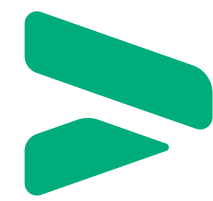





# Agricultural Technology Regional Industry Advisory



April 26th, 2024



# Housekeeping

- ✓ Enable your video camera (optional)
- ✓ Please stay on  unless you are called on to ask a question
- ✓ Submit all questions and commentary using the chat function
- ✓ This meeting will be recorded and will be provided as part of the post-meeting materials

# Welcome & Introduction

Hilary Tellesen, Valley Vision

Senior Project Manager

Diangelo Andrews, Valley Vision

Project Associate



# ➤ Thank You!



Josh Sweigert

Director of Employer Partnership

Agriculture, Water, Environmental Technology



Julie Muir

Director of Employer Partnership

Manufacturing and Automation

# Agenda

9:00 PM: Welcome and Introduction

9:10 PM: Agriculture in Greater Sacramento: A Labor Market  
Assessment

9:40 PM: Industry Panel Discussion

10:30 PM: Regional Programs

10:45PM: Networking Breakout Rooms

# Thank you

to all of our supporters



# Agriculture in Greater Sacramento: A Labor Market Assessment

Ebony Benzing, Director North (Greater Sacramento) Center of Excellence for Labor Market Research, Hosted By Los Rios Community College District



# Agriculture in Greater Sacramento

A Sector Overview





# The Centers of Excellence for Labor Market Research



Region	Director
North Far North	Ebony Benzing (North)
	Sara Phillips (Far North)
Bay Area	Marcela Reyes
Central Valley Motherlode	--
South Central Coast	--
Los Angeles	Luke Meyer
Orange County	Jesse Crete
Inland Empire/Desert	--
San Diego/Imperial	Tina Ngo Bartel
Statewide	Laura Coleman

# Typical COE Research Questions



Industries & Businesses



Size & Performance of Labor Market



Occupations & Job Titles



Wages & Earnings



Education & Training



Credentials



Skills



Emerging Workforce Trends

- What is the employment **outlook** for students?
- What **skills** and **credentials** are needed?
- What **programs** look ripe for investment?

# Presentation Overview

- Overview of Greater Sacramento's Agriculture Sector
- Demand for Jobs in Agriculture
- Agriculture Job Postings
- Postsecondary Agriculture Career Education Programs
- Ag Upskilling Initiatives





# Agriculture Sector Overview

- Source: Lightcast
- Covers the seven-county North (Greater Sacramento) subregion
- Historic period: 2017-2022
- Projection period: 2022-2027

# Greater Sacramento's Agriculture Sector

15,557

Jobs in 2022

15,357

Projected Jobs in 2027

(1%)

5-Yr Projected Job Growth

\$60,763

Average Earnings Per Job

1,315

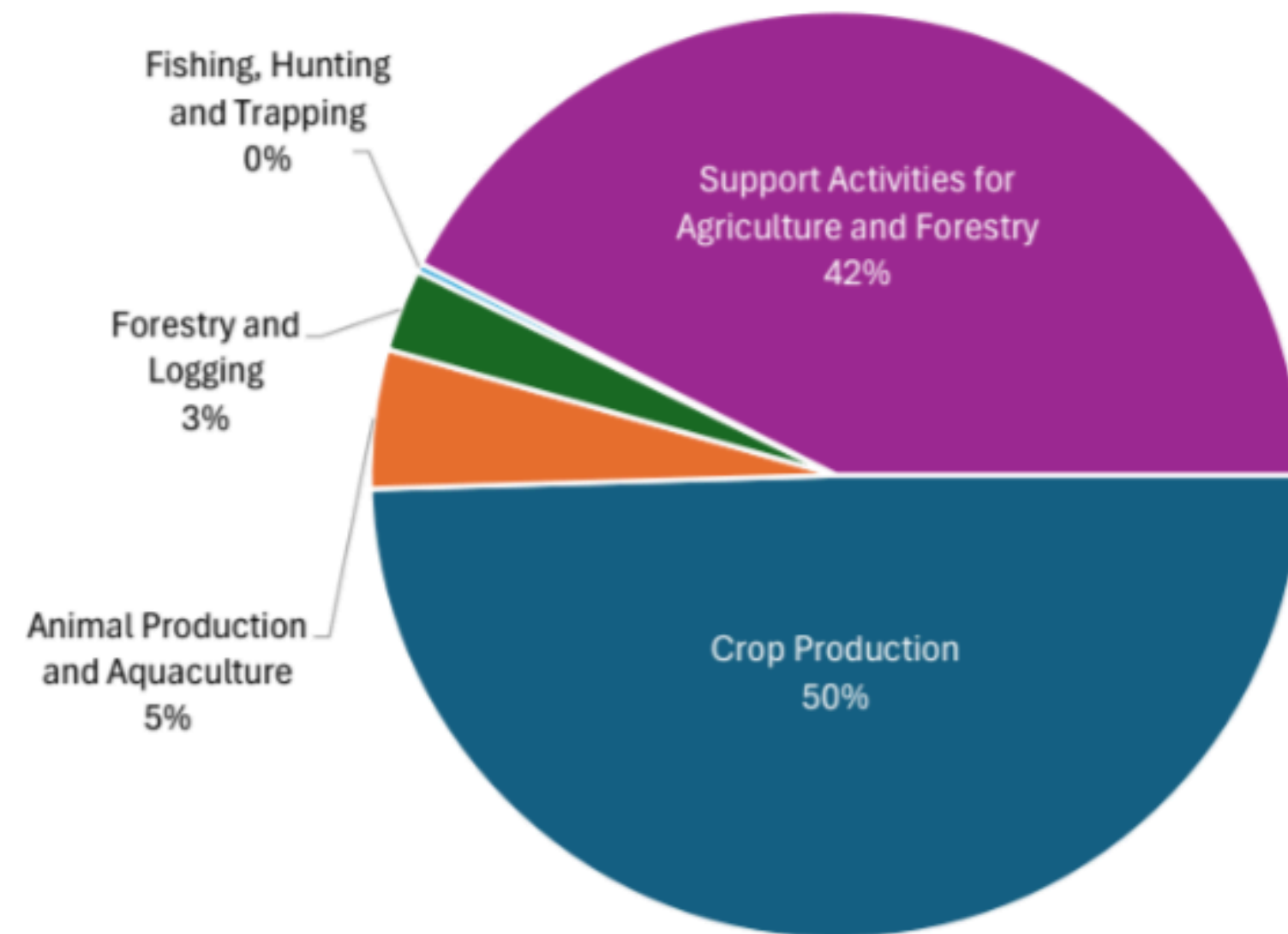
Number of  
Establishments

# Agriculture in Greater Sacramento

## Agricultural Subsectors:

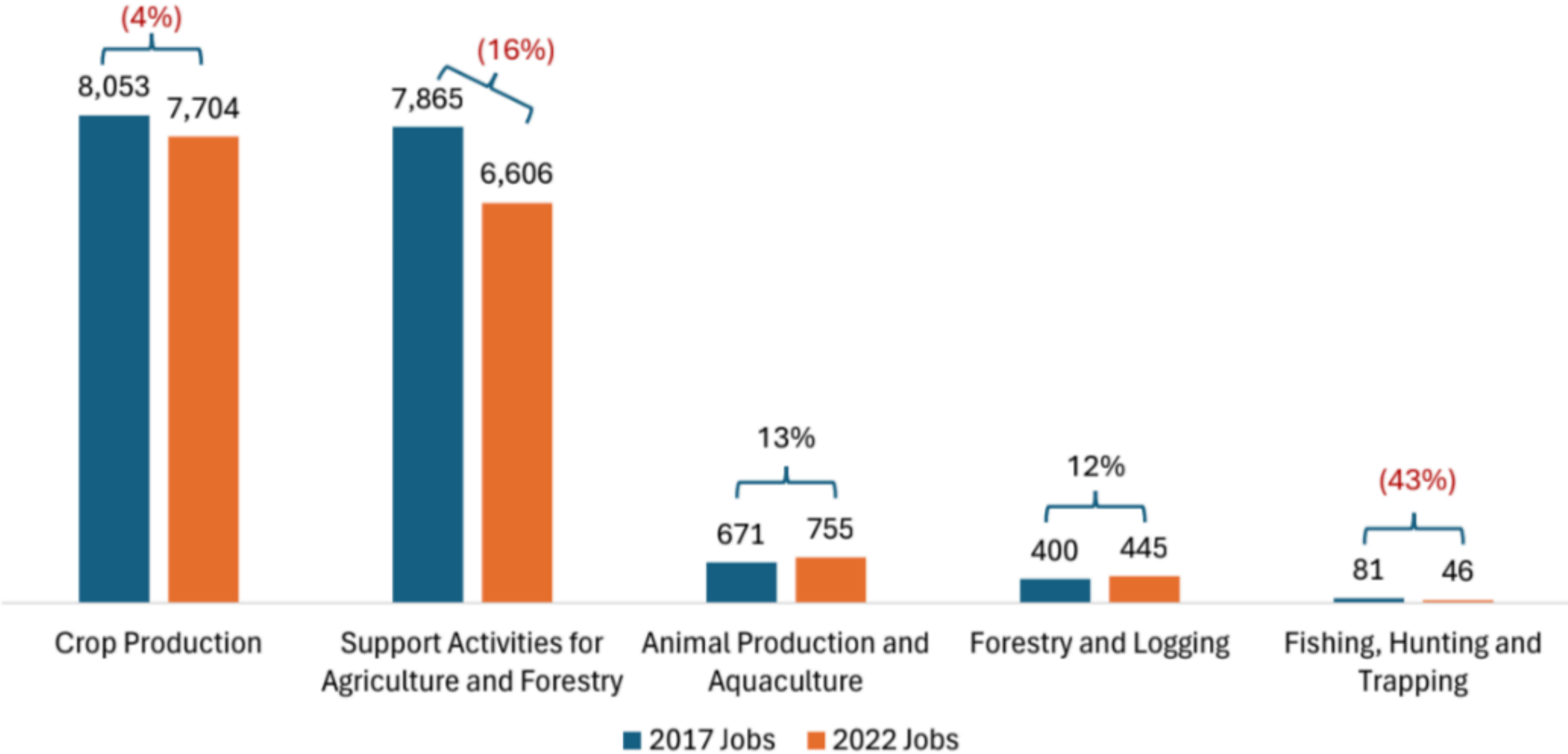
- Crop Production
- Animal Production & Aquaculture
- Forestry & Logging
- Fishing & Hunting
- Support Activities

## Greater Sacramento Agriculture Jobs, 2022



Source: Lightcast 2024.1 QCEW Employees, Non-QCEW Employees, and Self-Employed.

# Historic Job Changes, 2017-2022



Source: Lightcast 2024.1 QCEW Employees, Non-QCEW Employees, and Self-Employed.

# Projected Job Changes, 2022-2027

Subsector	2022 Jobs	2027 Jobs	5-Yr Projected Change	5-Yr Projected % Change
Crop Production	7,704	7,530	(174)	(2%)
Support Activities	6,606	6,665	59	1%
Animal Production and Aquaculture	755	748	(6)	(1%)
Forestry and Logging	445	378	(67)	(15%)
Fishing, Hunting and Trapping	46	36	(10)	(23%)
<b>Greater Sacramento Totals</b>	<b>15,557</b>	<b>15,357</b>	<b>(200)</b>	<b>(1%)</b>
<b>All Greater Sacramento Industries</b>	<b>1,278,319</b>	<b>1,377,193</b>	<b>98,874</b>	<b>8%</b>

Source: Lightcast 2024.1 QCEW Employees, Non-QCEW Employees, and Self-Employed.

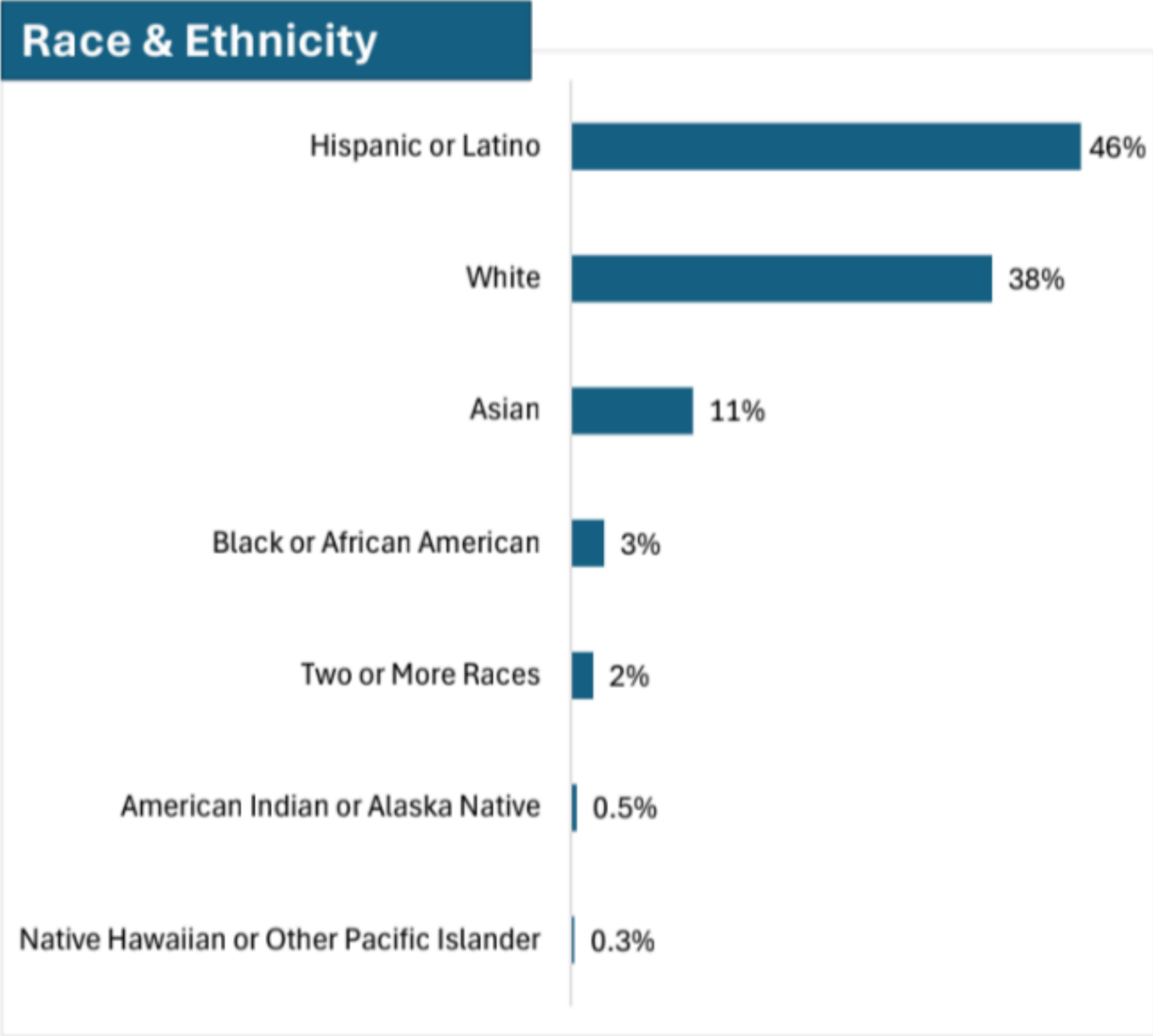


# Greater Sacramento's Agriculture Sector Demographics



Gender	
Male	64%
Female	36%

Age	
Under 24 years	9%
25 to 54 years	58%
55 to 64 years	19%
65 years and older	15%



Source: Lightcast 2024.1 QCEW Employees, Non-QCEW Employees, and Self-Employed.



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

# Demand for Agricultural Occupations

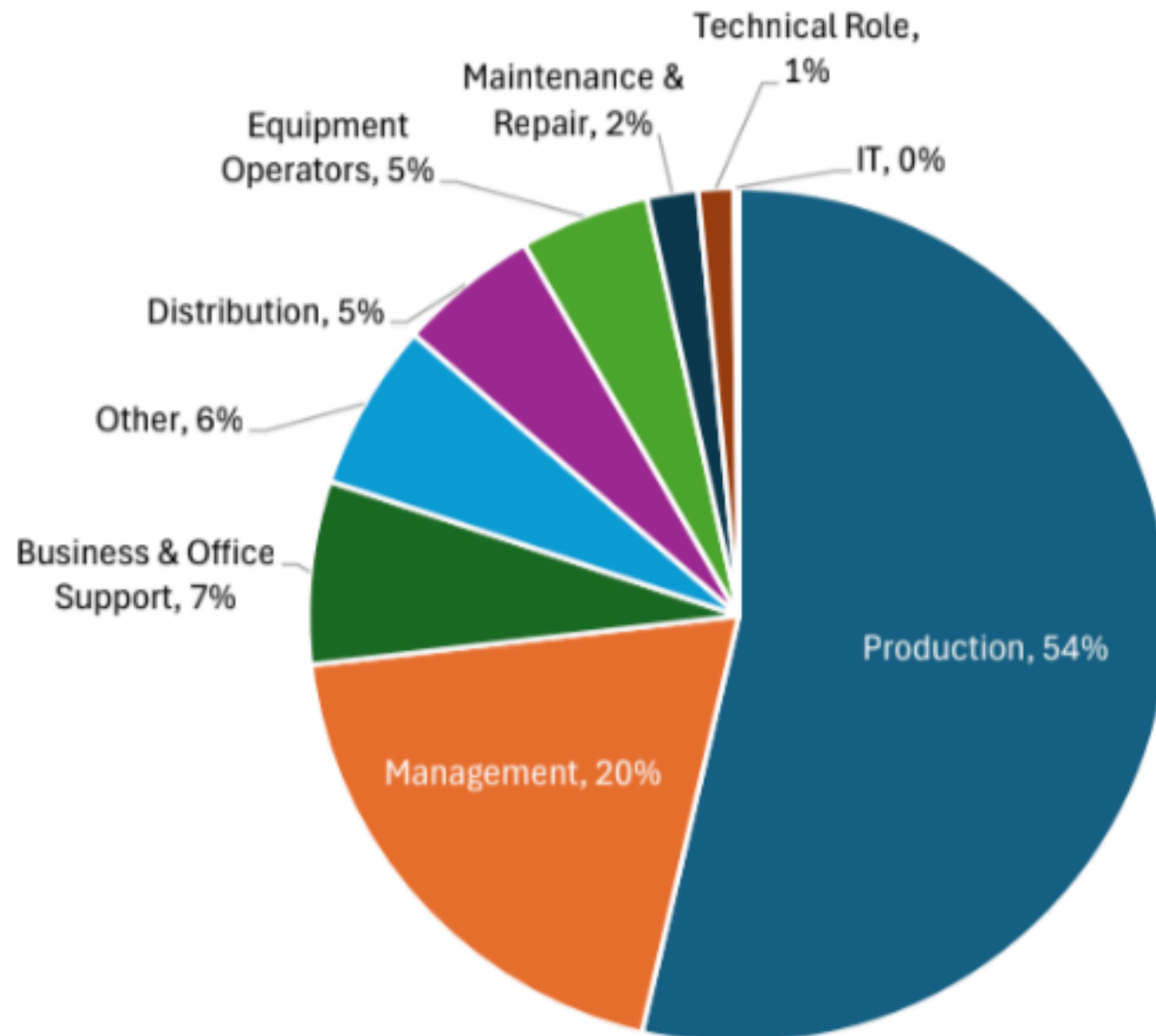
- Source: Lightcast
- Covers the seven-county North (Greater Sacramento) subregion
- Projection period: 2022-2027

# Agriculture Industry Sector Staffing

## Nine Occupational Groups

- Business & Office Support
- Distribution
- Equipment Operators
- IT
- Maintenance & Repair
- Management
- Production
- Technical Roles
- Other

## Employment by Occupational Group, 2022



Source: Lightcast 2024.1 QCEW Employees, Non-QCEW Employees, and Self-Employed.

# Projected Demand for Agricultural Workers

Agriculture Occupational Group	Employed in Sector 2022	Employed in Sector 2027	5-Yr Projected Change	5-Yr Projected % Change	Annual Openings*
Production	8,342	8,188	(154)	(1.8%)	10,746
Management	3,041	3,025	(16)	(0.5%)	3,222
Business & Office Support	1,077	1,037	(40)	(3.7%)	22,557
Distribution	824	810	(13)	(1.6%)	5,411
Equipment Operators	757	757	1	0.1%	477
Maintenance & Repair	297	294	(3)	(0.8%)	2,316
Technical Roles	208	216	7	3.5%	488
IT	28	31	4	12.9%	1,180
Other	984	998	14	1.4%	N/A
<b>Greater Sacramento Totals</b>	<b>15,557</b>	<b>15,357</b>	<b>(200)</b>	<b>(1.3%)</b>	<b>46,396</b>

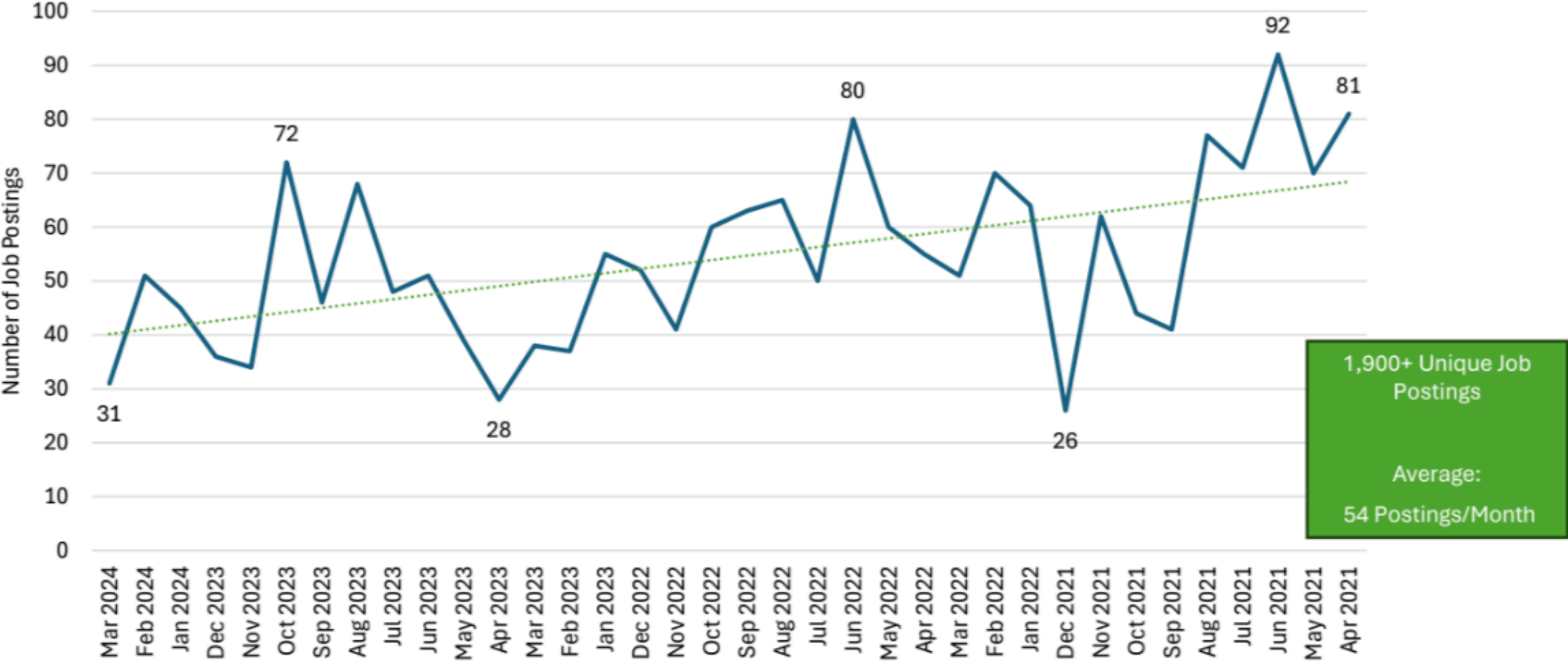
Source: Lightcast 2024.1 QCEW Employees, Non-QCEW Employees, and Self-Employed.



# Job Postings in Agriculture

- Source: Lightcast Job Posting Analytics
- Covers the Agriculture sector (NAICS 11) in the seven-county North (Greater Sacramento) subregion
- Online job postings in the subregion, April 2021 – March 2024
- Excludes internships, staffing companies, unclassified job titles, and unclassified employers.

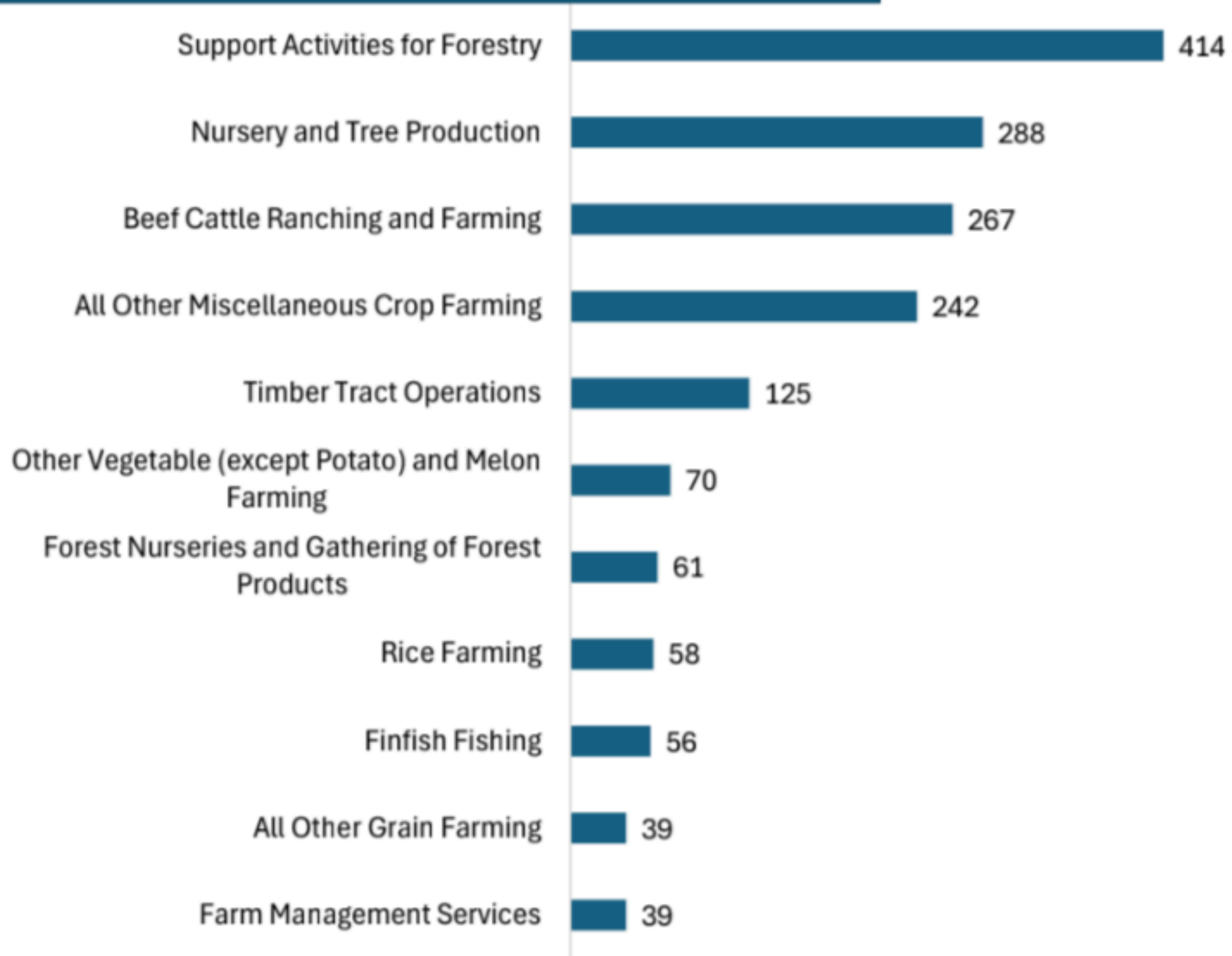
# Ag Sector Three-Year Job Postings Trend



Source: Lightcast Job Posting Analytics, April 2021-March 2024.

# Industries & Employers

## Ag Industries with the Most Postings



## Employers with the Most Postings

- United States Forest Service
- Woodland Agency
- Natura
- Ecological Farming Association
- Sierra Pacific Industries
- Village Nurseries
- Lumpy's Flowers GCM Management Services
- Cramer Fish Sciences
- McGee Services
- Wright Service Corp.

# Occupations & Job Titles

## Middle Skill Occupations with the Most Postings

- Forest and Conservation Technicians
- Heavy and Tractor-Trailer Truck Drivers
- Farmers, Ranchers, and Other Agricultural Managers
- Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
- Biological Technicians

## Above-Middle Skill Occupations with the Most Postings

- Foresters
- Secondary School Teachers
- Sales Representatives, Technical and Scientific Products
- Sales Managers

## Job Titles with the Most Postings

- Forestry Technicians
- CDL-A Truck Drivers
- Customer Service Representatives
- Pest Control Technicians
- Biological Science Technicians
- Farm Managers
- Maintenance Workers
- Delivery Drivers
- Shipping and Warehouse Managers
- Maintenance Handymen

Source: Lightcast Job Posting Analytics, April 2021-March 2024.



# Most Desired Skills in the Agriculture Sector

## Specialized

- Agriculture ↑
- Forestry ↑
- Biology ↑
- Irrigation (Landscaping And Agriculture)
- Pruning
- Warehousing ↑
- Cannabis ↑
- Accounting
- Project Planning
- Office Equipment

## Baseline/Soft

- Management
- Communication
- Operations
- Detail Oriented
- Lifting Ability
- Planning
- Customer Service
- Sales
- Leadership
- Coordinating

## Software

- Microsoft Office ↑
- Spreadsheets
- Geographic Information Systems ↑
- Google Workspace
- QuickBooks (Accounting Software)
- ArcGIS (GIS Software) ↑

Source: Lightcast Job Posting Analytics, April 2021-March 2024. Note: A green arrow indicates increasing demand for the listed skill.



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

# Community College Agriculture Programs

- CCCCO DataMart Covers the seven-county North (Greater Sacramento) subregion

# Community College Career Education Programs

Agriculture, Water & Environmental Technologies (AgWET) Sector Programs				
<b>Agricultural Pest Control Adviser</b> <ul style="list-style-type: none"> <li>Woodland (C)</li> </ul>	<b>Agriculture Business, Sales &amp; Service</b> <ul style="list-style-type: none"> <li>Cosumnes River (C/D/T)</li> <li>Woodland (C/T)</li> </ul>	<b>Agriculture Technology &amp; Sciences</b> <ul style="list-style-type: none"> <li>Cosumnes River (C/D)</li> <li>Sierra (C/D)</li> <li>Woodland (D)</li> <li>Yuba (D)</li> </ul>	<b>Animal Science</b> <ul style="list-style-type: none"> <li>Woodland (T)</li> <li>Yuba (C)</li> </ul>	<b>Environmental Technology</b> <ul style="list-style-type: none"> <li>Lake Tahoe (C/D)</li> <li>Sacramento City (C)</li> <li>Sierra (C/D)</li> <li>Woodland (C)</li> </ul>
<b>Equine Science</b> <ul style="list-style-type: none"> <li>Cosumnes River (D)</li> </ul>	<b>Forestry</b> <ul style="list-style-type: none"> <li>Lake Tahoe (C/D)</li> </ul>	<b>Horticulture</b> <ul style="list-style-type: none"> <li>American River (C)</li> <li>Cosumnes River (C)</li> <li>Woodland (C/D)</li> </ul>	<b>Landscape Design &amp; Maintenance</b> <ul style="list-style-type: none"> <li>American River (C/D)</li> <li>Cosumnes River (C/D)</li> </ul>	<b>Natural Resources</b> <ul style="list-style-type: none"> <li>American River (C/D)</li> </ul>
<b>Nursery Technology</b> <ul style="list-style-type: none"> <li>American River (C)</li> </ul>	<b>Parks and Outdoor Recreation</b> <ul style="list-style-type: none"> <li>Lake Tahoe (C)</li> </ul>	<b>Plant Science</b> <ul style="list-style-type: none"> <li>Woodland (T)</li> </ul>	<b>Veterinary Technician</b> <ul style="list-style-type: none"> <li>Cosumnes River (C/D)</li> <li>Yuba (C/D)</li> </ul>	<b>Viticulture, Enology &amp; Wine Business</b> <ul style="list-style-type: none"> <li>Folsom Lake (D)</li> </ul>

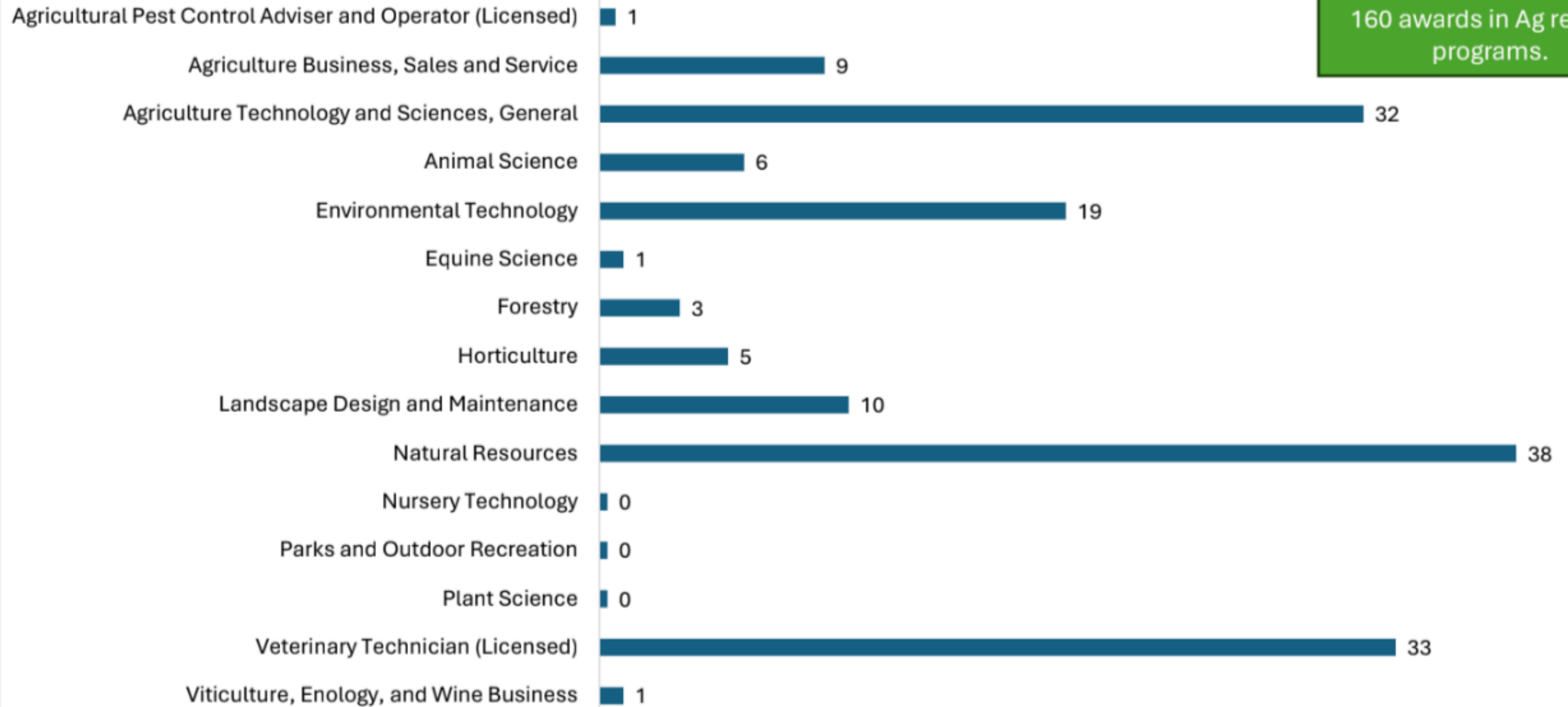
C = Certificate

D = Associate Degree

T = Associate Degree for Transfer

Source: California Community Colleges Chancellor's Office DataMart. Note: COE used a TOP-to-CCC Sector crosswalk to identify programs related to Agriculture.

## Agriculture Program Average Annual Awards (2020/21 – 2022/23)



In the last three years, Greater Sacramento Community Colleges conferred an average of 160 awards in Ag related programs.

Source: California Community Colleges Chancellor's Office DataMart. Note: COE used a TOP-to-CCC Sector crosswalk to identify programs related to Agriculture.

# Thank you!

Ebony J. Benzing  
Director, North (Greater Sacramento) COE

[ebony.benzing@losrios.edu](mailto:ebony.benzing@losrios.edu)

[coeccc.net](http://coeccc.net)



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

# » Industry Panel Discussion



Jose Alvarez

Organizational  
Effectiveness Director at  
Del Monte Foods



Trudi Hughes

President/CEO at  
California League of  
Food Producers



Amy Vedmore

Director Supply Chain  
Integration at Blue  
Diamond Growers



Diane Robinson

Human Resources  
Manager at TOMRA  
Foods



Greg Ahart

Vice President of  
Operations at Superior  
Farms



# Program Offerings and College Partnerships

---

Presented By Julie Muir and Josh Sweigert

# ➤ Program Offerings and College Partnerships

## Manufacturing Technology/Machining & Welding



### AS Degrees:

- Manufacturing Technology and Machining
  - <https://yc.yccd.edu/programs/manufacturing-technology-machining/>
- Welding
  - <https://yc.yccd.edu/programs/welding/>

### Certificates:

- Advanced Welding Technologies
- Fabrication and Manufacturing Methods
- Introductory Welding Technologies

### Program Highlights:

- Weld Camp 2024: 10 High Schools attended
- Project MFG Advanced Manufacturing Regional Competition
- Our manufacturing team traveled to the College of Southern Nevada, competing with 80 schools. Yuba College ranked 15<sup>th</sup>, and we are possibly moving into the Final Four. We are still waiting for the results!





# ➤ Program Offerings and College Partnerships



## Industrial Maintenance Mechanic Technician & Mechanical Electrical Technology (HVAC/R)

### AS Degrees:

- Mechanical-Electrical Technology (HVAC/R): <https://scc.losrios.edu/academics/programs-and-majors/mechanical-electrical-technology>
- Electro-Mechanical Technician: <https://scc.losrios.edu/academics/programs-and-majors/industrial-maintenance-mechanic-technician>

### Certificates:

- Mechanical Systems Technician
- Industrial Controls Technician
- Mechanical-Electrical Technology
- Industrial Maintenance Technician
- Electro-Mechanical Technician

### Program Highlights:

- Expanding two CNC (Computer Numerical Controls) courses into complete CNC program with an added focus on CNC Maintenance
- Working to build upon current course offerings to create a Water Technology Repair (WTR) career
- Hosted a career fair and open house last week with over 30 participating employers



# ➤ Program Offerings and College Partnerships



## Manufacturing and Industrial Technology & Modern Making

**AS Degrees:** <https://flc.losrios.edu/academics/programs-and-majors/manufacturing-and-industrial-technology>

- Manufacturing and Industrial Technology

**Certificates:**

- CAD/CAM Programming
- Manufacturing and Industrial Technology
- Production Planning
- Quality Technician
- Digital Fabrication
- Modern Making
- Physical Computing and the Internet of Things



# ➤ Program Offerings and College Partnerships



## Electronics Technology & Welding

**AS Degrees:** <https://arc.losrios.edu/academics/programs-and-majors/electronics-technology>

- Electronics Systems Technology (full-time or part-time)
- Mechatronics (full-time or part-time)
- Welding Technology: <https://arc.losrios.edu/academics/programs-and-majors/welding-technology>

**Certificates:**

- Electronic Systems Technology
- Mechatronics
- Telecommunication Specialist
- Welding Technology



# ➤ Program Offerings and College Partnerships



## Advanced Manufacturing, Mechatronics & Welding Technology

### AS/AA Degrees:

- AS: Advanced Manufacturing: <https://www.sierracollege.edu/academics/interest-areas/applied-technology/advanced-manufacturing/>
- AS: Advanced Manufacturing –Drafting Mechanical/Civil
- AS or AA: Mechatronics Technology: <https://www.sierracollege.edu/academics/interest-areas/applied-technology/mechatronics/>
- AS or AA: Welding Technology: <https://www.sierracollege.edu/academics/interest-areas/applied-technology/welding-technology/>

### Certificates:

- Advanced Manufacturing
- Drafting Essentials
- Foundations of Modern Machining
- Mechanical Drafting Specialist
- Mechatronics Technology
- Electro-Mechanical
- Welding
- Gas Metal Arc Welding
- Gas Tungsten Arc Welding
- Metal Fabricator and Designer
- Shielded Metal Arc Welding
- Welding Entrepreneurship

### Highlights:

- Curriculum highlights hands-on experience with foundational technologies ensuring students are well-versed in the basics of automation technology and manufacturing, including mechatronics and robotic systems.
- Over 100 local employers have hired the mechatronics graduates including Intel, TSI Semiconductor and Anheuser-Busch





# Program Offerings and College Partnerships

## Cosumnes River College [Agriculture Program Link](#) [Horticulture Program Link](#)

### AS Degrees:

- **General Agriculture (AS)**
- **Horticulture, Sustainable Landscape Technology (AS)**

### Certificates:

- General Horticulture
- Sustainable Irrigation and Water Management
- Sustainable Landscape Design

### Program Highlights:

- \$100K donation to renovate Urban Farm
- Replanting fruit orchard, adding small vineyard and an herb garden, other improvements
- Installing hydroponic and aquaponic systems in greenhouse Summer 2024

# ➤ Program Offerings and College Partnerships



## Advanced Manufacturing, Mechatronics & Welding Technology

### AS/AA Degrees:

- AS: Advanced Manufacturing: <https://www.sierracollege.edu/academics/interest-areas/applied-technology/advanced-manufacturing/>
- AS: Advanced Manufacturing –Drafting Mechanical/Civil
- AS or AA: Mechatronics Technology: <https://www.sierracollege.edu/academics/interest-areas/applied-technology/mechatronics/>
- AS or AA: Welding Technology: <https://www.sierracollege.edu/academics/interest-areas/applied-technology/welding-technology/>

### Certificates:

- Advanced Manufacturing
- Drafting Essentials
- Foundations of Modern Machining
- Mechanical Drafting Specialist
- Mechatronics Technology
- Electro-Mechanical
- Welding
- Gas Metal Arc Welding
- Gas Tungsten Arc Welding
- Metal Fabricator and Designer
- Shielded Metal Arc Welding
- Welding Entrepreneurship



### Highlights:

- Curriculum highlights hands-on experience with foundational technologies ensuring students are well-versed in the basics of automation technology and manufacturing, including mechatronics and robotic systems.
- Over 100 local employers have hired the mechatronics graduates including Intel, TSI Semiconductor and Anheuser-Busch

# ➤ Program Offerings and College Partnerships

## **Butte College** [Agriculture Program Link](#)

### **AS Degrees:**

- **Agriculture Business**
- **Agriculture Science**
- **Environmental Horticulture**
- **Natural Resources: Parks and Recreation**
- **Mechanized Ag: Heavy Equipment Operations**
- **Welding Technology**



### **Certificates:**

- **Plant Protection**

### **Program Highlights:**

- **Diversity of Programs**
- **Number of tenure-track faculty (5)**
- **In-person and online offerings**
- **Strong enrollments**

# ➤ Program Offerings and College Partnerships

## American River College [Horticulture Program Link](#)

### AS Degrees:

- **Horticulture**
- **Landscape Design Technology**

### Certificates of Achievement

- Horticulture
- Landscape Design Technology

### Certificates

- Floristry
- Horticulture Skills
- Landscape Design
- Plant Production
- Sustainable Landscaping





# ➤ Program Offerings and College Partnerships

## Woodland College [Agriculture & Horticulture Program Link](#)

### AS Degrees:

- **Ag Science (AS)**
- **Ag Animal Science (AS-T)**
- **Ag Business (AS-T)**
- **Ag Plant Science (AS-T)**
- **Environmental Horticulture (AS)**

### Certificates:

- Ag Research Technician
- Ag Business
- Environmental Horticulture
- Sustainable Ag
- Plant Protection

### Program Highlights:

- Working on partnership with UCD Bio/Ag/Engineering around Ag Mechanics certificate pathway to support Yolo/Colusa county employers by teaching technical skills for application in the field and at production facilities. Target launch: Fall 2025
- Dual enrollment SEED Academy with WJUSD – 11 high school students will graduate this year with their WCC Sustainable Ag certificate



# ➤ Program Offerings and College Partnerships

## Butte College [Agriculture Program Link](#)

### AS Degrees:

- Agriculture Business
- Agriculture Science
- Environmental Horticulture



- Natural Resources: Parks and Recreation
- Mechanized Ag: Heavy Equipment Operations
- Welding Technology

### Certificates:

- Plant Protection

### Program Highlights:

- Diversity of Programs
- Number of tenure-track faculty (5)
- In-person and online offerings
- Strong enrollments



# ➤ Program Offerings and College Partnerships

Yuba College [Agriculture Program Link](#)



AS Degrees:

- **Agriculture (AS)**
- **Ag Technology (AS)**

Certificates:

- Ag Technician

Program Highlights:

- Currently updating/revamping Ag Tech program to better serve local industry
- Emphasis on soft skills – dependability, interpersonal communication, integrity, etc.
- Seeking local employers/industry to advise program redesign, participate in annual advisory committee, offer work-based learning opportunities

# ➤ Program Offerings and College Partnerships

**Yuba College** [Agriculture Program Link](#)

## Yuba College Ag Tech Points of Contact:



Brittney Strong: [bstrong@yccd.edu](mailto:bstrong@yccd.edu)  
Agriculture Faculty

Alan Dixon: [adixon@yccd.edu](mailto:adixon@yccd.edu)  
Dean of CTE and Workforce Development

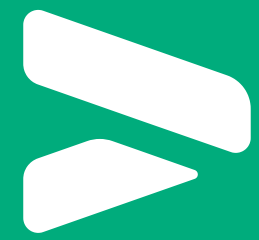
Josh Sweigert: [jsweigert@shastacollege.edu](mailto:jsweigert@shastacollege.edu)  
Director of Employer Partnership, Ag-Tech

# ➤ Upcoming Events

Hospitality, Culinary, and Tourism  
Advisory on Point of Sales Systems  
May 10 from 9-11 am

REGISTER NOW





# Please Join Your Networking Breakout Room

- Manufacturing Discussion Group
- Agriculture Discussion Group

For more information, please contact:

Julie Muir, Director of Employer Partnership  
[MuirJ@scc.losrios.edu](mailto:MuirJ@scc.losrios.edu)

Josh Sweigert, Director of Employer Partnership  
[jsweigert@shastacollege.edu](mailto:jsweigert@shastacollege.edu)

Hilary Tellesen, Project Leader  
[hilary.tellesen@valleyvision.org](mailto:hilary.tellesen@valleyvision.org)

DiAngelo Andrews, Project Associate  
[diangelo.andrews@valleyvision.org](mailto:diangelo.andrews@valleyvision.org)



Fill out our survey and  
let us know what you  
think