

Arizona Agriculture
Reaches the World

Citrus, Fruit and Vegetable Division

Annual Report July 1, 2022-June 30, 2023



AZDA
ARIZONA
DEPARTMENT
OF AGRICULTURE

ARIZONA DEPARTMENT OF AGRICULTURE
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ARIZONA DEPARTMENT OF AGRICULTURE

CITRUS, FRUIT & VEGETABLE DIVISION

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<https://agriculture.az.gov/about-us/divisions/citrus-fruit-vegetable-standardization>

The Citrus, Fruit and Vegetable Division as set forth in A.R.S. § 3-441 and A.R.S. § 3-481 provides produce licensing, collection of statistical data and fresh produce administrative assistance. Citrus, Fruit and Vegetable Division formerly monitored and enforced quality standards. Under the recommendation of the Citrus, Fruit and Vegetable Division Advisory Council, the Citrus, Fruit and Vegetable Division program has moved toward a food safety program instead of a produce quality program.

Statistical data is collected from Arizona Shippers, who are the first handlers of produce. Citrus, Fruit and Vegetable Division assists the Arizona Citrus Research Council (ACRC) and the Arizona Iceberg Lettuce Research Council (AILRC) in the collection of assessments and statistical data. ACRC and AILRC support the development of citrus and iceberg lettuce research programs and projects within the Arizona produce industry.

Citrus, Fruit and Vegetable Division assisted in the implementation and in the current administration of the State of Arizona's first marketing agreement. Arizona Leafy Greens Marketing Agreement (Arizona LGMA) provides food safety audits to the Arizona produce industry and is managed by the Arizona Leafy Greens Food Safety Committee. The Arizona Leafy Greens Food Safety Committee is made up of five signatory members, elected by all of the Arizona LGMA signatories. Arizona is the second largest leafy green producer in the United States. Arizona LGMA members represent 99.4% of leafy green products grown in Arizona.

Under a cooperative agreement with the United States Department of Agriculture (USDA), Citrus, Fruit and Vegetable Division manages the Federal-State Inspection Service which includes shipping point and terminal market inspections with offices in Phoenix, Nogales, and Yuma.

The Produce Safety Rule is administered under the guidance of Citrus, Fruit and Vegetable Division through a grant provided by the U.S. Food and Drug Administration (FDA). The Produce Safety Rule program provides the Arizona produce industry training, outreach, and inspection for compliance of the Produce Safety Rule component of the Food Safety Modernization Act.

This program is entirely industry funded through license fees and carton assessments and uses no general fund monies. We work closely with a governor appointed industry advisory council, which meets quarterly and advises the program supervisor on all issues pertaining to Citrus, Fruit and Vegetable Division.



Note: Acreage information is available at:

Arizona Agricultural Statistics

230 N. 1st Avenue, suite 302-A

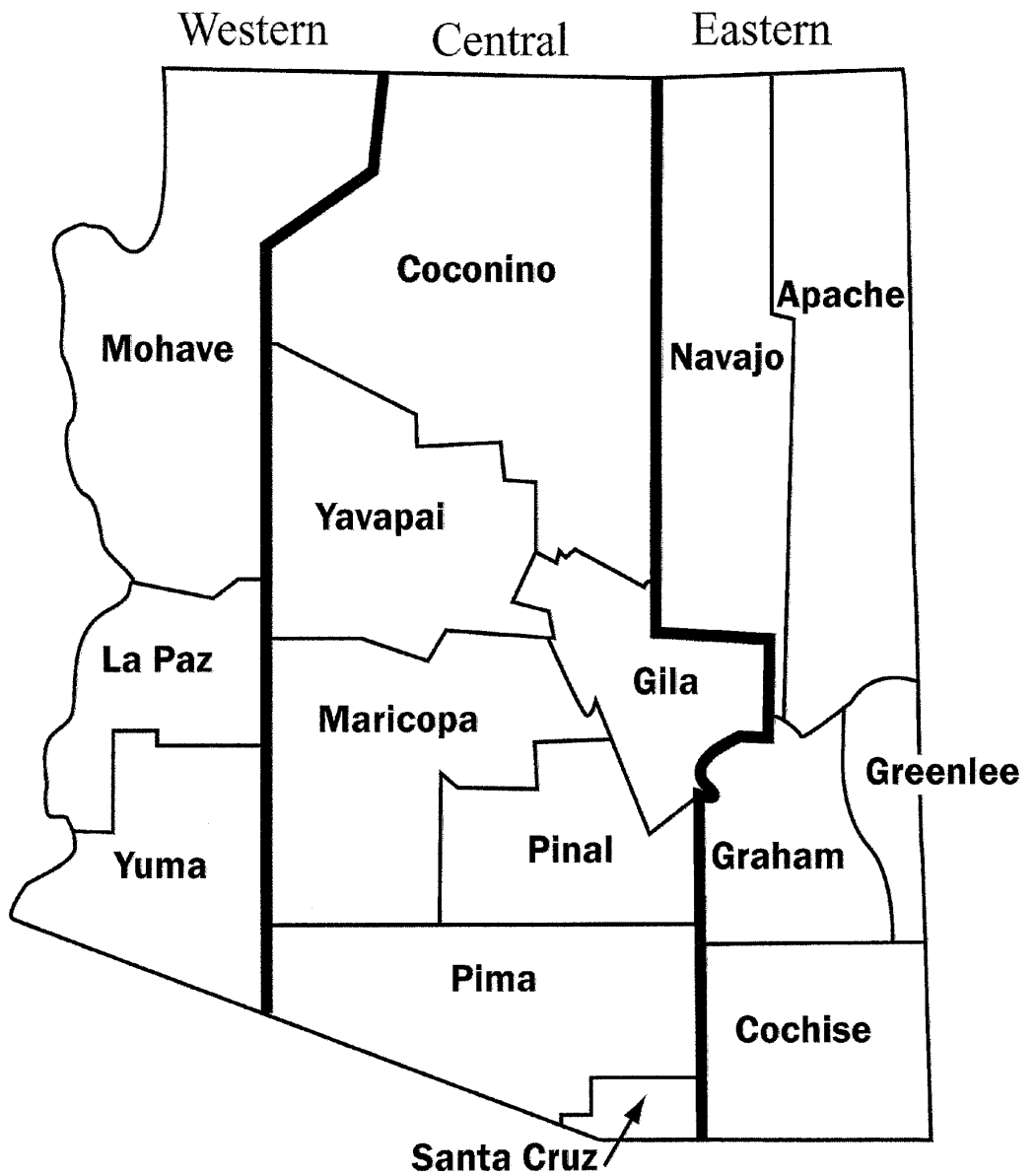
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Arizona Fresh Fruit & Vegetable Production District Map



**TOP TEN ARIZONA PRODUCE COMMODITIES
JULY 1, 2022 - JUNE 30, 2023**

Commodity	Package	Central	Western	Eastern	Total Arizona
Lettuce, Iceberg	Carton	283,684	22,905,177	0	23,188,861
Lettuce, Romaine	Carton	125,303	20,185,136	0	20,310,439
Cantaloupe	Carton	4,932,469	2,615,292	0	7,547,761
Spinach	Carton	40,782	7,234,232	0	7,275,014
Broccoli	Carton	1,591,345	4,877,640	0	6,468,985
Lettuce, Leaf	Carton	36,346	6,272,353	0	6,308,699
Cabbage	Carton	354,182	3,948,483	0	4,302,665
Cauliflower	Carton	63,079	3,746,519	0	3,809,598
Celery	Carton	56,471	2,723,959	0	2,780,430
Watermelon	Carton	847,156	1,791,976	0	2,639,132

**TOTAL ARIZONA PRODUCTION
JULY 1, 2022 - JUNE 30, 2023**

Commodity	Package	Central	Western	Eastern	Total Arizona
<u>VEGETABLES</u>					
Anise	Carton	0	67,259	0	67,259
Arugula	Carton	0	939,301	0	939,301
Beets	Carton	23,964	74,292	0	98,256
Bok Choy	Carton	14,482	166,849	0	181,331
Broccoli	Carton	1,591,345	4,877,640	0	6,468,985
Brussel Sprouts	Carton	0	138,272	0	138,272
Cabbage	Carton	354,182	3,948,483	0	4,302,665
Cauliflower	Carton	63,079	3,746,519	0	3,809,598
Celery	Carton	56,471	2,723,959	0	2,780,430
Cilantro	Carton	192,013	1,347,479	0	1,539,492
Corn	Carton	326,521	0	0	326,521
Dandelion	Carton	10,289	8,639	0	18,928
Dill	Carton	0	1,624	0	1,624
Endive	Carton	0	15,140	0	15,140
Escarole	Carton	0	19,497	0	19,497
Frisee	Carton	0	9,131	0	9,131
Greens, Mixed	Carton	59,906	163,945	0	223,851
Herbs	Carton	0	3,688	0	3,688
Kale	Carton	111,640	649,135	0	760,775
Kohlrabi	Carton	3,125	2,685	0	5,810
Leeks	Carton	9,695	94,819	0	104,514
Lettuce, Boston	Carton	0	965,262	0	965,262
Lettuce, Iceberg	Carton	283,684	22,905,177	0	23,188,861
Lettuce, Leaf	Carton	36,346	6,272,353	0	6,308,699
Lettuce, Romaine	Carton	125,303	20,185,136	0	20,310,439

TOTAL ARIZONA PRODUCTION (continued)
JULY 1, 2022 - JUNE 30, 2023

Commodity	Package	Central	Western	Eastern	Total Arizona
<u>VEGETABLES continued</u>					
Napa	Carton	12,220	275,084	0	287,304
Okra	Carton	167	0	0	167
Onions, Dry	Carton	213,288	186,667	0	399,955
Onions, Green	Carton	0	144,769	0	144,769
Parsley	Carton	99,318	655,154	0	754,472
Potatoes, Table	50 Lb Carton	311,618	0	0	311,618
Radicchio	Carton	0	46,216	0	46,216
Spinach	Carton	40,782	7,234,232	0	7,275,014
Spring Mix	Carton	18,282	2,520,136	0	2,538,418
Swiss Chard	Carton	25,210	116,149	0	141,359
Tomatoes	Carton	346,706	45,136	0	391,842
Turnips	Carton	12,744	35,951	0	48,695
Watercress	Carton	0	8,813	0	8,813
<u>FRUIT</u>					
Apples	Carton	0	0	12,628	12,628
Apples	Mfg Ton	0	0	1,680	1,680
Figs	Carton	8,188	1,413	0	9,601
Pears	Mfg Ton	0	0	48	48
<u>MELONS</u>					
Cantaloupe	Carton	4,932,469	2,615,292	0	7,547,761
Canary	Carton	15,028	0	0	15,028
Honeydew	Carton	1,258,850	551,990	0	1,810,840
Santa Claus	Carton	10,045	0	0	10,045
Specialty/Mixed Melon	Carton	121,610	424,645	0	546,255
Watermelon	Carton	847,156	1,791,976	0	2,639,132
<u>CITRUS</u>					
Lemons	Carton	54,298	1,900,363	0	1,954,661
Oranges, Navel	Carton	13,813	0	0	13,813
Tangerines, Minneola	Carton	21,032	19,461	0	40,493
<u>CITRUS BY-PRODUCTS</u>					
Lemons	Ton	2,065	14,512	0	16,577
Oranges, Navel	Ton	48	0	0	48
Tangerines, Minneola	Ton	0	110	0	110

FIVE YEAR PRODUCTION COMPARISONS

Comparison of Fresh Cartons

Commodity	Carton Size	2018-19	2019-20	2020-21	2021-22	2022-23
Anise	37 lbs.	94,755	89,095	118,645	63,984	67,259
Apples	40 lbs.	8,372	21,317	7,577	17,249	12,628
Artichoke	23 lbs.	0	0	0	105	0
Arugula	35 lbs.	534,096	543,320	501,673	743,829	939,301
Bean Sprouts	10 lbs.	280	1,911	0	0	0
Beets	35 lbs.	91,716	92,436	115,586	128,768	98,256
Bok Choy	38 lbs.	72,601	89,057	99,747	155,166	181,331
Broccoli	23 lbs.	6,227,550	6,418,031	6,352,021	6,550,849	6,468,985
Brussel Sprouts	25 lbs.	17,633	21,222	17,273	24,329	138,272
Cabbage	50 lbs.	3,978,812	3,474,608	3,202,687	3,874,554	4,302,665
Canary Melons	30 lbs.	0	0	6,419	7,938	15,028
Cantaloupes	40 lbs.	7,688,295	7,457,185	6,686,501	6,612,617	7,547,761
Cauliflower	25 lbs.	4,453,735	4,513,252	4,313,903	4,219,430	3,809,598
Celery	50 lbs.	1,841,509	2,110,514	1,991,520	2,396,076	2,780,430
Cilantro	20 lbs.	776,396	1,006,852	1,201,079	1,284,266	1,539,492
Corn, Sweet	50 lbs.	432,166	275,677	310,347	287,222	326,521
Daikon	40 lbs.	156	0	0	0	0
Dandelion/Dill	15 lbs.	35,064	31,494	24,306	24,511	20,552
Endive	30 lbs.	12,519	19,844	20,435	15,905	15,140
Escarole	30 lbs.	31,711	37,864	29,619	22,398	19,497
Figs	20 lbs.	31,219	30,917	14,524	13,561	9,601
Frisee	35 lbs.	2,959	7,142	8,359	1,695	9,131
Grapefruit	34 lbs.	20,360	0	0	0	0
Grapes	20 lbs.	9,464	0	0	0	0
Greens, Mixed	25 lbs.	119,420	120,201	187,783	230,264	223,851
Herbs	5 lbs.	22,735	14,917	5,696	5,699	3,688
Honeydew	30 lbs.	1,753,635	1,612,031	1,464,694	1,551,827	1,810,840
Kale/Flowering Kale	25 lbs.	793,565	694,816	628,743	733,282	760,775
Kohlrabi	20 lbs.	10,423	8,657	10,179	7,719	5,810
Leeks	30 lbs.	28,443	32,148	11,195	62,449	104,514
Lemons	40 lbs.	1,978,008	2,498,897	1,402,357	1,802,029	1,954,661
Lettuce, Boston	35 lbs.	450,652	415,223	356,753	299,318	965,262
Lettuce, Iceberg	50 lbs.	24,405,556	20,950,739	20,278,811	20,914,964	23,188,861
Lettuce, Leaf	35 lbs.	6,302,892	6,691,018	6,276,716	6,628,720	6,308,699
Lettuce, Romaine	40 lbs.	19,353,392	18,746,765	17,569,804	17,476,631	20,310,439
Napa	40 lbs.	120,564	120,220	109,613	146,902	287,304
Okra	30	0	0	0	0	167
Onions, Dry	50 lbs.	818,749	485,290	375,634	287,896	399,955
Onions, Green	13 lbs.	373	0	0	0	144,769
Oranges	40 lbs.	45,566	26,939	0	0	13,813
Parsley	21 lbs.	335,136	352,714	419,562	535,855	754,472
Pears	26 lbs.	4,397	0	0	0	0
Peas, English	25 lbs.	0	0	23	6,080	0
Potatoes, Table 50#	50 lbs.	268,135	354,637	263,111	362,554	311,618
Radicchio	35 lbs.	73,919	65,842	52,971	55,885	46,216
Santa Claus Melons	30 lbs.	0	0	7,887	5,567	10,045
Specialty & Mixed Melons	30 lbs.	575,126	318,462	611,144	375,261	546,255

Comparison of Fresh Cartons Continued

Commodity	Carton Size	2018-19	2019-20	2020-21	2021-22	2022-23
Spinach	25 lbs.	7,971,256	6,489,502	5,866,119	8,310,749	7,275,014
Spring Mix	35 lbs.	2,484,382	4,969,803	2,562,792	2,432,595	2,538,418
Summer Squash	30 lbs.	0	0	0	926	0
Swiss Chard	15 lbs.	147,510	126,833	118,609	112,990	141,359
Tangerines	40 lbs.	164,949	129,469	81,058	51,566	40,493
Tomatoes	30 lbs.	773,252	819,421	516,072	408,794	391,842
Turnips	50 lbs.	28,413	18,922	27,313	40,103	48,695
Watercress	8 lbs.	66,716	44,618	3,177	53,714	8,813
Watermelon	60 lbs.	4,131,909	3,433,622	3,359,659	3,527,908	2,639,132
Total Cartons		97,469,040	94,179,560	85,859,364	92,872,699	99,537,228

FIVE YEAR PRODUCTION MANUFACTURED TONS COMPARISONS

Comparison of Mfg. Tons

Commodity	2018-19	2019-20	2020-21	2021-22	2022-23
Apples	1,866	3,768	1,813	2,299	1,680
Pears	0	0	0	0	48
Lemons	10,106	18,928	465	12,834	16,577
Oranges	0	203	0	0	48
Tangerines	1,365	2,749	28	585	110
Total Mfg. Tons	13,337	25,648	2,306	15,718	18,463

CFV LICENSING

A company desiring to transact business as a fruit or vegetable fruit dealer, citrus dealer, or shipper are required to apply for a license to the Citrus, Fruit and Vegetable Division. A license must be current prior to packing, shipping or wholesaling of produce. The citrus dealer licenses expire on August 1st and fruit or vegetable fruit dealer and shipper expire on September 1st of each year and must be renewed annually.

License Type	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Citrus Dealer	38	41	40	39	44
Produce Dealers	222	224	220	214	224
Shippers	147	139	133	130	127
Total	407	404	393	383	395

ORGANIC CERTIFICATION COST SHARE REIMBURSEMENTS

Organic operations may receive one reimbursement per certificate or scope of certification per year. The NOP currently recognizes four scopes of certification: crops, wild crops, livestock, and processing/handling. This means that clients with more than one certification scope may be eligible for more than one reimbursement.

Eligible operations will be reimbursed up to 50% of their organic certification costs, not to exceed \$500, for each NOP scope of organic certification. Any operation that is located within the United States and received organic certification on or between October 1, 2021 and September 30, 2022 may apply for reimbursement.

Fiscal Year	Certification Dates	Number of Reimbursements	Amount Reimbursed
FY 2011	October 1, 2010-September 30, 2011	32	\$ 31,989.22
FY 2012	October 1, 2011-September 30, 2012	43	\$ 35,888.48
<i>FY 2013</i>	<i>The USDA did not renew the Arizona grant for Organic Certification Cost Share Reimbursement for October 1, 2012-September 30, 2013.</i>		
FY 2014	October 1, 2013- September 30, 2014	48	\$ 40,897.37
FY 2015	October 1, 2014- September 30, 2015	58	\$ 67,727.27
FY 2016	October 1, 2015- September 30, 2016	60	\$ 41,273.58
FY 2017	October 1, 2016- September 30, 2017	91	\$ 67,794.83
FY 2018	October 1, 2017- September 30, 2018	98	\$ 67,491.37
FY 2019	October 1, 2018- September 30, 2019	80	\$ 47,038.15
FY 2020	October 1, 2019- September 30, 2020	80	\$ 36,961.79
FY 2021	October 1, 2020- September 30, 2021	76	\$ 37,215.00
FY 2022	October 1, 2021- September 30, 2022	62	\$ 30,417.85
Total		728	\$474,277.06

FEDERAL STATE INSPECTION SERVICE

The Arizona Federal-State Inspection Service, Fresh Produce Grade Inspection operates under a cooperative agreement between the United States Department of Agriculture and the Arizona Department of Agriculture. Citrus, Fruit and Vegetable Division has managed the program since 1996. The service is self supported with mandatory and voluntary inspection and certifications of fruits, vegetables and nuts and is funded entirely through user fees.

Inspection	Fiscal Year	Nogales	Phoenix	Yuma	Total
Market Inspections	FY 2021	54,645	599	644	55,888
	FY 2022	40,147	182	202	40,531
	FY 2023	43,307	247	9	43,563
Shipping Point Inspection	FY 2021	445	0	29	474
	FY 2022	129	14	0	143
	FY 2023	149	0	117	266
GHP/GAP Audits Statewide	FY 2021	17			
	FY 2022	10			
	FY 2023	10			

PRODUCE SAFETY RULE

In September of 2016, the Arizona Department of Agriculture and the Food and Drug Administration (FDA) entered into a five year cooperative agreement for the implementation of the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR). In August of 2018, the AZDA's Citrus, Fruit and Vegetable (CFV) Division gained primacy over the PSR.

The goal of the cooperative agreement was to develop and implement, a training and outreach program and a regulatory compliance and enforcement program for Arizona stakeholders covered under the PSR. The overarching goal of the Produce Safety Rule Program is to protect public health through the safe production of fresh fruits and vegetables. Ultimately, minimizing the risks of pathogen contamination is instrumental to preventing foodborne illnesses.

In July 2021, the Cooperative Agreement Program was extended for another five year period and the Arizona Department of Agriculture will continue to oversee the Produce Safety Rule Program in the state of Arizona.

We believe it is important to align our program with the federal regulation to guarantee consistency nationwide. We continue to leverage the existing expertise, knowledge and resources in our state to provide education, training, and technical assistance to all produce farms. To better understand and assess the type of risks which occur during the growing, harvesting, packing and holding of fresh fruits and vegetables the AZDA continues to evaluate produce

PSR FARM INVENTORY

In order to reach our goals and provide outreach, we will continue to establish and maintain an inventory of covered farms. This information will be shared quarterly with the FDA on an aggregate level throughout the next five year period. The AZDA recognized the importance of providing our partners with only the necessary data while protecting the privacy of our stakeholders, therefore we will continue to only share aggregate information. Farms are classified into sizes based on their average annual produce sales. Farms can be approved for an exemption based on criteria defined by the Food and Drug Administration. 2021 was the first year that farms received certification for either a Qualified Exemption or a Micro-Exemption.

Type of Farm	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Large Farms (Over 500,00 average annual produce sales)	143	109	124	121	132
Small Farms (250,000-500,00 average annual produce sales)	29	21	28	15	23
Very Small Farms (25,000-250,000 average annual produce sales)	31	36	44	17	16
Total Covered Farms	203	166	196	153	171
Certified Qualified Exempt (Under 500,000 average annual produce sales and shipping within 275 miles)	0	0	19	45	53
Certified Micro Exempt (Under 25,000 average annual produce sales)	0	0	19	149	111

PSR EDUCATION, TRAINING & TECHNICAL ASSISTANCE

Education before and while we regulate will continue to be the motto for the Produce Safety Rule Program. It is necessary to provide produce farmers with all the resources need to comply with the regulation. The Produce Safety Rule is the first ever federally mandated food safety standard thus technical assistance must be provided to ensure compliance. In 2022, there will be updates to the agricultural water section of the Produce Safety Rule and because of the changes made to the regulation there will be a need for additional training and outreach for farmers nationwide. We will also have to provide internal training for our inspectors once the rule is finalized.

The AZDA provides sub award funding to the University of Arizona's Environmental Science Department for assistance from their cooperative extension staff that is well versed in food safety to assist in stakeholder trainings and technical assistance. We will continue to fund the sub awardee to provide assistance in order to satisfy the goals in the grant for the next five year period.

PSR EDUCATION, TRAINING & TECHNICAL ASSISTANCE

We made an effort to make training convenient for our industry by offering the mandatory, eight hour Produce Safety Alliance Grower Training course on a regular basis in different locations across Arizona. Additionally, a significant emphasis has been placed on enhancing individual farm technical assistance through our On-Farm Readiness Reviews. With the onset of COVID19, we adapted our training and outreach efforts to remote and online. Additional outreach was made through new online resources such as the AZDA Produce Safety Rule webpage, new social media accounts, an email listserv and the development of promotional videos.

Education, Training & Technical Assistance	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
PSA Grower Training Courses - ENG	1	4	10	7	30	12	12	76
PSA Grower Training Courses - SPA	1	2	1	2	0	2	0	8
Number of PSA Participants	78	165	241	142	229	142	186	1183
On Farm Readiness Reviews			25	46	38	16	14	139
Farm Visits (Educational)		20	21	42	45	53	34	215

PSR COMPLIANCE & ENFORCEMENT

In November 2019 the AZDA began regulatory inspections that reinforced our education and outreach of the Produce Safety Rule. Compliance and enforcement will ensure that we are providing the industry with the proper education, training and technical assistance to comply with the federal regulation and continue to improve upon their food safety practices. During 2021, routine inspections began for farms who had already received an initial inspection in the previous year. As routine inspections continue, inspectors will begin to determine the frequency of inspections based on food safety risks based on the Food and Drug Administration's criteria.

PSR Inspections	FY 2020	FY 2021	FY 2022	FY 2023
Initial Inspections	55	57	26	32
Reinspection	1	0	0	1
Routine		23	45	44
Total	56	80	71	77