Year:	(5.592)	-35%
Current vs. Prior 8yr Avg:	(4.481)	-21%

= -3.3 M acre ft Decrease vs. Last year in these key Agricultural Supply Reservoirs.

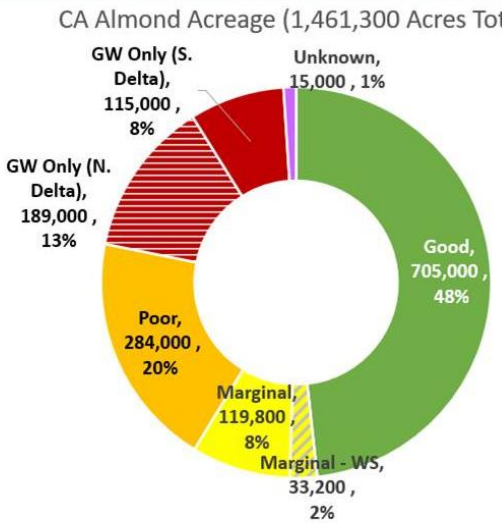
	2013	2014	2015	2016	2017	2018	2019	2020	Current 2021	
Federal Water Supply (CVP)										
North of Delta Ag	75%	0%	0%	100%	100%	100%	100%	50%	5%	Allocation not accessible until the Bureau ensures high priority deliveries are met (e.g., Exchange Contractors)
North of Delta Exchange/Settlement Contractors	100%	75%	75%	100%	100%	100%	100%	100%	75%	
South of the Delta Ag	20%	0%	0%	5%	100%	50%	75%	20%	5%	Allocation not accessible until the Bureau ensures high priority deliveries are met (e.g., Exchange Contractors)
South of the Delta Exchange/Settlement Contractors	100%	65%	75%	100%	100%	100%	100%	100%	75%	
Friant Class 1	62%	0%	0%	75%	100%	88%	100%	65%	20%	
Friant Class 2	0%	0%	0%	0%	0%	130K AF	0%	0%	0%	
State Water Allocation	35%	5%	20%	60%	85%	35%	75%	20%	5%	

Current vs. YTD Normal:	64%
LY vs. YTD Normal:	98%

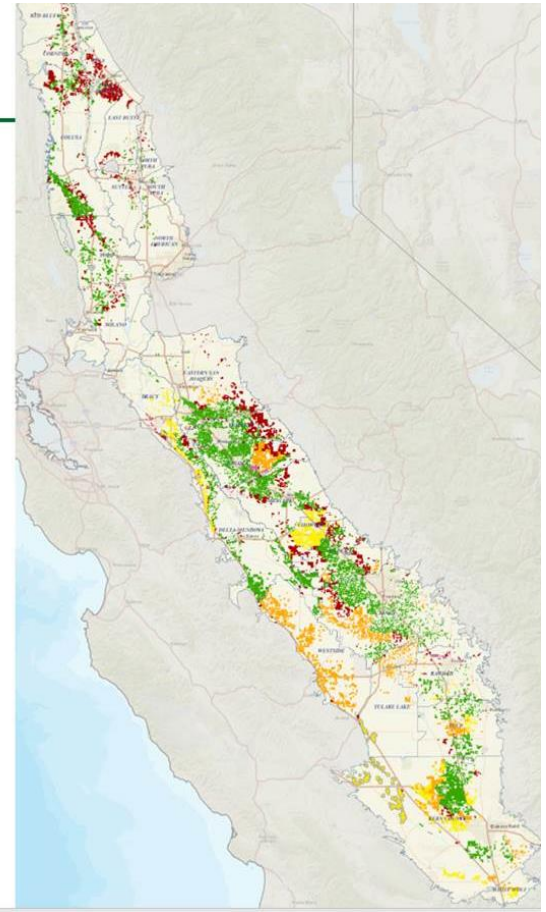
Affordable and Available Water Supply is even worse!



21% of CA almond acreage groundwater only
20% has poor surface water supply



Crop Data Source: County Ag Commissioners, 2018
Includes new plantings



INC Almond Webinar Wrap-up

Q&A Session

INC Almond Webinar Wrap-up

Thank You all for
Your Participation!