



ASFMRA

Almond Board of California

Kent Stenderup

Richard Waycott

Joel Kimmelshue

May 20, 2021

Agenda



- 1) Overview of the Almond Board of California (Kent/Richard)
- 2) Almond bearing and non-bearing acreage – USDA/NASS (Kent/Richard)
- 3) Land IQ remote sensing analytics – Almonds and California agriculture (Joel)
- 4) Impacts of SGMA (Joel)
- 5) Almond production estimates and actual (Kent/Richard)
- 6) Almond bearing acreage and production outlook (Kent/Richard)
- 7) Global almond shipments (Kent/Richard)
- 8) ABC Market Development – building demand ahead of supply (Kent/Richard)
- 9) Almond industry initiatives (Kent/Richard)
- 10) Almond farming continuous improvement and experimentation (Kent)
- 11) Question and answer



Almond Industry Vision:

*California almonds make life better by
what we grow and how we grow*

Almond Board of California (ABC)

- Grower-enacted “Federal Marketing Order” established in 1950
 - Represents growers and handlers (processors)
 - “Quasi governmental”
 - Non-profit organization
- Under USDA supervision
- Funded by assessment \$.03/lb
- Does not sell, set, track, or quote almond prices
- Broad-based program
 - Global Market Development
 - Scientific Research
 - Industry Education
 - Quality and Food Safety
 - Regulatory Issues

2020 – 2021 Board of Directors



Paul Ewing



Brian Wahlbrink,
Vice Chair



Holly A. King



Alexi Rodriguez



Todd Meyer



Darren Rigg



George Goahgarlan Jr.



Kent Stenderup,
Chair



Mel Machado

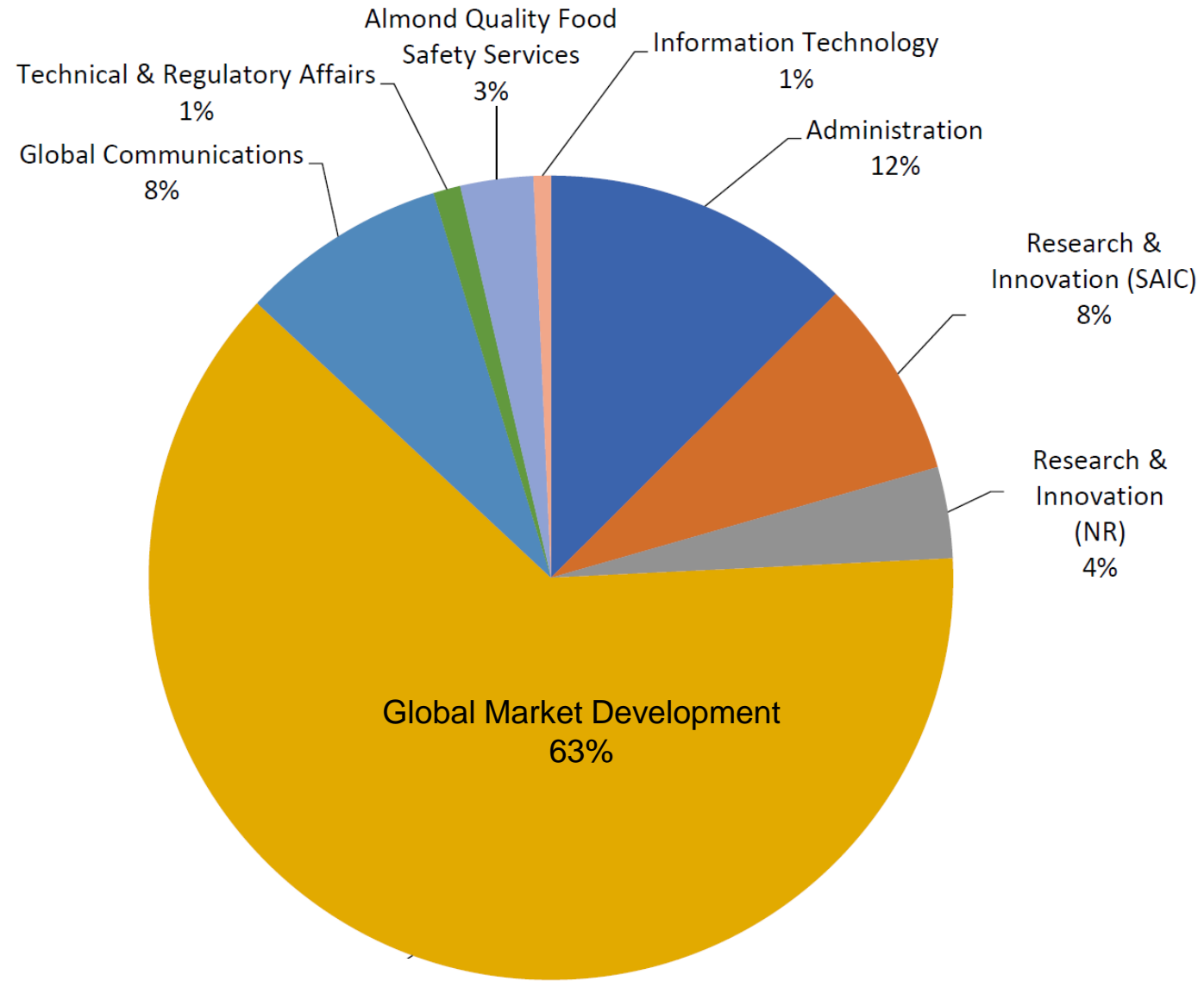


Bill Morecraft

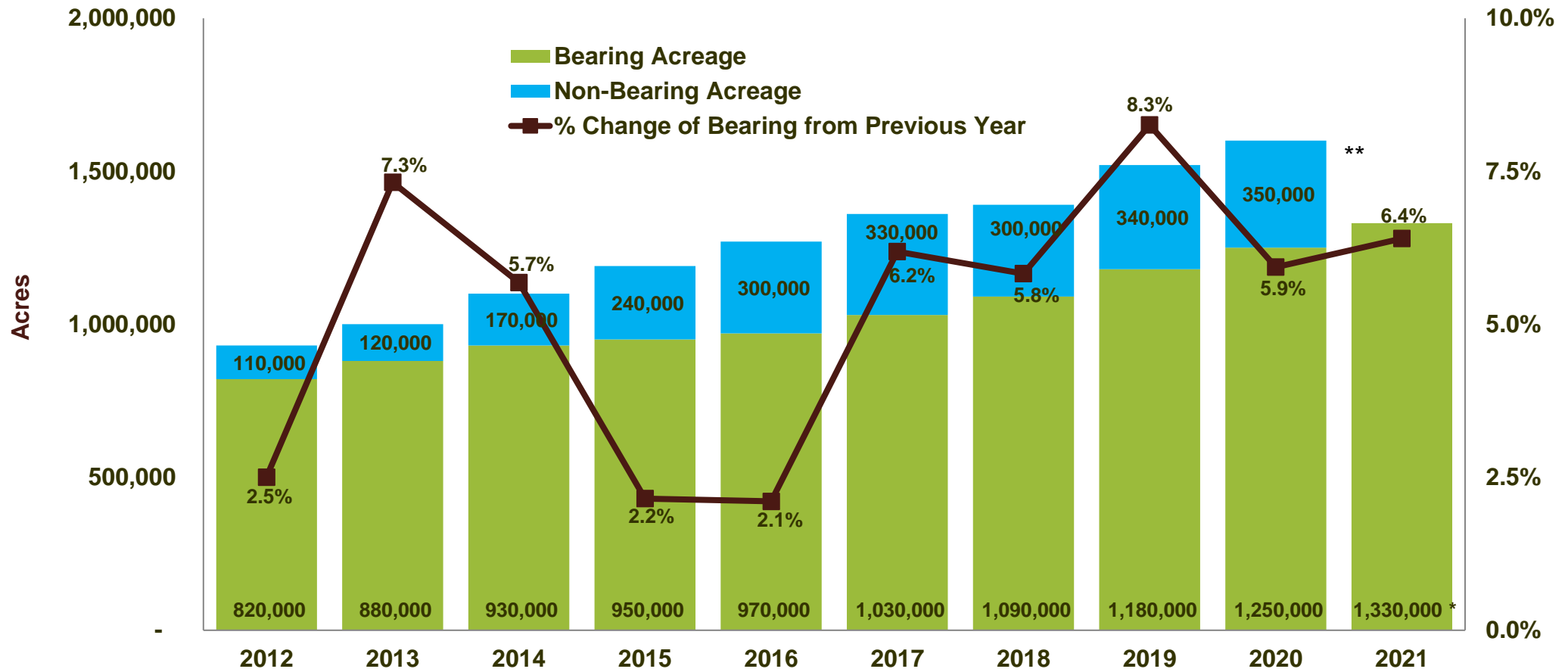
***57 employees based in Modesto,
New Delhi, London, Shanghai, Seoul***

FY 2020 – 2021 Budget

FY 2020–2021 Budget
\$83,631,027



California Almond Acreage



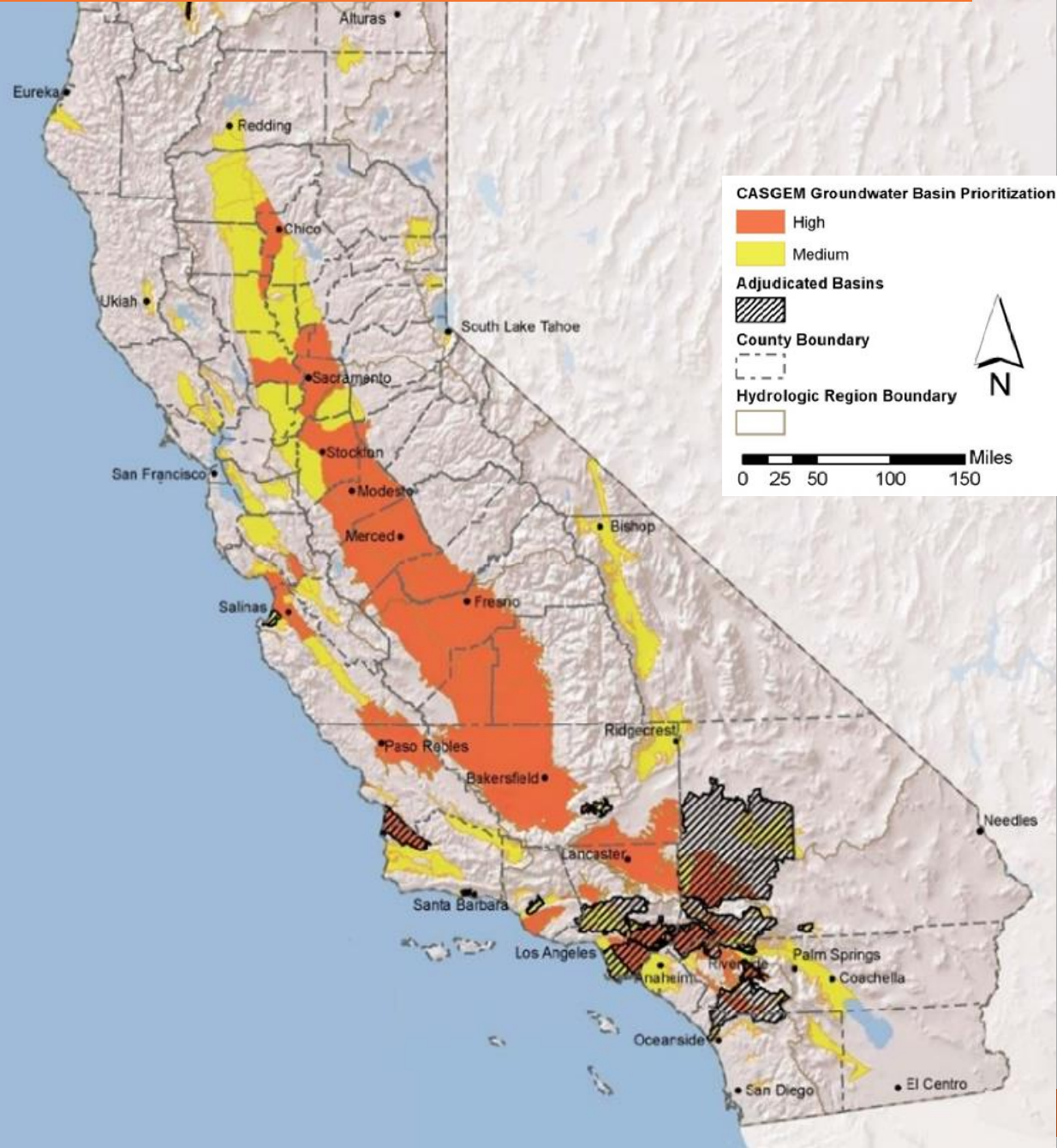
Source: USDA Agricultural Statistics Service, Pacific Region (NASS/PR) 2020 Acreage Report
 *Estimate **Non-bearing acreage for 2021 available in April 2022.



LAND IQ

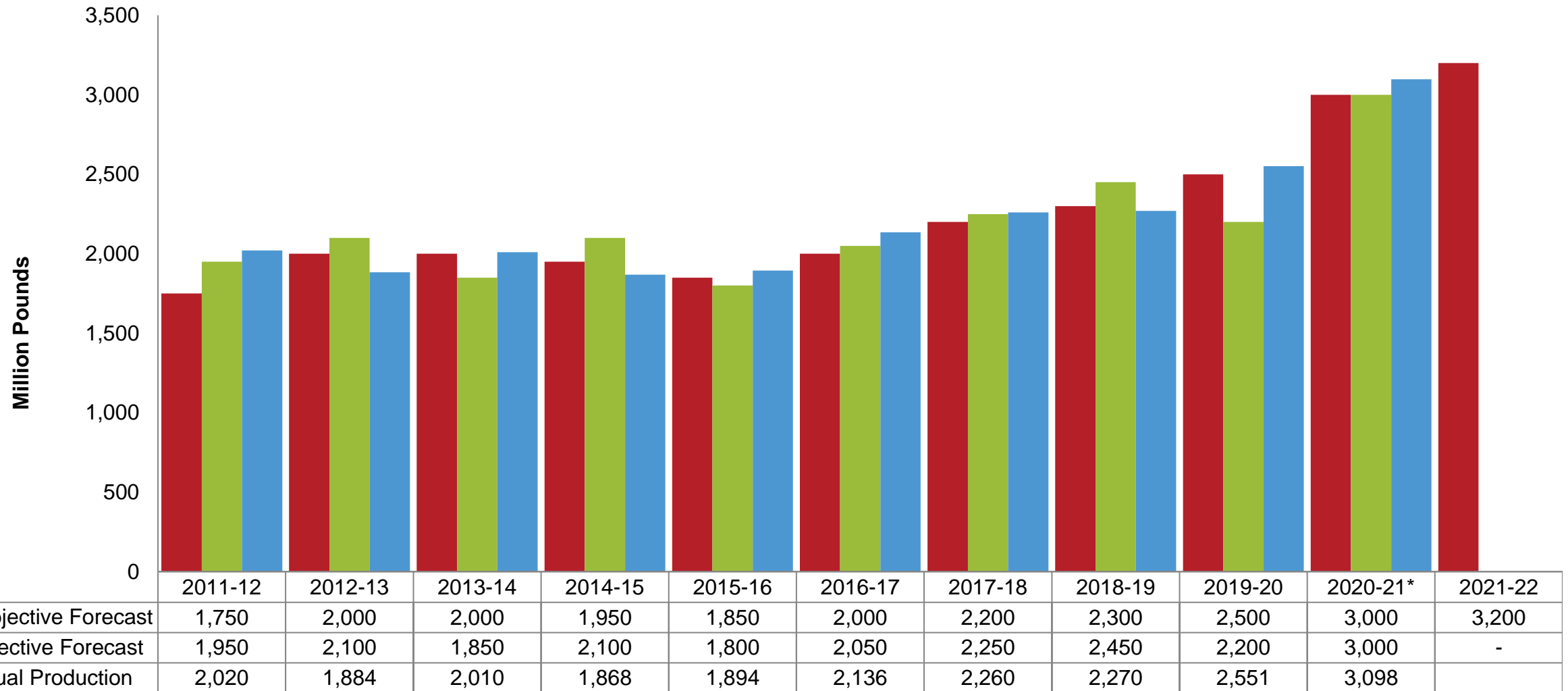
Remote sensing analytics
Almonds and California agriculture

Impacts of SGMA



- Groundwater supplies 38%-46% of total California water use.
- 94 basins must create a Groundwater Sustainability Plan.
- Estimated 6.9 million acres of critically over drafted basins in the San Joaquin Valley.
- 1.8 to 2.4 million acre-feet of annual average overdraft.
- Fallowing of up to 750,000 acres.
- Increased water value and prices.
- Land values more dependent upon sustainable water supply.

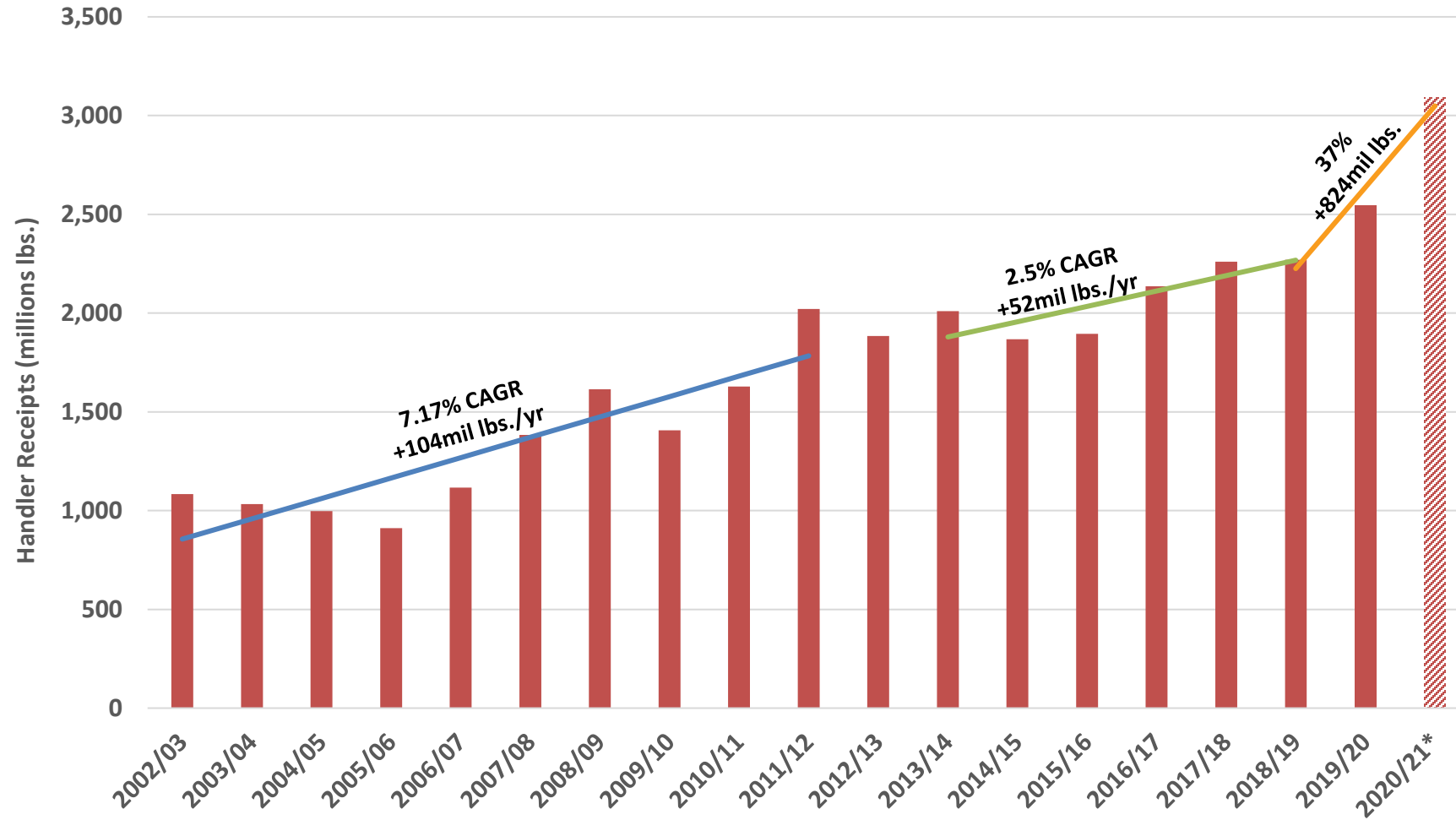
California Almonds Production Estimates



Source: USDA/NASS, ABC Form 1

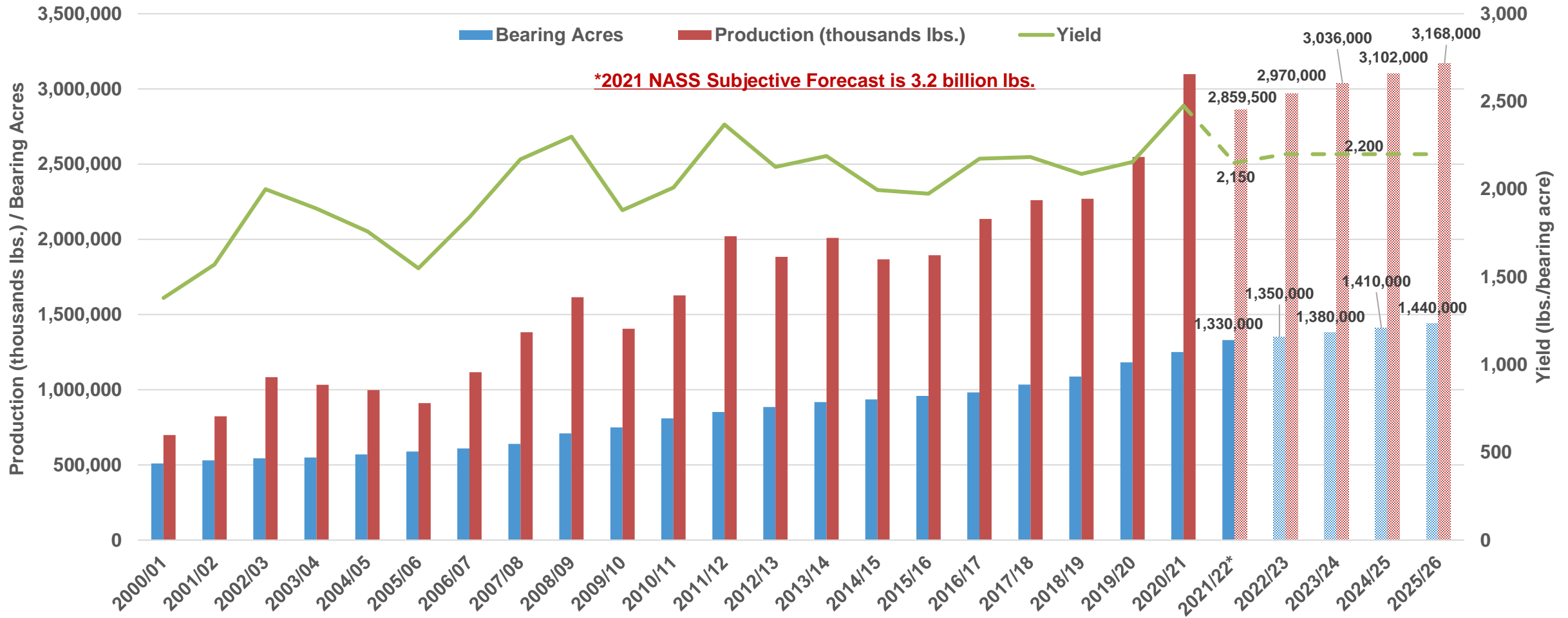
*Production YTD (8/1/2020-4/30/2021)

California Almonds Product Growth



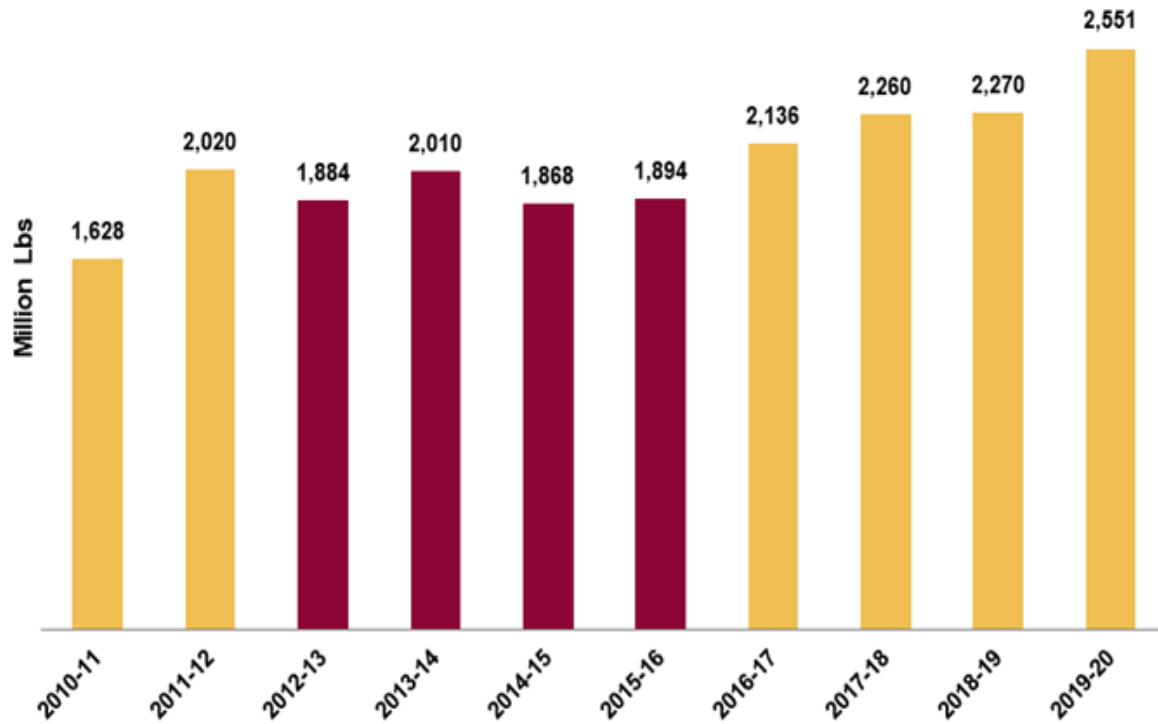
Source: ABC Form 1
*YTD (8/1/2020-3/31/2021)

Production Forecast Model

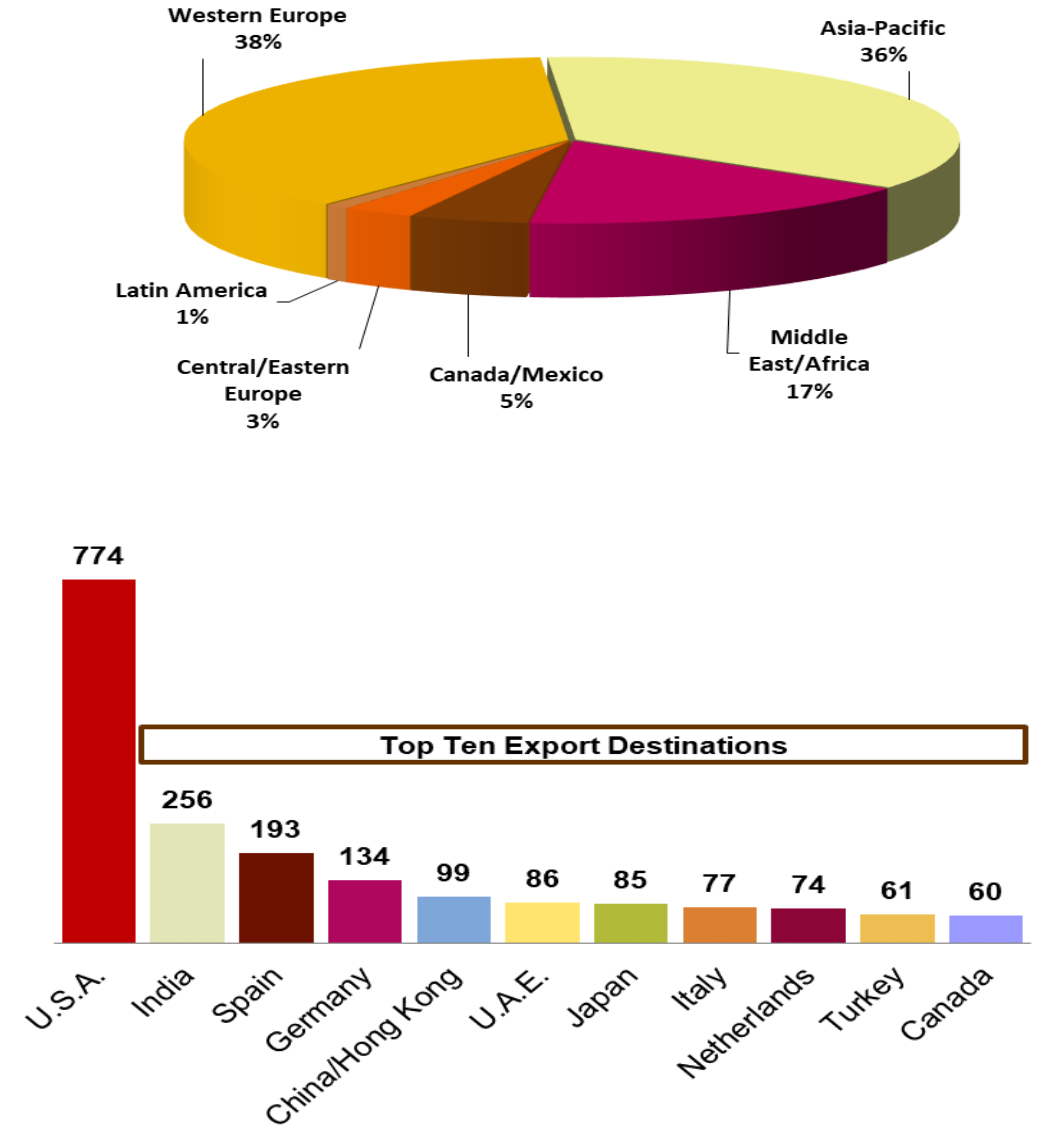


Source: NASS, LandIQ, Almond Board of California

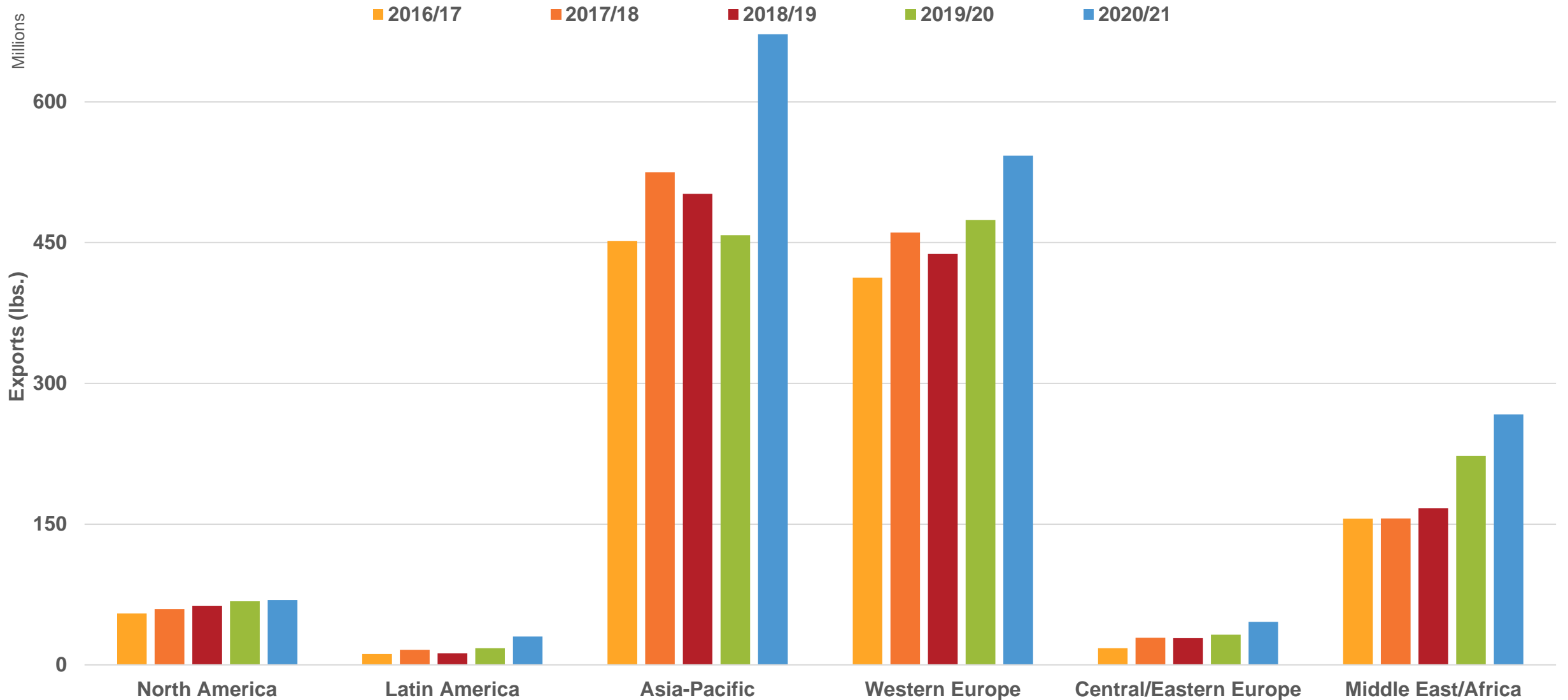
2019/20 California Almond Shipments



ALMOND EXPORTS BY REGION 2019/2020



Exports by Region – YTD (August – April)



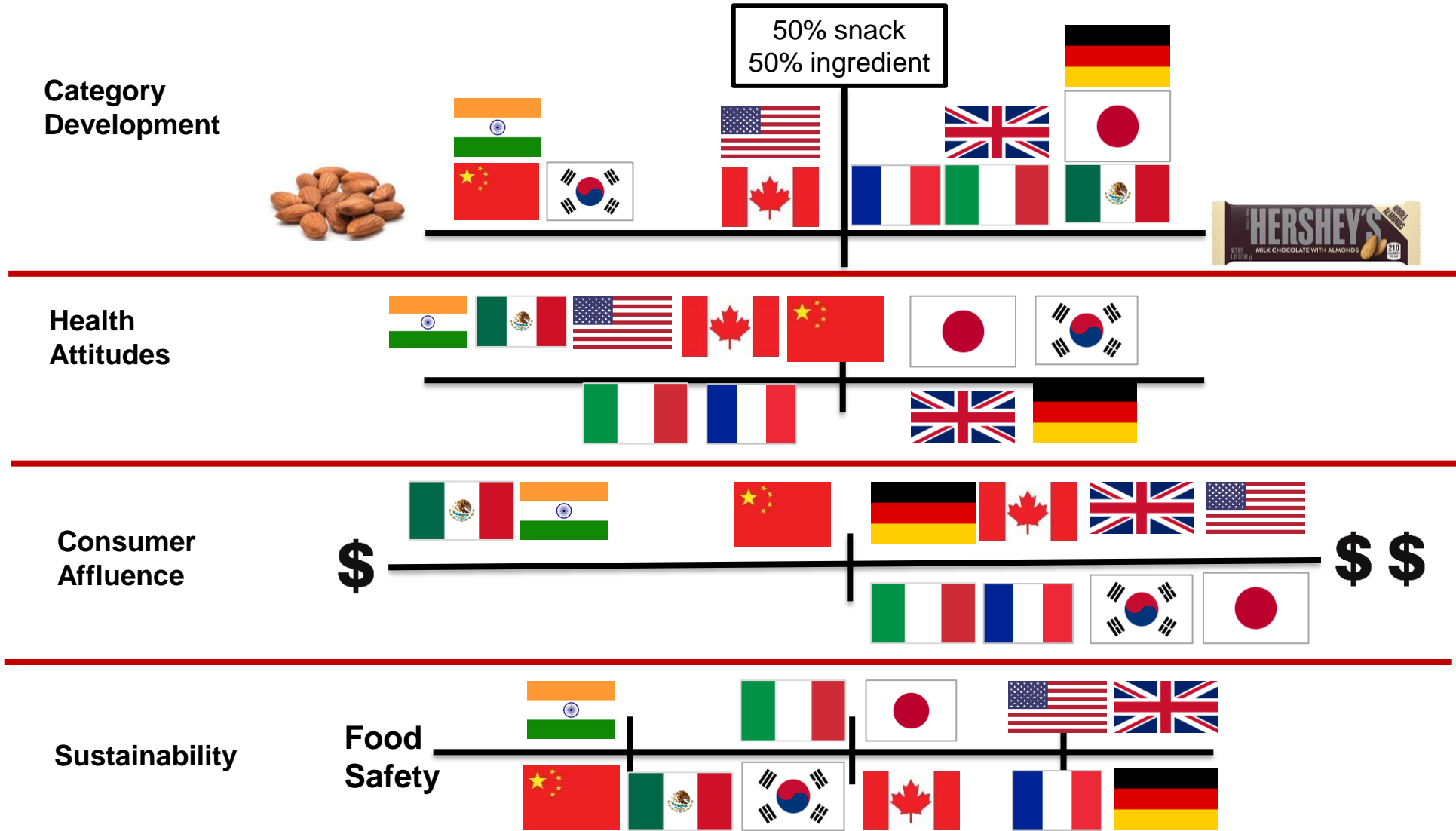
Source: Almond Board of California



The World Loves Almonds

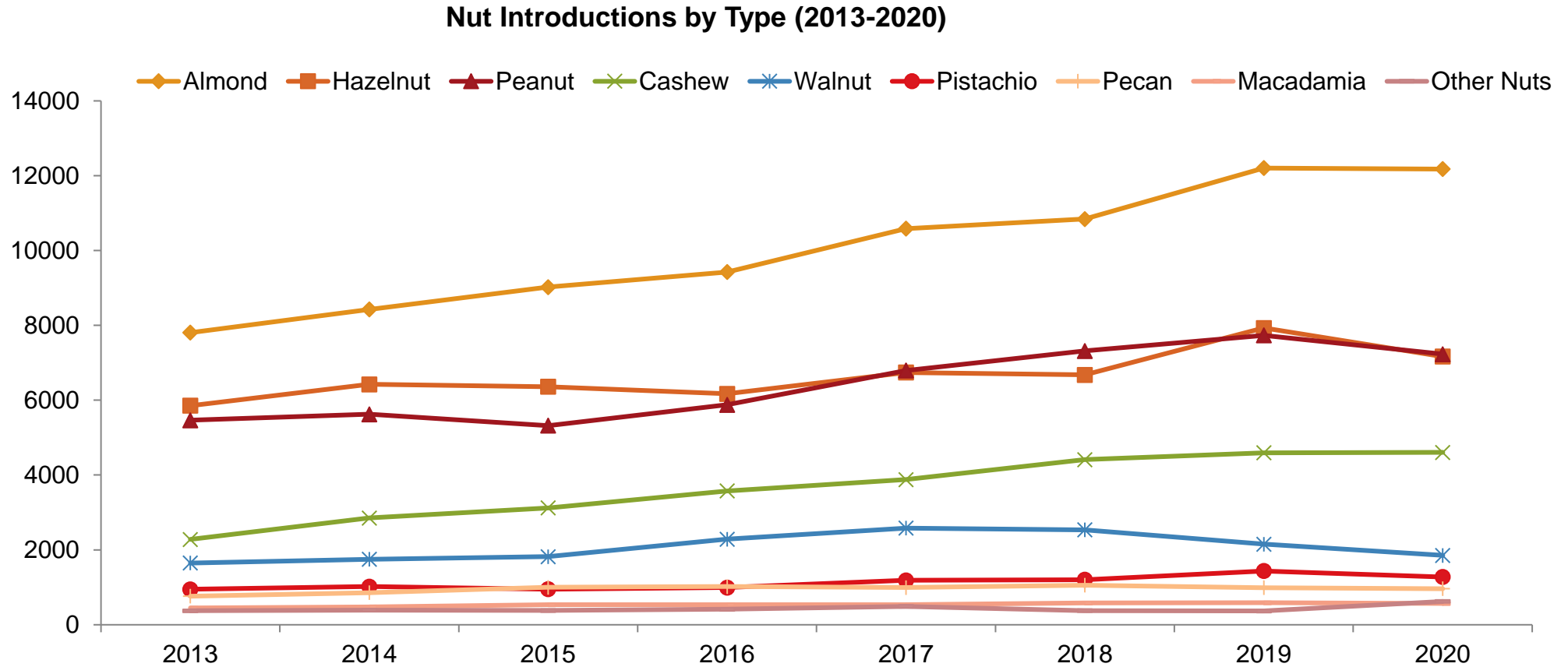


Each one of the 11 markets is different



Almonds remains the leading nut type in 2020 by a wide margin

Every nut type lost out in 2020 but almonds lost the least in the new product introductions battle!



*Other Nuts include non specified and mixed nuts.

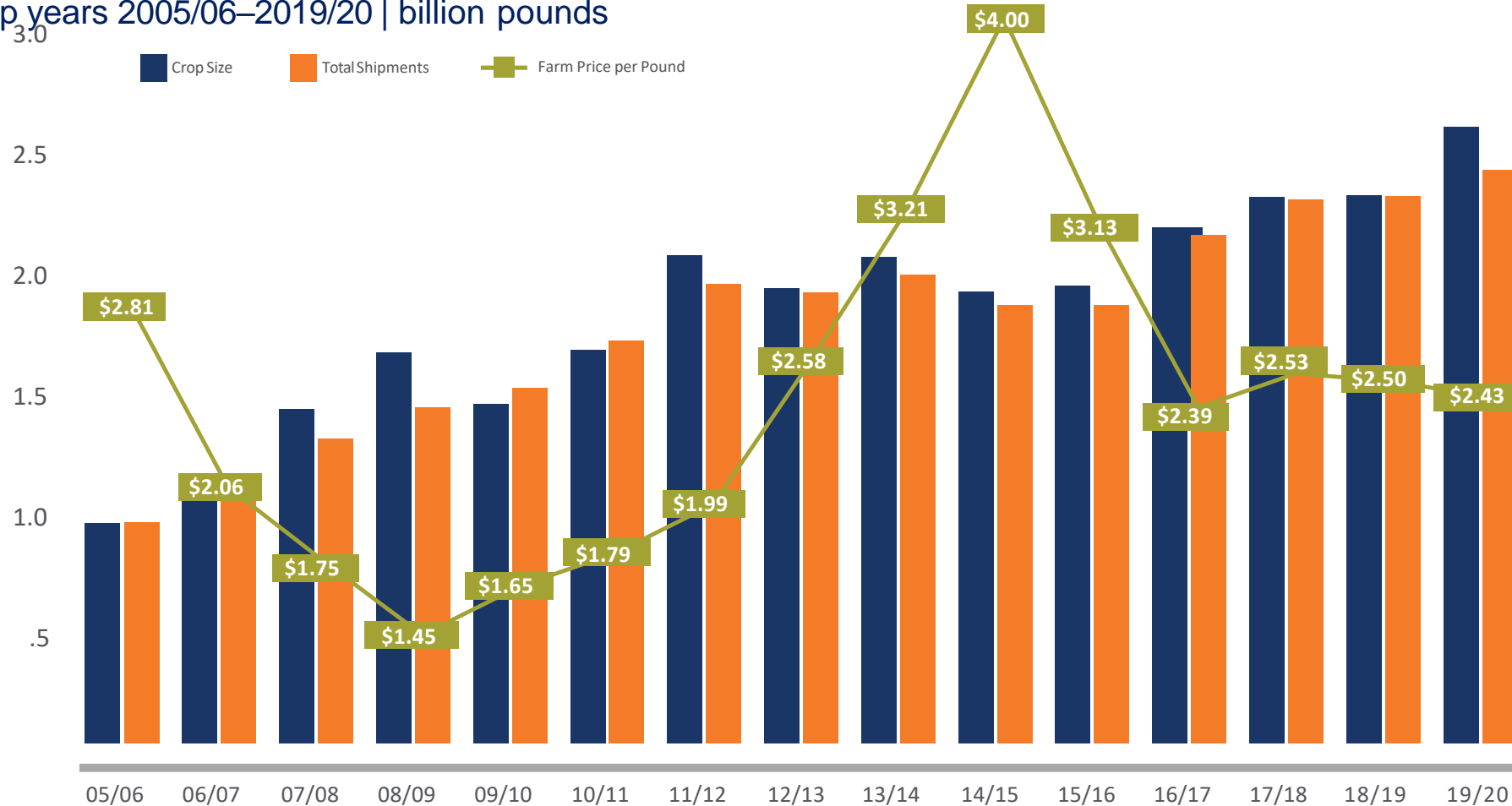
**Global Nut Introductions is lower than the sum of the nut types, since products containing more than one type of nut are counted only once.

Goal to increase Demand ahead of Supply

- Consistently striving to drive demand ahead of supply
- Past 15 years are evidence of strong demand growth

Historical Crop Size + Shipments vs. Farm Price

crop years 2005/06–2019/20 | billion pounds



Sources: Almond Board of California, USDA, NASS/PRO.



REDUCE THE AMOUNT OF WATER
USED TO GROW A POUND OF
ALMONDS BY 20%



REDUCE DUST DURING ALMOND
HARVEST BY 50%



INCREASE ADOPTION OF
ENVIRONMENTALLY FRIENDLY
PEST MANAGEMENT TOOLS BY 25%



ACHIEVE ZERO WASTE IN OUR
ORCHARDS BY PUTTING EVERYTHING
WE GROW TO OPTIMAL USE

BLOOM



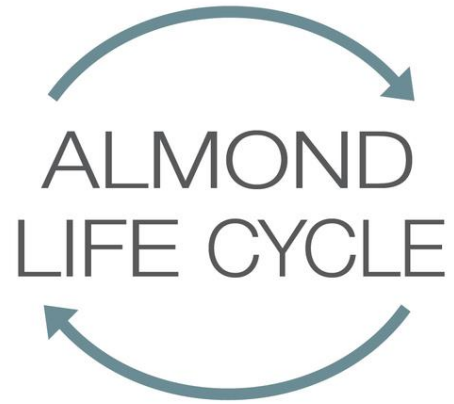
NUT DEVELOPMENT



MATURING NUTS



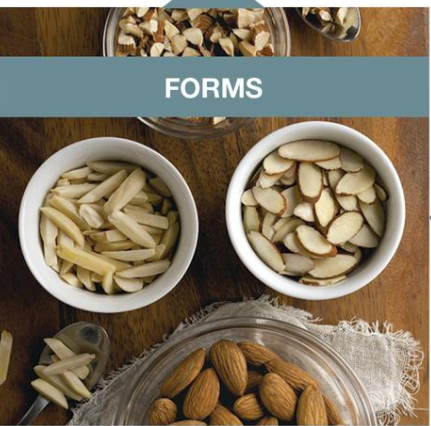
DORMANCY



HARVEST



FORMS



STORAGE



PROCESSING





Innovation continuum

**THE
HERE**

**THE
NEAR**

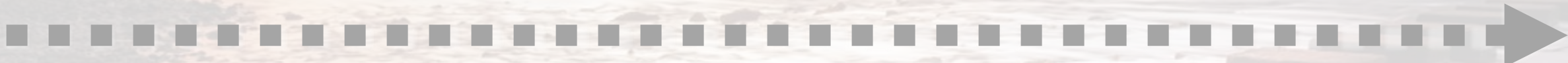
**THE
FAR**

SURVIVAL

NEW + RENEW

DISRUPTION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



new varieties	soil health	insect farming	NOW SIT	co-pyrolysis of woody material	global pasteurization
afla reduction	eval new varieties	biopesticides	gene edited trees	almond jet fuel	off ground harvesting
export hulls	Fermentation of hulls	almond allergy threshold		full control irrigation	almond batteries
full nutrient management	biomass applications	global pasteurization		isotope human studies confirm almond nutrients	

Off-ground journey

Harvesting the kernels



Drying the kernels

Stadium Drying



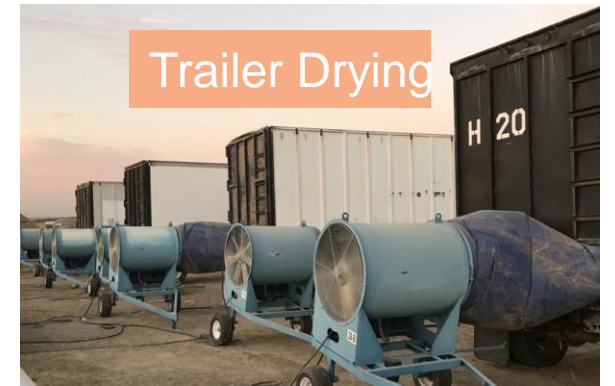
Column Drying



Tunnel Drying



Trailer Drying



Did you know?

The amount of water to grow an almond tree is similar to the amount used to grow many other fruit and nut trees. And the water used to grow almond trees actually produce three things: the hull, the shell and the kernel.

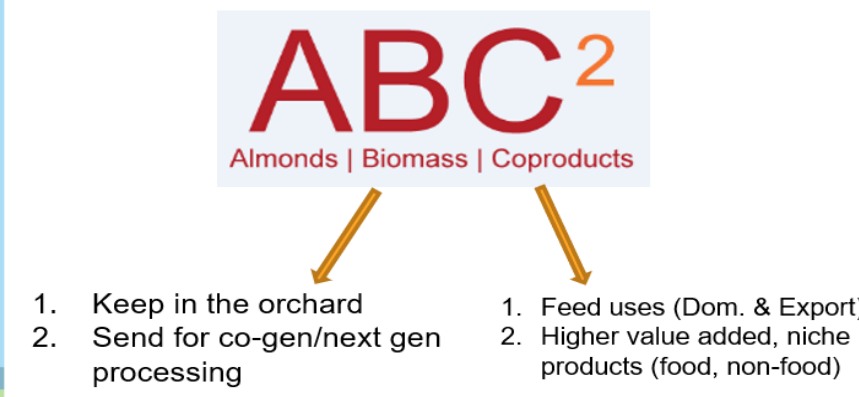
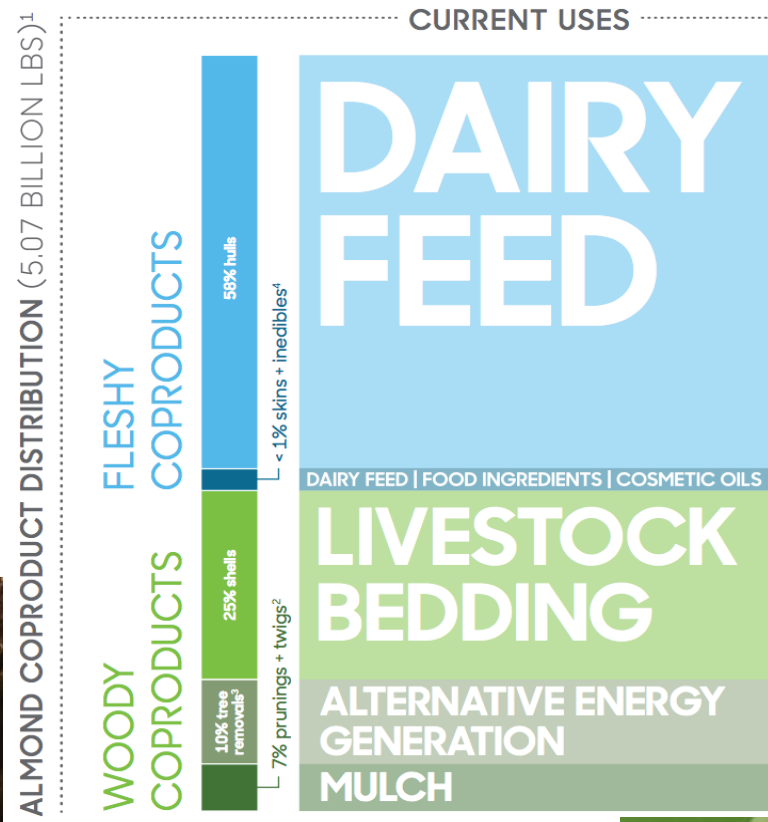
- 1. The Hull 51%**
The hull is the dried, fleshy outer layer. Hulls are sold as livestock feed, which reduces the amount of water used to grow other feed crops.
- 2. The Shell 19%**
Shells are used as an alternative fuel to generate electricity and as livestock bedding.
- 3. The Kernel 30%**
The kernel is the nutrient almond we eat. Each ounce of almonds (about a handful) has 9g of plant-based protein, 4g of fiber and is high in "good" (unsaturated) fat and only 1g of saturated fat.

ALMOND ORCHARD OF THE FUTURE

Where can the almond industry and ABC make a difference?

Accelerated Innovation Management (AIM)

- WATER MANAGEMENT + EFFICIENCY
- SUSTAINABLE WATER RESOURCES
- 22ND CENTURY AGRONOMICS
- AIR QUALITY



20 biomass projects funded for total of \$2.1 million



- Research on:
- Biosolarization
 - Torrefaction of shells
 - Blackcarbon

Working on opening china market for pelletized hulls

As a Federal Marketing Order, Almond Board employees are precluded from undertaking any activities that would be considered lobbying and/or influencing legislation.

Since 2013, ABC has maintained an agreement with the Almond Alliance of California. This has allowed the Almond Alliance to utilize ABC staff expertise in a consulting role to facilitate advocacy initiatives undertaken by the Almond Alliance.

Issues covered under the Agreement

- Water – both availability and quality**
- Trade – market access/tariffs/trade agreements**
- Pest Management – pesticide registration, MRLs**
- Biomass**
- Proposition 65**
- Issues that may arise during the year**



The Almond Alliance is fully dedicated to advocating for policies and legislation which benefit and protect the entire California almond industry. AAC members include almond processors, hullers/shellers, growers and allied businesses.

The Alliance is focused on being a voice for California's almond industry, monitoring state and federal legislation and engaging where bills would be beneficial or alternatively could damage the almond industry.

Questions?





Thank you!