Mission:

To protect the health and safety of Arizona consumers, advance and support Arizona agriculture, and safeguard commerce.



Arizona

Department of Agriculture

Annual Report

FY2022

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Executive Summary



As the Arizona Department of Agriculture (AZDA) completes its 30th year as an agency, the AZDA has a mission, "to support and promote Arizona agriculture in a way that encourages farming, ranching and agribusiness, protects the well-being of people, plants, animals and the environment while safeguarding commerce, consumers and natural resources".

The AZDA was created in 1991 and sought to bring together various boards and commissions and all aspects of agriculture under one roof, using the fewest regulations possible while improving customer service, enhancing protection of the public, consumers and natural resources. Additionally, the AZDA was tasked with assisting producers in raising the best crops and herds, educating the public about Arizona agriculture and increasing the demand for our commodities. Director Killian has attended numerous industry and



representative meetings to talk about the AZDA and its eight main divisions/programs and to solicit feedback from its customers and the public. In addition, The Department surveyed our customers and also held a number of strategic planning meetings that culminated with a summary of our 5 Year Strategic Priorities are as follows: 1) Attract, Develop and Retain Talented Employees, 2) Modernize Processes, Services, Information Technology, Equipment and Administrative Rules, 3) Safeguard Agricultural Products While Expanding and Creating New Markets and, 4) Achieve Awareness of the Importance of Agriculture to Society. People should understand and recognize the magnitude of Agriculture's impact on the Arizona economy - \$23.3 billion and more than 138,000 jobs.



The AZDA continues to focus on enhancing our customer service and helping clients understand the need for certain regulations and how to comply with such regulations. The AZDA continues to review all regulations to make sure they are still necessary.

The agribusiness community encompasses more than farms and ranches; it includes packers, processors, shippers, equipment, water delivery systems, finance and other support industries.

The vision of the AZDA is to be recognized as a global leader in enhancing and protecting agricultural commerce, championing consumer awareness and protection while fostering and promoting an understanding of Arizona agricultural products and producers.

~Mark Killian, Director



Agricultural Consultation & Training (ACT)

The Agricultural Consultation and Training Program is an innovative compliance assistance program unique to an agricultural regulatory agency. This program embraces the Arizona Department of Agriculture's (AZDA) goal of encouraging farming, ranching and agribusiness, while protecting consumers and natural resources by utilizing a non- enforcement approach. ACT is not affiliated with any of AZDA's enforcement programs, allowing staff members to provide a formal means by which the regulated agricultural community may request compliance assistance without regulatory intervention. Agricultural Consultation and Training serves Arizona's diverse agricultural community by promoting agriculture, conducting training and increasing awareness of, and voluntary compliance with, regulatory requirements. ACT provides agricultural conservation education through the following compliance assistance and education programs:

- Pesticide Safety
- Air Quality

The Agricultural Consultation & Training Program also houses the following programs:

- Good Agricultural Practices/Good Handling Practices Food Safety Program
- Livestock & Crop Conservation Grant Program
- Specialty Crop Block Grant Program
- Specialty Crop Multi-State Program
- Arizona Citrus Research Council
- Arizona Iceberg Lettuce Research Council
- Arizona Grain Research and Promotion Council
- Agricultural Employment Relations Board

Pesticide Safety and Compliance Assistance

The Environmental Protection Agency's (EPA) Worker Protection Standard (WPS) is designed to reduce the risk of pesticide exposure to pesticide handlers and agricultural workers. The WPS includes requirements for pesticide safety training, notification of pesticide applications, use of personal protective equipment, restricted entry intervals following pesticide application, decontamination supplies and emergency medical assistance. The Agricultural Consultation and Training (ACT) Pesticide Safety staff assists agricultural employers in complying with federal and state Worker Protection Standards by providing pesticide safety training for pesticide handlers and agricultural workers, developing pesticide information resources in English and Spanish, and performing site visits to assist farm and nursery owners in complying with pesticide regulations.

Pesticide Safety Training

Among the more popular services provided by ACT staff are free pesticide safety training courses. Course attendees learn how to work safely around pesticides or in areas where pesticides have been applied and the steps to recognize, respond to, and prevent pesticide exposure.

The training courses are provided in English and Spanish and are open to anyone who would like to attend. Licensed and certified pesticide applicators may also attend to learn about the WPS and to receive one hour of continuing education toward the renewal of their licenses.



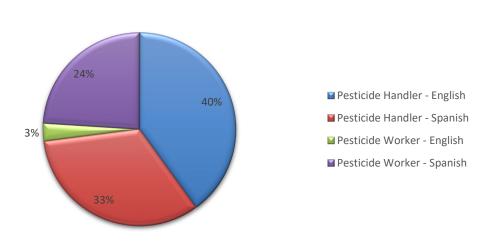
During fiscal year 2022, ACT staff presented WPS pesticide safety training to 958 people who were employed by 52 agricultural operations, landscaping companies, tribal communities, golf courses and governmental agencies.

Pesticide handler courses were provided to 698 people who work directly with pesticides. Of the handlers, 9 certified applicators participated to receive updated information and Continuing Education hours toward the renewal of their private or commercial credentials.

In addition to the pesticide handlers, 251 agricultural workers attended a pesticide safety course. Agricultural workers perform tasks such as weeding, irrigating, and harvesting crops in areas where pesticides have been applied in the previous 30 days.

The following chart shows the percentage of attendance in each type of training and language in which the information was provided:





Arizona Pesticide Safety Train-the-Trainer Workshops



Each year, staff in the Arizona Department of Agriculture's (AZDA) Agricultural Consultation & Training Program works with industrial hygienists from AZDA's Environmental Services Division to present pesticide safety train-the-trainer workshops for trainers of agricultural workers and pesticide handlers.

The workshops, presented in English and Spanish, are designed to increase knowledge on human health and environmental concerns when working with pesticides and steps to reduce exposure to agricultural pesticides.

Hands-on training techniques and group activities are used to demonstrate how to disseminate pesticide information to handlers and agricultural workers. In addition to attending the workshop, participants must pass a 50-question trainer exam before qualifying to provide WPS training in Arizona.

In fiscal year 2022, ACT staff assisted in proctoring 1 exam event in Phoenix. Through this exam event, 7 people completed the trainer requirements and earned a 3-year certification to train agricultural workers and handlers in Arizona.

Pesticide Applicator Pre-Certification Courses and Exam Events

ACT staff administers private and commercial applicator licensing exams during trade shows, conferences and to large groups working in remote areas.

During fiscal year 2022, ACT proctored 2 exam events in Camp Verde and Willcox. A total of 17 attendees took the National Pesticide Core Exam to become a certified applicator.

During fiscal year 2022, ACT collaborated with the UofA to provide a 3-day pesticide applicator precertification training to a total of 50 attendees.

During fiscal year 2022, ACT collaborated with the Environmental and Plant Services Division to provide a 3 day Continuing Education Unit (CEU) Recertification event in Phoenix, Yuma, and Marana. A total of 64 certified applicators attended full and half day courses to earn CEUs for 1 year certification renewal.

Pesticide Safety Teaching Tools, Informational Resources, and Training Modules

ACT staff develops and adapts teaching tools, informational resources, and training modules. These materials are used during safety events and are distributed to agricultural employers, employees, health care professionals, and outreach educators.

In order to continue pesticide safety education during COVID19 restrictions, the ACT pesticide program, in collaboration with University of Arizona and the Environmental Services Division, developed a virtual program to provide pesticide safety training and train-the-trainer education via live online webinars both in English and Spanish. In person trainings during this period were held with socially distanced groups no larger than 25.

Air Quality Compliance Assistance

Regulated Agricultural Best Management Practices

The Regulated Agricultural Best Management Practices (RABMP) program has completed its nineteenth year of providing air quality compliance assistance to Arizona's agricultural community through a cooperative agreement with the Arizona Department of Environmental Quality (ADEQ). The RABMP program provides a means by which Arizona's agricultural community can request compliance assistance without incurring regulatory intervention for applicable federal, state and local regulation.

The RABMP program goal is to provide the regulated agricultural community in Maricopa, Yuma and Pinal Counties with the necessary resources to achieve compliance with applicable air quality standards.



The air quality program staff regularly participates in local meetings of agricultural stakeholders such as:

- Pinal County PM10 reduction stakeholder group
- Yuma County stakeholder groups for the Ag BMP program
- Governor's Agricultural Best Management Practices Committee Technical Workgroup
- State and County Farm Bureau
- Pinal County I-10 Corridor Dust Mitigation Workgroup
- Annual Dust Conference

The federal Clean Air Act requires that air pollutant emissions be controlled from all significant sources in areas that do not meet the National Ambient Air Quality Standards. Air quality regulation for agricultural dust requires farmers, nursery professionals, and producers in animal agriculture in certain parts of Arizona to implement agricultural Best Management Practices (BMPs) to help reduce air pollution, especially particulate matter (PM10). Agricultural BMPs are feasible and effective practices that have been evaluated for their efficiency, applicability, likelihood for implementation, and have been adopted into state regulation.



Examples of BMPs include:

- Limit tillage and harvest activity during periods of high dust generations.
- Stabilization of soil prior to plant emergence.
- Use drag equipment to maintain pen.
- Provide shade in corral.
- Apply water to unpaved noncropland areas.
- Create a wind barrier.
- Biological controls of aquatic weeds.
- Plant multi-year crops.

Educational outreach is provided to Arizona's agricultural community about air quality in an effort to reduce regional dust pollution through:

- **On-site visits to farms and nurseries** for site specific assessments and recommendations. For fiscal year 2022 there were 169 visits with producers to promote the program.
- **Agricultural BMP training for producers**. In fiscal year 2022 there were 13 trainings, presentations, promotions and outreach of the program to agricultural workers and representatives. Outreach and training reached 1,291 participants.
- **High wind advisory email alerts.** During fiscal year 2022, thirty-eight forecasts were sent to 307 producers in Maricopa, Yuma, and Pinal Counties.
- Air Quality & Agriculture Air Quality in Action, a quarterly newsletter. In fiscal year 2022, 1,228 copies of the newsletter were sent to 307 stakeholders in Maricopa, Yuma, and Pinal Counties.
- **Cooperation with other agencies** such as the Arizona Department of Environmental Quality (ADEQ) and county farm bureaus to address compliance issues needing correction. These include public complaints and violations. During fiscal year 2022, there were 27 producers requesting assistance.
- **Best Management Practices:** In fiscal year 2022 the Regulated Agricultural Best Management Practices program completed BMP reviews for 87 operations, with 455 BMPs implemented and an estimated 561,638 lbs. /yr. emissions reduced.



The RABMP Coordinator is a member of the Pinal County I-10 Corridor Dust Mitigation Workgroup. This workgroup consists of Federal, State, and Local agencies to address windblown dust that creates hazardous driving conditions along the I-10 corridor.

The workgroup did not meet in FY22 due to Covid19 restriction. The group did get an update during the Annual Dust Workshop in March of data collected from ADOT's storm radar detection system installed on I-10 near Picacho Peak.

The future of the workgroup is uncertain due to completions of projects on the I-10 corridor and changes to budgets for future projects.

In 2005 the Yuma Ag BMP program was implemented to address the PM10 problem in Yuma County, but no outreach materials were available. Outreach to the community began in fiscal year 2010 to promote the Yuma agricultural industry's proactive approach to addressing the PM10 problem. In fiscal year 2022 the RABMP Coordinator visited with 22 producers of which 9 had not previously participated in the Ag BMP program. The RABMP Coordinator attended the Southwest Ag Summit held annually in Yuma. ACT Staff promoted their programs to the estimated 100 attendees that visited the ACT booth.



Due to the increase in nut production in Southeastern Arizona and past windblown dust events in San Simon it was determined that the added outreach could play a vital role in the reduction in dust emissions for nut producers throughout the State. As undisturbed desert is converted into agriculture, voluntary BMPs will be key in reducing PM10 in the future.



- The RABMP Coordinator visited five pecan growers in Southeastern Arizona to discuss the Ag BMP Program.
- A town hall meeting was held in Kingman to discuss the current PM10 issues in the community and find ways to mitigate PM10 originating from nearby nut producers. The RABMP Coordinator participated in the meeting by answering questions on agriculture and the Ag BMP Program for the 300 in attendance.
- The RABMP Coordinator visited a pecan grower in Sahuarita to discuss complaints from their neighbors about the dust from their harvest procedures.

Good Handling Practices/Good Agriculture Practices (GHP/GAP)



The Agricultural Consultation and Training (ACT) Program of the Arizona Department of Agriculture (AZDA), through a United States Department of Agriculture-Agricultural Marketing Service (USDA-AMS) Specialty Crop Block Grant Program grant, offers Arizona's agricultural community assistance in developing a food safety program that will pass the USDA GHP/GAP audit. Good Handling Practices (GHP) refers to post-harvest operations, while Good Agriculture Practices (GAP) refers to on-farm operations and systems, ensuring these crops are produced, packed, stored and handled in the safest manner possible to minimize risks of microbial contamination. ACT's Food Safety Projects Coordinator (FSPC) promotes the food safety program, develops training and maintains participants' records.

Food Safety Training

GHP/GAP is a voluntary, on-site farm verification program which has been developed for growers, harvesters, packers, warehouses, transportation lines, and gardeners of consumable specialty crops (fresh fruit, vegetables, and tree nuts). The ACT GHP/GAP Program offers free classroom training and training materials (sample food safety plans, monitoring logs and tracking forms), virtual training and on-site evaluations for the development of operation-specific food safety protocols for the USDA/AMS food safety audit and certification. Also discussed is the critical issue of on-site farm security/biosecurity.

Food Safety Certification

While sales of fresh produce to some buyers do not require a food safety certificate, many buyers of fresh produce require third-party food-safety certification as a purchase specification. Without this certificate, a grower may not be able to sell produce to the larger buyers. Certification allows for produce sales to restaurants, hospitals, school districts, farmers markets, wholesalers and distributors who accept the USDA GHP/GAP certification for mitigating food safety hazards.

Audit Cost-share Reimbursement

Further incentivizing food safety, AZDA will offset the expenses of a successful USDA audit with a cost-share grant of up to 75% while funds remain available from USDA/AMS.

Outreach

Due to lingering COVID19 meeting restrictions, as well as the retirement of the Food Safety Projects Coordinator (FSPC) early in Fiscal Year 2022, most program activities lapsed for numerous months. A new FSPC began in April, is being trained and gaining momentum. He has conducted 1 group training, 7 onsite visits and reviewed/edited 3 food safety plans.

His additional outreach activities have included tribal entities, the Creighton Community Foundation, The Veterans Agriculture Education group, the Verde Valley Food Policy Council and Cornucopia Community Advocates.

Livestock & Crop Conservation Grant Program

The Livestock & Crop Conservation Grant Program (LCCGP) was created on September 18, 2003, by the Arizona State Legislature to assist ranchers and farmers with the implementation of conservation projects that ultimately provide for the preservation of open space. The Arizona Department of Agriculture is charged with developing,

implementing and managing the program. The LCCGP is funded through the Proposition 303 Growing Smarter Statute that was passed by public referendum in 1998. Approximately \$1.8 million was available in grant funds each year, through fiscal year 2011. Per the grant program authorizing statute, A.R.S. §41-511.23 (G) (1), eligible applicants include individual landowners and grazing and agricultural lessees of state or federal lands that desire to implement conservation-based management alternatives using livestock or crop production or reduction practices to provide wildlife habitat or other public benefits that preserve open space. Grant funds may be used for projects taking place on private, State and Federal land. The grant program has functioned on a biennial grant cycle.



During fiscal year 2022, the LCCGP Coordinators monitored completed projects from the previous grant cycles. The following types of projects were completed by grantees:

Utilization of funds as match/cost share to other conservation grants. For example, if the applicant is
participating in, or plans to apply for, a USDA Natural Resources Conservation Service (NRCS)
Environmental Quality Incentives Program (EQIP) grant which typically requires that the applicant provide
a percentage of the total project funding, LCCGP funds could be awarded for use as the required cost share
funds to the EQIP contract.

- On-the-Ground Conservation Projects (for example: riparian fencing, water resource development, grassland restoration).
- Livestock deferment funding in relation to a conservation practice or project. For example, if the applicant chooses to implement a conservation management practice such as prescribed burning or herbicide application that requires the deferment of livestock, the applicant may apply for LCCGP funds to cover the costs associated with deferring livestock.

At the close of fiscal year 2022 this is the status of all grant cycles.

Fiscal Year	# of Grants Awarded
2005	56
2007	70
2009	63
2011	43
2013	13
2016	16
Total Grants Awarded:	261

The last project remaining from fiscal year 2016 was completed in fiscal year 2021 and monitored in July of 2022. No funds were disbursed to grantees to work on their contracted projects throughout fiscal year 2022.

Specialty Crop Block Grant Program

On December 21, 2004, the Specialty Crops Competitiveness Act of 2004 authorized the USDA to provide state assistance for specialty crops. Under Section 101 of the statute, the Secretary of Agriculture is directed to "make grants to States for each of the fiscal years 2005 through 2009 to be used by State Departments of Agriculture solely to enhance the competitiveness of specialty crops." The Food, Conservation, and Energy Act of 2008 (Farm Bill) amended the Specialty Crops Competitiveness Act of 2004. Under the amended Act, the Secretary of Agriculture is directed to make grants to States for each of the fiscal years 2008 through 2012 (referred to as the Specialty Crop Block Grant Program –



Farm Bill) to be used by State Departments of Agriculture to enhance the competitiveness of specialty crops. The Agricultural Act of 2014 provided funding for the program through 2018. The Agricultural Act of 2018 continues funding for the program through 2023. Specialty Crops are defined as fruits, vegetables, tree nuts, dried fruits, and nursery crops (including floriculture). The value of U.S. specialty crops is equivalent to the combined value of the five directly subsidized program crops. However, sixty percent of all farmers do not raise program crops and do not receive direct subsidies. The purpose of this act is to help address this inequity between program crops and specialty crops.

The Arizona Department of Agriculture's Specialty Crop Block Grant Program is administered by the ACT program. In state fiscal year 2022, two of Arizona's State Plans were approved by the U.S. Department of Agriculture's Agricultural Marketing Service (AMS), and two cooperative agreements, which provided \$1,764,626.39 (Farm Bill) and \$2,341,863.88 (H.R. 133 Stimulus Funding) in grant funds to the AZDA, were executed on September 15, 2021 (Farm Bill) and October 28, 2021 (H.R. 133 Stimulus Funding). The H.R. 133 Stimulus Funding was additional funding provided in FY2021 by Congress due to COVID-19 impacts to the food

system. The SCBGP Program Coordinators worked with sub-recipients to execute grant award agreements, and provide guidance and assistance with quarterly reports and quarterly reimbursements.

On January 25, 2022, AMS announced the availability of \$72.9 million in federal fiscal year 2022 funding. The funding is authorized by the Agricultural Act of 2018. Each state department of agriculture is eligible to receive a base grant of approximately \$243,001.17. In addition, AMS allocated the remainder of the grant funds based on the proportion of the value and acreage of specialty crop production in the state. The 2022 base grant amount plus the AMS assigned value and acreage of specialty crop production for Arizona is \$1,308,495.84. Arizona's State Plan was submitted to AMS on May 3, 2022.

Specialty Crop Multi-State Program

Created by the Agricultural Act of 2018, the 2019 Specialty Crop Multi-State Program (SCMP) made available approximately \$10 million to help develop solutions to problems affecting the specialty crop industry across state boundaries. USDA's Agricultural Marketing Service (USDA-AMS) administers the program and competitively awards funds to State departments of agriculture solely to enhance the competitiveness of specialty crops by funding collaborative, multi-state projects that address the following regional or national level specialty crop issues: food safety; plant pests and disease; research; crop-specific projects addressing common issues; and marketing and promotion.

One research project submitted by the Arizona Department of Agriculture (AZDA) was selected and approved for funding by USDA-AMS, which provided \$487,685.00 in grant funds to the AZDA. In fiscal year 2022, a total of \$101,187.71 was distributed to the sub-recipient for project activities.

The project selected for funding is titled "Expanding Novel Sources and Post-Production Uses for Commercial Mushroom Substrates in the Western United States". The AZDA, in collaboration with University of Arizona and University of California Cooperative Extension, plans to advance commercial mushroom production, and includes collaborators and partners in academia and industry in Arizona and California.

Arizona Citrus Research Council



The Arizona Citrus Research Council was created by A.R.S. §3-468 to support the development of citrus research programs and projects within the Arizona citrus industry. The Council is funded by a per carton assessment (5 cents) paid by Arizona Citrus producers. Last year, the Arizona citrus industry produced more than 1.8 million cartons and more than 26

million pounds of carton equivalents (juice fruit) of grapefruits, lemons, oranges and tangerines. Council programs and projects target production, plant pest and disease control, efficient fertilization and irrigation techniques and variety development.

The Council is comprised of five citrus producers appointed by the Governor:

- Two producers from District One (including Yuma County)
- One producer from District Two (Maricopa, Pima and Pinal Counties)
- Two producers at large

Fiscal Year 2022 Financial Status - Arizona Citrus Research Council

Revenue \$126,364.46 Expenses \$67,075.03

Legislation passed in the 2022 legislative session increased the allowable assessment to 5 cents per carton and included carton equivalents of juice fruit as well as standard packed cartons.

Legislation passed in the 2012 legislative session created the Arizona Citrus Trust Fund which holds the Council's revenue in trust.

Arizona Iceberg Lettuce Research Council



The Arizona Iceberg Lettuce Research Council was created by A.R.S. §3-526 to conduct research for an Arizona industry that produced more than 20 million cartons of iceberg lettuce in fiscal year 2022. The Council is funded by a per carton (.004 cents) assessment paid by Arizona iceberg lettuce producers.

Council members are appointed by the Governor and consist of seven producers:

- Four producers from District One (including Yuma and La Paz Counties)
- Three producers at large

The Council reviews and awards a wide range of research proposals on topics such as variety development, lettuce pest eradication, and for programs relating to food

safety, production, harvesting, handling and transporting lettuce from fields to markets. During fiscal year 2022, the Council continued to support research projects by granting more than \$90,000 to the University of Arizona. Some examples of research grant projects include evaluation of new insecticides for insect management, Yuma area-wide monitoring for lettuce insects and projects dedicated to research on Fusarium Wilt, Downy Mildew and Impatiens Necrotic Spot Virus (INSV).

Fiscal Year 2022 Financial Status - Arizona Iceberg Lettuce Research Council

Revenue \$ 81,715.06 Expenses \$100,050.46

Legislation passed in the 2012 legislative session created the Arizona Iceberg Lettuce Trust Fund which holds the Council's revenue in trust.

Arizona Grain Research and Promotion Council

The Arizona Grain Research and Promotion Council was created by A.R.S. §3-581 through §3-594 and utilizes grower 'check-off funds' to aid in marketing wheat and barley, participate in research projects and other programs that assist in reducing freshwater consumption, develop new grain varieties and to improve grain production, harvesting and handling methods.



Research continues to be a top priority of the Council by continuing support for the research activities of the University of Arizona. Research projects focused on monitoring Desert Durum $^{\circledR}$ wheat and barley diseases and the role of durum production in maintaining soil health. More than \$21,000 was granted for research projects during fiscal year 2022.

The Council supports the activities of the U.S. Wheat Associates, the export market development arm of the United States wheat industry. This support is important because more than half of Arizona's durum wheat is exported. The council collaborates with the California Wheat Commission to conduct an annual crop quality survey of the Desert Durum $^{\circledR}$ crop in Arizona and Southern California and publishes the results for buyers around the world.

Fiscal Year 2022 Financial Status - Arizona Grain Research and Promotion Council

Net Revenue \$96,869.18 Expenses \$71,740.02

Legislation passed in the 2012 legislative session created the Arizona Grain Research Trust Fund which holds the Council's revenue in trust.

Agricultural Employment Relations Board



The Agricultural Employment Relations Board (AERB) was created by A.R.S. §23-1386 in 1993 to provide a means to bargain collectively that is fair and equitable to agricultural employers, labor organizations and employees, to provide orderly election procedures, to resolve questions concerning representation of agricultural employees and to declare that

certain acts are unfair labor practices that are prohibited and that are subject to control by the police power of this state.

The Board is comprised of seven members (and two alternates):

- Two agricultural employers/management
- Two organized agricultural labor representatives
- Three public members, from which a Chairman must be selected.

The Board has an annual budget of \$23,300.

In Fiscal Year 2022, the Board and its staff completed an extensive review and subsequent revisions to their administrative rules (4 A.A.C. 2) and developed an informational brochure to educate the industry on its statutory authority.

Animal Services Division (ASD)

Animal Health and Welfare Program

Priorities and Oversight

The first priority of the Animal Services Division's (ASD) Animal Health and Welfare Program (AHWP) is the prevention of certain diseases of livestock, poultry and commercial fish; and if established, their subsequent eradication. Relatedly, AHWP protects the public from diseases which are transmissible from livestock to people. Field staff in AHWP enforce all ownership and dominion laws as well as specific equine neglect and livestock cruelty statutes. Additionally, through the State Emergency Response and Recovery Plan (SERRP), AHWP is involved in a myriad of human and animal welfare contingencies. Lastly, the staff of the Meat and Poultry Inspection Program is responsible for the oversight of livestock and poultry slaughtering as well as processing.



Animal Health Programs

There were a total of 16 Administrative Orders issued this fiscal year for animal health issues. These were for Rabbit Hemorrhagic Disease Equine Piroplasmosis, Equine Herpesvirus, Strangles, and various entry requirement violations in Arizona. There were a total of 83 Illegal Entry Hold Orders issued this year for illegal movement into Arizona. These were for cattle, horses, pigs, sheep and goats. This is a 29% increase over the previous year.

The agency continue to collect samples for Brucellosis suis and pseudorabies in pigs at slaughter as well as scrapies sampling of slaughter sheep and goats.

Multiple Foreign Animal Disease (FAD) investigations were conducted (56 total) which identified and confirmed cases of Rabbit Hemorrhagic Disease (RHD) Equine Infectious Anemia (EIA), and Piroplasmosis. There were a total of 12 investigations for RHD, 20 investigations for Vesicular Stomatitis Virus, 18 Avian Influenza/Virulent Newcastle Disease investigations, and the balance representing various miscellaneous reportable diseases. The our last positive test result was on May 27, 2022.

Ongoing state / federal / industry programs for the control and elimination of:

- Brucellosis
- Tuberculosis
- Pseudorabies
- Equine Infectious Anemia
- Scrapie

Ongoing state / federal / industry programs for the benefit of public health:

- Rabies control
- West Nile Virus and other equine encephalomyelitides (zoonoses)
- National Poultry Improvement Plan (control of multiple diseases)
- Animal Disease Traceability
- Multiple obligations under the Emergency Support Functions of SERRP

USDA Cooperative Agreements

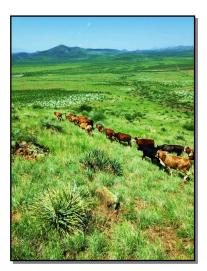
Animal health surveillance programs are predominantly funded via the Umbrella Cooperative Agreement grant with the United States Department of Agriculture (USDA). These surveillance programs have primarily included poultry, cattle, horse, swine, sheep, goats, and zoonotic/public health concerns. The reporting year for USDA begins April 1st and concludes March 31st. For this report the reporting year is April 1, 2022 through March 31, 2023.

UmbrellaGrant: AnimalDisease Surveillance Program

This cooperative agreement, which supports response efforts as described above, has four parts which include general surveillance, diagnostic testing, outreach & education, and preparedness & response. Protecting the health of food producing livestock and poultry will result in a stable source of wholesome food, reduce the likelihood of animal diseases causing human health problems and preserve the economic viability of Arizona animal agriculture by maintaining disease free confidence with our trading partners.

Early recognition of an animal disease outbreak is essential to reducing the impact of a devastating disease on the agriculture industry in Arizona. For example, as of February 2022, multiple States across the United States have dealt with the outbreak of Highly Pathogenic Avian Influenza (HPAI). This outbreak is ongoing and forecast to become severe again during the fall migration of wild bird. It is estimated that this outbreak response has cost approximately \$400 million dollars since the first detection.

The Arizona State Veterinarian is thus far the only veterinarian to have attended the Foreign Animal Disease Diagnostician (FADD) training. As a part of this training the USDA has world class subject matter experts teach State, Military, and Federal Veterinarians on how to recognize clinical signs, perform diagnostic testing and establish a biosecure zone to prevent spread of disease to other premises. Diseases covered in FADD training include Foot and Mouth Disease, African swine fever, Classical Swine Fever, amongst many others. Several Arizona Livestock Incident Response Team (ALIRT) investigations were conducted during this reporting period in conjunction with the Arizona Veterinary Diagnostic Laboratory. None of these cases were found to be a Foreign Animal Disease. One of the two Assistant State Veterinarians is scheduled to attend the course this fall, after many delays due to COVID restrictions.



Arizona's ASD has been very successful in the eradication of several program diseases and have achieved a "Free" status with both brucellosis and tuberculosis. Even though Arizona currently has a free status, the state continuously follows-up with suspect cases from cattle, sheep, and goats being tested for interstate movement. This past year Arizona Accredited Veterinarians tested 17,073 head of cattle and State/Federal Veterinarians performed follow-up testing on 245 head of cattle. No cattle were diagnosed with Tuberculosis this year. Arizona maintains its TB free status through ongoing surveillance which encourages producers in other states to continue to buy cattle from Arizona.

The National Poultry Improvement Plan (NPIP) was originally established for the eradication of salmonella and typhoid salmonella

in poultry. Arizona's NPIP program currently consists of hobbyist and exhibition poultry and game bird breeding flocks and products. NPIP is comprised of elements of biosecurity, disease monitoring, sanitation and record keeping. Even though the NPIP program is voluntary, any person moving hatching eggs, chicks or older birds across state lines will benefit from becoming an NPIP participant, as doing so will create ease in meeting, and receiving other state's entry requirements. This program allows Arizona a better opportunity for surveillance along with the enhanced opportunity to work one on one with poultry producers concerning disease monitoring and biosecurity. Ongoing goals for NPIP are to perform surveillance for Avian Influenza and Virulent Newcastle Disease in backyard exhibition birds, birds seized by local law enforcement, sick birds, and stray birds. ASD once again has a NPIP technician, who runs the program jointly with the NPIP Coordinator.

One of the cooperative agreement's other goals is to monitor diseases in animals that are transmissible to humans (zoonotic). ASD works with the Arizona Department of Health Services (ADHS) to make sure that the public is educated and protected, were there to be outbreaks of Plague, Leptospirosis, Brucellosis, and Rabies. ASD also participates in monthly conference calls which maintain an exchange of information and dialogue between departments. ASD stays invovled in joint educational outreach events with ADHS for public education.

As of August 9, 2017 the Department no longer participates in the Animal Disease Traceability Cooperative Agreement. The ASD continues to track suspected disease cases with the limited resources that have been allocated. If additional funding was provided, ASD would immediately modernize record keeping with an electronic database. This database would be kept in house and allow tracking of livestock moving interstate in a more efficient manner than searching through paper records; an inefficient and costly process to the tax payer of Arizona. It is documented that there are now over 1,000,000 pigs and 400,000 cattle transported on American highways every day. This has required most states to swiftly modernize their technology to effectively respond to disease investigations given the potential for rapid disease dissemination within their state. Moving forward, stakeholder support to modernize technology, especially in the State Veterinarian's Office (SVO), will help prepare the state of Arizona for future disease outbreaks.

Annual Licenses

Aquaculture

The Aquaculture Program regulates commercial operations that grow, transport and process fish and shrimp. Currently there are 39 licensees that are licensed as growing facilities, transporters, processors, fee fishing facilities or any combinations of the above licenses.

Feedlots

24 feedlot licenses were issued in FY22. This is only required for feedlots with 500 or more head of beef cattle.

Inspection Data Tracking

As of July 1, 2017, the Livestock Inspection Program began tracking field activities through the Arizona Department of Transportation's Enforcement and Compliance Division. This change has resulted in our customers having access to a 24/7 dispatch. The dispatch phone number of 623-445-0281 did not change during this transition. When we went to the IT inspection in July 2017, we were able to track the inspection numbers for our staff. They did almost 14,976 inspections on the computer system in FY2022. There are instances that paper inspections are necessary; however, the IT inspection system has improved the Department's efficiency and accuracy of the inspections, which allows for freer movement of livestock. This data below summarizes the inspections done by the inspectors and are broken down by species and gender for FY2022.

Self-Inspection Program

Currently, over 6,219 producers are approved to use the Self-Inspection Program. Livestock owners understand the value of documenting animal movement and have accepted responsibility for intrastate documentation through Self-Inspection certificates. Livestock Officers, Inspectors and Deputies document non-Self-Inspection activities such as the sale of range cattle and custom slaughter livestock. Exhibitions, fairs and shows have also been supportive of the "seasonal exhibition pass" implemented by statute and rule. Livestock theft investigation and enforcement cases remain at a low level, and Arizona continues to maintain disease free status in all industry / state / federal cooperative disease control programs.

Arizona Livestock Incident Response Team Program

The Arizona Livestock Incident Response Team (ALIRT) program was implemented through legislative authorization in FY 2005. Annual funding has been used to train and equip participating private veterinarians to conduct investigations of unusual livestock disease events and to conduct outreach and education to livestock producers. Participating veterinarians and state staff receive training annually.

Since its initiation, several investigations have been conducted and in every case, the response resulted in a preliminary diagnosis within 48 hours, with laboratory diagnosis confirmation soon after.

ALIRT is an emergency response program overseen by ASD and implemented through cooperation with the University of Arizona's Department of Veterinary Science Veterinary Diagnostic Laboratory and Cooperative Extension. USDA Wildlife Service and Veterinary Service actively participate in a program designed to facilitate the potential diagnosis of unexplained livestock losses. Once a problem has been discovered, various levels of response may be initiated. It all starts with the producer, local veterinarian, and/or the local University of Arizona Cooperative Extension Office. If warranted, trained ALIRT private veterinarians will respond to the scene, start an investigation, and collect samples. This is followed by a conference call of the ALIRT steering committee that determines what, if any, actions are necessary. The Midwestern University Diagnostic Laboratory has been an asset since being added to the ALIRT response network and has help to facilitate a more timely response, especially for cases in the northern half of the state.

The cost of case work-up is covered by ALIRT program funding and includes expenses for the ALIRT private veterinarian and other response personnel, as well as laboratory expenses related to the diagnosis. Once a diagnosis is made and/or a treatment program is implemented, the expense becomes the responsibility of the producer. The producer plays a key role in this process, starting with the reporting of a problem in a herd. The producer also critical in preparing a herd history and identifying any contributing factors that may assist in diagnosis. The ALIRT program responds at the invitation of the owner or manager and is available to individual producers who have significant unexplained animal illnesses and/or death. The program also activates if a region is having multiple suspicious livestock losses. The ALIRT program was designed for the producer and all information collected remains confidential. Emergencies are reported by calling the Arizona State Veterinarian at 602-542-4293 or the University of Arizona Veterinary Diagnostic Laboratory at 520-621-2356.

Meat and Poultry Inspection Program

The Meat and Poultry Inspection (MPI) Program is a federal-state cooperative program, funded 50% from the state General Fund and 50% by USDA / Food Safety Inspection Service (FSIS). The program oversees slaughter and processing of amenable meat animals and poultry which are offered for official inspection prior to sale to the public. Operating to help ensure both food safety and truth in labeling to consumers, inspectors visit regulated facilities on a daily basis. The program authority is established by state statutes and rules, the federal Meat Inspection Act and the federal Poultry Products Inspection Act.

State MPI personnel monitor general plant and equipment sanitation, processing sanitation, good manufacturing practices during production, ante mortem and post mortem inspection at slaughter, humane handling, Hazard Analysis Critical Control Point (HACCP) implementation, multi-ingredient formulation, the use of approved labeling, net weights and perform laboratory sampling programs as requested. They also verify compliance with state and federal regulations prior to allowing the inspected and passed triangle shaped "mark of inspection" to be applied to applicable products.

AZDA inspectors receive training including HACCP inspection procedures, Sanitation Standard Operating Procedures and animal ante mortem and post mortem inspection procedures for disease.

Each day one of the 30 official state inspected establishments operates, an MPI employee makes at least one unannounced visit to review production. If discrepancies are found, they are documented

and discussed with plant management to determine what corrective actions will be taken to ensure that no unwholesome or mislabeled product leaves the plant. In slaughter plants an MPI Inspector observes each animal presented for slaughter both alive and at various stages during the carcass dressing procedure lookingfor any pathology that may be present.

Unfit and/or unwholesome carcasses and parts are removed from the human food chain and decharacterized for inedible purposes. Humane handling is strictly enforced to ensure no animal is mistreated or improperly stunned at slaughter.

Sanitation is observed and verified each day a plant operates by a pre-operational check of facility and all equipment prior to the start of operations and/or operational sanitation checks to verify sanitation is maintained during production.

HACCP verification is performed by reviewing the HACCP plan and all supporting documentation. Direct observation or review of records is performed at all Critical Control Points. Corrective actions are taken when a deviation occurs. Verification and reassessment is performed as required by regulation.

Labels are reviewed to show that they reflect the product is actually as the label states and that the label meets all labeling requirements per regulation, including approval and allergen declaration. Formulation is observed to verify the product is being made to meet product standards and as approved. Net weights are verified on certified scales weighing random lots of finished product to ensure compliance.

Product samples are taken as requested by the Program Manager in selected establishments and delivered to the State Agricultural Laboratory to be analyzed for the pathogen of concern. In the event of non- compliance, establishments are notified by written non-compliance reports and regulatory control actions are taken as needed to ensure affected product does not reach the consumer.

Inspectors also periodically visit the other 53 processors known as "custom exempt," which are firms that process meats, game and poultry for personal consumption of the owner. These types of processors may not sell meat to the general public without obtaining an official slaughter and processing license.

More than 535 food safety samples were submitted to the State Agricultural Laboratory to be analyzed for E-coli 0157:H7, non-0157 Shiga Toxin E-coli (STEC), Salmonella, Listeria Monocytogenes or violative antibiotic residue. Additionally, antibiotic residue samples requested by USDA / FSIS and Tuberculosis samples from suspect animals at slaughter were also taken. All of this information is entered each day by the inspectors into a computer database system mandated by FSIS called the Public Health Information System (PHIS). This system tracks all aspects of the meat inspection program.

6104 on-site food safety inspections were performed at official establishments and custom exempt facilities this past year. These numbers are up slightly due to plants once again operating at full capacity that had had reduced business during COVID 19. No food-borne illnesses were reported from any Arizona official establishment in Fiscal Year 2022.

Meat and Poultry Compliance Program

Compliance is an integral part of the MPI Program. Arizona Revised Statutes provide the authority and responsibility to protect consumers by assuring meat and poultry products are wholesome, not adulterated and properly labeled. In-commerce surveillance and reviews are conducted at distribution centers, public warehouses, retail stores, restaurants, schools, prisons and poultry exempt facilities. Surveillance reviews are conducted to ensure industry compliance and consumer safety. These surveillance reviews consist of product and facility assessments, food safety, sanitation, hazard control and labeling assessments.

Compliance also investigates food safety, misbranding and other violations of law to protect public health and to support criminal, civil and administrative action. An investigation includes: planning, decision- making, evidence collection, identification, custody, interviews, photographic evidence, reports of investigation and investigative liaison with attorneys. The program is authorized to identify, detain and control adulterated, misbranded, illegally imported and other illegal or unsafe meat and poultry products so they do not reach consumers.

If requested Compliance will assist with food safety related illness outbreaks and epidemiological investigations. This consists of conducting product trace back and trace forward. The program coordinates with USDA and various statewide health departments in conducting surveillance reviews and investigations of retail stores and restaurants to ensure that meat and poultry products are wholesome and properly labelled. Compliance will also conduct investigations of illegal slaughter and/or processing operations statewide. Compliance has a database of 129 licensees which include: warehouses, distributors, jobbers, dead stock haulers, brokers and meat storage.

Dairy & Dairy Products Inspection Program

Dairy inspection staff regulate all aspects of the dairy industry, from the dairy farm until products leave the processing plant. Beginning at the farm, inspectors review plans submitted for construction of new farms and the remodeling of existing farms. Farm inspections are conducted to check for compliance in sanitation, milking procedure, equipment condition and usage/labeling of drugs for animals, along with other requirements. Water and milk cooling systems are reviewed and sampled for compliance with public health standards.

Milk produced is sampled and tested for compliance with regulatory requirements. Bulk milk tankers, used to collect and transport milk to processors, and milk tanker drivers are inspected and licensed after approval by the dairy inspectors.

Dairy inspectors regulate dairy processing plants ranging from small cheese makers to plants processing millions of pounds of milk per day. At plant inspections, inspectors review plant processing records, and facilities are inspected for compliance with sanitation and maintenance requirements. Pasteurization systems are tested quarterly and the controls are sealed by the inspector. If regulatory seals are broken for maintenance or repairs, the plant must immediately notify the Dairy Program and the equipment must be retested and sealed by the inspector or certified industry sealer. Arizona milk processors use a variety of approved pasteurization processes. These processes include the relatively simple batch pasteurizer and proceed in complexity to systems called Ultra Pasteurization, which greatly extend the shelf-life of dairy products. In FY 2022, the four Dairy inspectors conducted 633 sample visits, 174 processing plant inspections, 169 tanker driver evaluations, 238 pasteurizer tests (with an additional 101 regulatory seal replacement visits), 204 dairy farm inspections and 31 milk tanker inspections.

Inspectors also check packaging/bottling facilities and processes at dairy plants. Other facilities manufacture containers and closures for dairy products. These facilities are also inspected and their products are sampled and tested.

Finished milk and milk products are collected by Dairy inspectors and submitted to the State Agricultural Laboratory for testing.

Universal Sampling System

Regulations require regular testing of milk produced by Grade A dairy farms. In Arizona, dairy farms are spread out over a large geographic area. Under the "Universal Sampling System," milk hauler/samplers are licensed by AZDA after passing an exam. These hauler/samplers are also evaluated in the field by Dairy inspectors to assure that their procedures are correct. The samples collected by licensed hauler/samplers may be randomly tested by the State and the results used for official purposes. This system reduces the personnel and the driving time that would be required if the State had to collect the samples from each individual farm.

If milk is determined to be adulterated, it must either be removed from the human food system or destroyed. In FY 2022 one tanker loads of milk 48,100 lb. was disposed of due to positive antibiotic tests. Four tanker loads, were found to be in violation of the aflatoxin limit and a total of 265,580 lb. were removed from the human food chain. The estimated combined total number of taker loads received at Arizona Dairy plants was in excess of 100,000 loads.

Raw Milk Consumption

The majority of milk and milk products produced in Arizona are pasteurized. This means that the milk was subjected to a process of heating the milk and holding it a specific temperature for a specified time period (161 degrees for 15 seconds, for example) in approved equipment. This process is known to kill harmful microorganisms which may be present.

A small amount of milk sold in Arizona is packaged and sold as raw milk for human consumption. This milk is not subjected to the pasteurization process. Although this milk is required to meet the same standards as pasteurized milk, it can potentially contain pathogenic organisms. For this reason, raw milk for consumption is required to have a warning statement on the label so that consumers can be informed of the potential risk. It is illegal, in Arizona, to sell raw milk for consumption without a license. During FY 2022 there were five licensed facilities selling raw milk for consumption.

Interstate Shipment of Milk

Arizona participates in the National Conference on Interstate Milk Shippers (NCIMS). This program creates uniform standards for evaluation of Grade A milk and milk products. This allows for milk to be transported between States and accepted via reciprocity. The Food and Drug Administration (FDA) certifies State personnel who conduct audits, called ratings, on producers and processors that wish to be listed as Interstate Milk Shippers (IMS). The FDA periodically conducts check ratings to assure uniformity in the system.

The NCIMS is also responsible for changes and updates to the Pasteurized Milk Ordinance (PMO), which

is the main document used to regulate Grade A milk and milk products. The NCIMS conference convenes every two years to consider and vote on proposed changes. The last scheduled conference was postponed and after multiple reschedules was canceled due to COVID. The 2023 conference is scheduled for April of 2023. Arizona's dairy program is a voting delegate at the conference and will be participating at the conference in Indiana.

Egg & Egg Products Inspection Program

Egg Inspection Program staff provides inspection services to the public, industry and the federal government. The Egg Inspection Program is funded entirely from a "mill fee" assessment from industry on each dozen of eggs or pound of egg products sold in Arizona. The program has operated on industry assessments since 1940.

Program staff inspects shell eggs and egg products from production at laying facilities to wholesalers and retail stores. Inspectors verify that products meet the required quality standards and that they were produced in accordance to state statutes and are held at temperatures of 45° Fahrenheit for eggs and 0° Fahrenheit for frozen egg products. Inspectors also verify proper packaging, sanitary handling, dating and weighing of eggs at production facilities, warehouses or retailers for product originating out-of-state. Inspectors also check Nest Run Egg producers for proper handling, labeling and registration with the Department. Nest Run Egg producers are limited to selling a total of 750 dozen unwashed ungraded eggs annually.

In FY 2022, the Departments conducted 1,176 inspections visits at producers, dealers, wholesalers and retailers. During those inspections, 380,762 individual eggs were graded and a total of 192,619 dozen eggs were retained for noncompliance with state law.

USDA Inspection and Grading Program

The Department also maintains cooperative programs with the USDA to provide "grade labeling" services to the industry upon request. These cooperative programs also include surveillance and enforcement under the federal Egg Products and Inspection Act, which regulates the movement and processing of certain types of under-grade eggs to keep them from entering the market. In FY 2022 we conducted 30 shell egg surveillance visits some of those were virtual audits due to USDA COVID restrictions. AZDA also enforces the Agricultural Marketing Act of 1970. In the past inspectors provided inspection services for USDA's School Lunch and commodity Program for poultry purchases made on behalf of school districts and foodbanks statewide. Those verification inspections are no longer required on a continued bases under USDA rules and are only requested on an infrequent basis in 2022 no inspections of this type was requested.

Graders perform both temporary and resident (in-house) grading services for the egg industry in Arizona. A total of 14 FTE state employees including two supervisors are stationed at five egg processing plants and provide inspection / grading services 365 days a year, 7 days a week. In FY 2022 the Department provided 24,601 hours of resident grading service under this USDA program. Resident graders continually monitor plant sanitation, processing temperatures, handling and holding cooler temperatures. This USDA program is voluntary and paid by the producer requesting the service. Eggs packed under USDA program supervision are eligible to be marked with USDA shield grade mark or other USDA identification. The USDA grade mark adds value to shell eggs because it provides a high level of

guarantee for quality and safety. Many retailers require the eggs to be graded by USDA to provide this additional level of service to their customers.

Emergency Preparedness and Response

State Emergency Response and Recovery Plan

The Department is the primary agency responsible for Emergency Response Function 11 (ESF-11) of the State Emergency Response and Recovery Plan (SERRP). In this role, the Department coordinates the emergency response activities of state, federal and private resources in response to and recovery from natural and human-caused disasters as well as plant, pest and Foreign Animal Disease (FAD) incidents that can negatively impact agricultural production.

Training and Exercise Program

As new employees are hired, the Department continues to implement training in the highly competitive and sought after ICS 300 and 400 level courses. In addition to this training, Livestock Officers and Inspectors, as well as employees of the SCO, work on completing (or have completed) the FEMA Professional Development Series (PDS). This training of Department employees from all divisions has enhanced overall preparedness, as demonstrated in the Departments exceptional performance during the Palo Verde Generating Station Exercises. In the event of a large disaster or emergency, the Department would need several people to fill roles within the Incident Command System (ICS). Now that employees have furthered their education in emergency management through training, these roles can be easily filled if and when necessary.

A training schedule has been implemented and maintained for livestock services staff to complete Federal Emergency Management Agency (FEMA) courses. Having staff stay current on FEMA training is essential to emergency response. Furthermore, all emergency responders within the Department must attend a personal protective equipment (PPE) training to ensure that they are prepared to respond to hazardous incidents.

The Department also hosts and participates in the quarterly AG/FBI WMD meetings for Arizona. This brings multiple agencies together including CBP, border patrol, USDA and Public health, among others, to discuss issues and create relationships should there be an issue with agriculture which falls under the WMD coordinate.

Palo Verde Generating Station

The Department is an integral part of the state and county response to any emergencies related to the Palo Verde Generating Station (PVGS) located west of Phoenix. Containing three reactors, this is the largest nuclear power plant in the U.S. with the capacity to serve millions of homes with energy. Should an incident at PVGS result in the release of radioactive material, the Director is statutorily authorized to "abate, suppress, control, regulate, seize, quarantine or destroy any agricultural product or foodstuff that is adulterated or contaminated as the result of an accident at a commercial nuclear generating station."

In February/March 2022, the Department participated in a statewide federally observed exercise, hosted by DEMA, to assess the state's readiness to respond to a disaster at the plant. In February, an exercise

pre-drill was conducted following with a March full scale exercise. After these exercises, the After Action Report (AAR) detailed no noted deficiencies. FEMA provided feedback after the exercise and determined that the Department was successful in completing its overall objectives for the exercise. The exercise also helped assess planning gaps, and familiarization with new employees who were first time players in an exercise of this scale.

Emergency Response

Capabilities building has been a large focus for the Department over the past fiscal year. A major accomplishment during this period of time was in the application for, and award of, an ASPCA Grant. The grant monies directly funded the procurement of a new Emergency Command and Response Trailer for the Arizona Department of Agriculture (AZDA). The acquisition of this trailer is integral to the agency in several ways. Foremost, this trailer increases the ability of the agency to capitalize on mobile response to emergencies, whether man made or natural. This is a novel capability for the department and will directly impact the success of agricultural emergency response. As Emergency Support Function 11 (ESF 11), there is the real possibility, and past precedent, for the department responding to various agricultural disasters. This trailer has already been utilized in AZDA exercises and drills for Palo Verde Generating Station, as well as outreach to the public and other government agencies to raise awareness of the new capabilities and role of the AZDA in emergency response. Another ASPCA grant has been recently applied for, with the focus on obtaining mobile veterinary clinic boxes for state veterinarian trucks, as well as safety and response equipment for wildfire response and large animal evacuation. This equipment will be instrumental in mitigating agricultural damage and facilitating response in relation to wildfires. Along with robust capabilities building, the Emergency Planner IV and Emergency Coordinator have been closely involved in operations surrounding border security; collaborating with the Department of Emergency and Military Affairs (DEMA) and AZDA leadership in safeguarding agriculture at the border. The AZDA has also been participating in regular meetings surrounding preparation for Superbowl 2023 in Phoenix.

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Livestock Inspection Reason Count

Livestock Division

Filter: 7/1/2021 to 6/30/2022

Species	Inspection Reason		Count
	Auction		50408
	Born On Place		253
	Change of Ownership		61957
	Commercial Slaughter		3584
	Custom Slaughter		1225
	Custom Slaughter (home use)		4282
	Dairy		1
	Feedlot		11291
Cattle	Information		273
	Missing/Theft		1
	Pasture		35283
	Railroad kill		17
	Return to Owner		76
	Road kill		47
	Show & Return		1293
	Stray		102
		Total:	170093
	Auction		17
	Born On Place		3
	Change of Ownership		40
	Information		59
	Pasture		8
Equine	Railroad kill		1
	Return to Owner		17
	Show & Return		121
	Stray		50
		Total:	316

Livestock Inspection Reason Count

Livestock Division

Species	Inspection Reason		Count
Goat	Auction		2830
	Born On Place		8
	Change of Ownership		143
	Commercial Slaughter		27
	Custom Slaughter		2
	Custom Slaughter (home use)		83
	Information		37
	Pasture		129
	Return to Owner		4
	Show & Return		58
	Stray		12
		Total:	3333
	Auction		2461
	Born On Place		3
	Change of Ownership		112
	Commercial Slaughter		36
	Custom Slaughter		5
Classes	Custom Slaughter (home use)		126
Sheep	Information		64
	Pasture		14
	Return to Owner		2
	Show & Return		28
	Stray		21
		Total:	2872
Swine	Auction		76
	Born On Place		1
	Change of Ownership		102
	Commercial Slaughter		68

Livestock Inspection Reason Count

Livestock Division

Species	Inspection Reason		Count
Swine	Custom Slaughter (home use)		16
	Information		14
	Pasture		22
	Show & Return		15
	Stray		12
		Total:	326

Citrus, Fruit & Vegetable (CFV) Division

Industry Funded -- Industry Supported

The Citrus, Fruit and Vegetable Division are entirely self-funded and receive no general fund allocations.

Standardization Program

Citrus, Fruit and Vegetable Standardization Funds are used for the operational costs associated with the collection of fees, licensing produce dealers and shippers and the compilation of statistical data. This includes services conducted for the Arizona Leafy Greens Food Safety Committee, the Arizona Citrus Research Council, the Arizona Lettuce Research Council, USDA Market News and the FDA Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR) Implementation. These funds are reviewed quarterly and adjusted yearly by the Citrus, Fruit and Vegetable Advisory Council.

In 2018, new legislation provided the AZDA primacy for the FSMA-PSR and granted the AZDA on-farm food safety regulatory authority over fresh produce production and harvest.

The Citrus, Fruit and Vegetable Advisory Council, by statute, is comprised of governor-appointed specialty crop producers from both large and small farms in specified counties, along with a produce holder from Santa Cruz county to represent Arizona produce imports. From this group of leaders their respective industries meet quarterly with staff of the Citrus, Fruit and Vegetable Division to review program policy and budgetary items.

Arizona ranks third in the nation for overall production of fresh market vegetables. Arizona acreage produced over 92.8 million cartons of fresh produce last year. Arizona ranks second in the nation in production of iceberg lettuce, leaf lettuce, romaine lettuce, cauliflower, broccoli, spinach, cantaloupes, and honeydews. In addition, the Citrus, Fruit and Vegetable Division issued 383 licenses to the produce industry.

The top ten commodities, which account for 87% of the state's total produce production, based on carton count for fiscal year 2022 (July 1, 2021-June 30, 2022) are as follows:

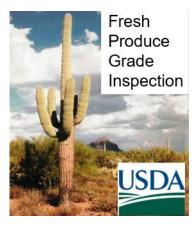
Iceberg lettuce	20,914,964	Broccoli	6,550,848
Romaine lettuce	17,476,631	Cauliflower	4,219,430
Spinach	8,310,749	Cabbage	3,874,554
Leaf Lettuce	6,628,720	Watermelon	3,527,908
Cantaloupe	6,612,617	Spring Mix	2,432,595

It is important to note that CFV has developed cost-reduction efficiencies for Arizona's agriculture industries through the cross-training of department inspectors, auditors and staff to handle all aspects of the Arizona fresh produce industry.

Federal-State Inspection Service- Fresh Produce Grade Inspection

This year the Citrus, Fruit and Vegetable Division successfully completed twenty-three years managing the Federal State Inspection Service (FSIS), Fresh Produce Inspection, and Terminal Market Programs in Nogales, Phoenix and Yuma under a cooperative agreement with United States Department of Agriculture. This FSIS program is administered by CFV and enforces United States import requirements and marketing order restrictions at the international border between Arizona and Mexico.

The Federal State Inspection Service program conducted 40,674 inspections last year, 143 were shipping point and 40,531 were terminal market inspections.



Significantly, Nogales is the second busiest port-of-entry for produce in the United States. Last year, department staff inspected a total of 61.9 million packages, with more than 425 thousand onions, 1.3 million avocados, 1.3 million packages of oranges, 36.8 million packages of field tomatoes and 21.2 million lugs of table grapes imported from Mexico and a variety of other commodities, including watermelons, peppers, cucumbers, squash, onions and citrus.

The Yuma's import date fruit inspections have tripled in the last 5 years. The Yuma FSIS conducted 427 import date inspections and an additional 202 market inspections.

The Phoenix district conducted 196 inspections, 14 were shipping point and 182 terminal market inspections

USDA Auditing Program

At the request of Arizona fresh produce industry representatives, the Arizona Department of Agriculture, along with other western State Departments of Agriculture and the United States Department of Agriculture, developed a Third-Party Audit program within the existing framework of USDA Agricultural Marketing Service Federal State Inspection. The resulting program is designed to audit the Good Agricultural Practices and Good Handling (GAP/GHP) Practices for the produce industry.

Federally licensed state inspectors perform these audits at industry's request. Last year state auditors performed 10 GAP/GHP audits. Again, Citrus, Fruit and Vegetable Division and Federal State Inspection Service developed cost-reduction efficiencies for Arizona's agriculture industries through the cross-training of department inspectors into auditors that provide the Leafy Greens audits for the Arizona Leafy Greens Food Safety Committee.

Arizona Leafy Green Products Shipper Marketing Agreement (Arizona LGMA)

In September 2007 Arizona farmers came together to raise the bar for food safety. The produce industry solicited the first Marketing Agreement in the history of the Arizona Department of Agriculture. As a result, the Arizona Leafy Green Products Shipper Marketing Agreement (Arizona LGMA) was formed. This agreement was renewed for an additional four years in October 2019.

Currently the Arizona LGMA has 39 signatory shippers that represent 99.4% of the volume leafy greens grown in Arizona. Arizona LGMA membership requires verification of compliance with the accepted food safety practices through mandatory government audits. University and industry scientists, food safety experts and farmers, shippers and processors developed these food safety practices.



These companies have committed to sell products grown in compliance with the Arizona LGMA Metrics, food safety practices accepted by the Arizona Leafy Greens Food Safety Committee. Last year LGMA used the Federal State Inspection Service Third Party Audit program to perform 105 audits.

The general purpose of this Marketing Agreement is to enable shippers of leafy green products to engage in mutual help and continue the production of high quality leafy green products grown in the State of Arizona. The primary purpose of this Marketing Agreement is to authorize signatory shippers to certify safe handling, shipment and sale of leafy green products to consumers by adopting leafy green best practices and by using an official mark. The Marketing Agreement will permit the advertisement and promotion of the use of the official mark and the education of consumers about the meaning of the official mark.

Members of the Arizona LGMA are working collaboratively to protect public health by reducing potential sources of contamination in Arizona-grown leafy greens. Leafy green products of the Arizona LGMA include: iceberg lettuce, romaine lettuce, green leaf lettuce, red leaf lettuce, butter lettuce, baby leaf lettuce (i.e., immature lettuce or leafy greens), escarole, endive, radicchio, spring mix, spinach, cabbage, kale, arugula and chard.

Assessments on signatories to the Arizona Leafy Green Products Shipper Marketing Agreement are based on cartons or carton equivalents of affected commodities sold. A shipper is a person that engages in shipping,

transporting, selling or marketing leafy green products under his or her own registered trademark or label or a person who first markets the leafy green products for the producer. It does not mean a retailer.

FDA Food Safety Modernization Act- Produce Safety Rule

In September 2016, the United States Food and Drug Administration (FDA) awarded the Arizona Department of Agriculture (AZDA) and the Citrus, Fruit and Vegetable Division a five year grant/cooperative agreement to implement the Food Safety Modernization Act (FSMA) Produce Safety Rule.

Under this Cooperative Agreement, CFV will provide statewide training/outreach for the Produce Safety Rule. FDA requires at least one person from every farms attend the Produce Safety Alliance – Produce Safety Rule Grower Training. The AZDA began this training in September of 2016 and CFV has trained over 965 participants. CFV is currently working to implement the National Association for State Departments of Agriculture (NASDA) On-Farm Readiness Review (OFRR), which provides a one-on-one farm visits to evaluate a farm's food safety practices and provide resources and guidance for improvement prior to any regulatory inspections.



The Cooperative Agreement also covers regulatory oversight and compliance. In 2018, new legislation passed that establishes the Citrus, Fruit and Vegetable Program as a division within the department. The new legislation provides the AZDA primacy for the FSMA PSR and granting the department on-farm food safety regulatory authority over fresh produce production and harvest. FDA does not intend to begin regulatory enforcement until spring of 2019.

Organic Certification Cost Share Reimbursement

Through a federal grant, the Citrus, Fruit and Vegetable Division oversees the Organic Certification Cost Share (OCCS) reimbursement program. The OCCS provides cost share assistance to producers and handlers who are obtaining organic certification for the first time or renewing their previous certification. Cost share assistance is provided on a first come, first served basis, as long as funds are available.

Organic operations may receive one reimbursement per certificate or scope of certification per year. The National Organic Program 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, 2020 and September 30, 2021 may apply for reimbursement.

The Citrus, Fruit and Vegetable Division has overseen this program since FY 2010 and has provided reimbursement for 666 certifications, reimbursing over \$474,000 to Arizona producers and handlers.

Environmental and Plant Services Division (EPSD)



The Environmental & Plant Services Division is composed of the *Environmental Services Section* and the *Plant Services Section*. EPSD is responsible for serving and protecting residents, visitors and those who choose to do business in the great state of Arizona. Our statutory responsibilities include the implementation of programs and enforcement of rules and regulations that protect consumers, human life, property, the agriculture industry and the environment.

The *Environmental Services Section (ESS)* works closely with the agriculture industry in Arizona to ensure adherence to Arizona and Federal laws and regulations related to the production, sales and handling of animal feed, seeds, fertilizer and pesticide products. This section also specializes in the monitoring of proper use of pesticides which includes enforcing regulations that protect employees who handle pesticides or work in areas where pesticides are applied.

Through inspection and compliance efforts, The *Plant Services Section (PSS)* safeguards the state with early detection of hazardous plant pests to minimize the impact of the introduction and the cost to stakeholders to mitigate it. Through intensive inspection and certification (federal and state) of vegetables, nuts, citrus, ornamentals and various other commodities for export, PSS facilitates interstate and international commerce by minimizing trade barriers.

Under statutory authority, PSS establishes and enforces quarantines to prevent introduction of hazardous plant pests from other states that threaten agriculture (i.e. exotic fruit flies), the environment (i.e. cactus moth) and the public (i.e. red imported fire ant). The issuance of compliance agreements and permits facilitates both intrastate and interstate commerce.

Environmental Services Section (ESS)

A team of six inspectors, including two supervisors, travel throughout the State of Arizona conducting inspections and collecting product samples to ensure only products that are licensed, are safe and provide the customer what they claim on their labels, are sold within our state boundaries. Our inspectors also conduct record keeping audits to make sure records of restricted use pesticides made, sold, delivered, received and used in Arizona, are generated and kept in accordance to regulations.

ESS Inspectors also provide compliance assistance and training. Compliance assistance is available to all Arizona Department of Agriculture customers that may have questions or may need assistance complying with regulations enforced by our section. Compliance assistance is most common with those companies or individuals newly licensed in Arizona or who wish to become licensed to operate in Arizona. Training is provided to those who seek to become pesticide safety trainers. We also offer continuing education training, which is required of those who hold certain pesticide related licenses.

ESS Inspections:

Restricted Use Pesticides (RUP) Audits

SELLER AUDITS: RUP Audits are conducted on-site at establishments that sell restricted-use pesticides. The purpose of the inspection is to determine if the dealer is properly licensed and maintaining the required records and if restricted-use pesticides are being sold only to certified applicators by reviewing the seller's records. During this audit inspectors also inspect the establishment's storage location to ensure it is in compliance with regulations.



APPLICATOR AUDITS (PUP/PUC/PUG): Similar to Seller Audits, this audit is done to determine if the licensed applicator is keeping required USE and inventory records of Restricted Use Pesticides. Part of this audit also includes an inspection the pesticide storage location.

Total Seller Audits21	Total Warnings Issued0
Total Applicator Audits25	Total Citations Issued0
Total Violations Detected7	Total Penalties Assigned\$142.00

Producer Establishment Inspection (PEI)

Producer Establishment Inspections are conducted at Environmental Protection Agency (EPA) registered establishments where pesticides or devices that claim to reduce or eliminate pests are produced and held for distribution or sale. During PEI inspections, products, product labels, refillable and non-refillable containers, containment, and records are examined for compliance. These inspections are conducted by EPA credentialed ESS Inspectors under a cooperative agreement with EPA. The EPA provides AZDA funding to help defray the cost of conducting these inspections. Any enforcement actions at these facilities must be carried out by the EPA.



Total PEI Inspections8	Total Warnings Issued0
Total Violations Detected0	Total Citations Issued0
	Total Penalties Assigned\$0.00

Pesticide Use Inspection (USE)

A Pesticide Use inspection (USE) is an observation of an actual pesticide application or an inspection following an application known as "post-application review". Use inspections include the many facets of pesticide use, including handling, mixing, loading, applying, disposal and storage. Pre- and post- application activities are subject to inspection. USE inspections are conducted to determine label comprehension and directions for use compliance by applicators. Use inspections can also detect non-compliant labels. USE inspection reports include data collected at the site such as what surrounds the site (i.e. other ag commodity fields, residential area), Inspectors will also check and documents wind



speed and direction. These inspections may, and often are conducted concurrently with Worker Protection Standard (WPS) Inspections.

Total USE Inspections50	Total Warnings Issued4
Total Violations Detected8	Total Citations Issued4
	Total Penalties Assigned\$411.00

Complaints alleging pesticide misuse are promptly and thoroughly investigated; they are treated as a "for-cause USE" Inspection. Once a complaint investigation is complete, a report is prepared and forwarded to the Office of the Associate Director of the Environmental & Plant Services Division for review and disposition. If evidence of a violation is discovered, the Associate Director may recommend a citation or warning to be issued by the Director. Cases are reviewed and proposed dispositions approved by Counsel assigned to AZDA by the Arizona Attorney General's Office. Cited parties may request a hearing with the Office of Administrative Hearings or pay a civil penalty which goes to the state general fund as established by state law.

During fiscal year 2022, nine agricultural application drift complaints were investigated. Drift is defined as "...the physical movement of pesticide through the air at the time of a pesticide application from the application [site to a location not intended]..."

Four of the drift complaints were sustained; no evidence of drift was found on 4 and the remaining 1 is pending laboratory analysis results.

Six other investigations were non-agriculture complaints in residential areas. Most of these were related to the use of moth balls contrary to label instructions. All cases were issued warnings.

Experimental Use Permit (EUP) Inspection

Similar to a USE inspection, an experimental use permit (EUP) inspection is conducted to determine compliance with an EUP and may be an actual observation of an application or an inspection of records. Experimental Use Permits are issued by the Arizona Department of Agriculture to pesticide companies wishing to test a new or modified product prior to registering it. At this point of the development of a new product or formula modification of a current one, a label must be developed and must accompany the EUP. The ESS inspector will review the label to make sure it is followed correctly and to ensure the product is labeled for Ag use.



Total EUP Inspections0	Total Warnings Issued	0
Total Violations Detected0	Total Citations Issued	
	Total Penalties Assigned	0

Worker Protection Standard (WPS) Inspection

The federal Worker Protection Standard (WPS) was implemented by the U.S. Environmental Protection Agency (EPA) and the Arizona Department of Agriculture in 1992 to ensure the health and safety of agriculture workers who work in areas where pesticides are applied and pesticide handlers are protected from pesticide related illness or injury. During WPS inspections ESS Inspectors look at training records as both workers and handlers must be trained in pesticide safety on an annual basis. Failure to train workers/handlers in pesticide safety is the most common violation found during WPS inspections.

Decontamination supplies such as clean water for hand washing and eye flushing, soap, and single use towels must be present within ½ mile of where workers are performing their work and for handlers the decontamination supplies must be immediately available at the mixing and loading site. Required postings including a poster containing pesticide safety information, pesticide application records, safety data sheets for pesticides applied, information on nearest operating emergency medical facility and the toll-free number to the Arizona Pesticide Hotline are all items the inspector will request to see during the inspection. Farm labor contractors are required to have all this information available at worksites with exception of application records and safety data sheets, they must





however, have a list of central posting locations for the agricultural establishment they are performing work for. The use of required personal protective equipment is also part of WPS inspections.

Total WPS Inspections184	Total Warnings Issued0
Total Violations Detected64	Total Citations Issued11
	Total Penalties Assigned\$4,344.56

Pesticide Safety Trainer (PST) Audit

Pesticide Safety Trainer audits are conducted to ensure adherence with trainer rules and regulations. This includes the inspections of training records, training materials and verification cards issued by PST's, as well as observing trainers during a training session.

PSTs must use training logs for record keeping that are approved by AZDA. WPS training verification cards must be provided by the employer and must be in the format also approved by AZDA. Trainers must keep trainer records for at least two years and must make them available to trainees, employers and ESS Inspectors upon request.



Only trainers that successfully complete AZDA's Pesticide Safety
Trainer Course are authorized to train in Arizona. ESS inspectors check trainer certifications during other inspections to ensure adherence with this regulation.

Total PST Inspections49	Total Warnings Issued
Total Violations Detected0	Total Citations Issued(
	Total Penalties Assigned

Consumer Protection Plan:

Non-Food Quality Assurance (NFQA) Program

ESS inspectors travel throughout the state conducting Marketplace Inspections (MPI) where labels are reviewed and product samples are collected to make sure only products that are licensed, are safe and offer what they claim on their labels are sold within our state. Commodities covered under this program are: animal feed, fertilizer, pesticides and seeds. Established sample collection protocols are strictly followed and samples are delivered to the State Agricultural Lab for analysis. It should be noted that as a result of COVD-19 restrictions sample collection quantities were lower than previous years.



Sample Collection:

Sample	Amount	Failure Rate
Туре	Collected	
Feed	179	3.4%
Fertilizer	103	6.8%
Pesticides	152	3.9%
Seeds	71	1.4%

Marketplace Inspections (MPI) [per commodity]:

Feed	Labels	Unlicensed Feed	Seize & Desist
MPIs Conducted	Reviewed	Companies	Orders Issued
130	17,565	61	61

Fertilizer	Labels	Unlicensed	Seize & Desist
MPIs Conducted	Reviewed	Fertilizer	Orders Issued
92	3,332	13	13

Pesticide	Labels	Unlicensed	Seize & Desist
MPIs Conducted	Reviewed	Pesticides	Orders Issued
149	8,230	15	15

Seed MPIs Conducted	Labels Reviewed	Expired Seed	Unlicensed Dealers/ Labelers	Seize & Desist Orders Issued
50	1,476	17	2	19

Country of Origin Labeling (COOL) Inspection

Through a partnership with the US Department of Agriculture (USDA), ESS Inspectors conduct COOL inspections throughout the state to ensure compliance with the Country of Origin Labeling Law. This law requires retailers, such as full-line grocery stores, supermarkets and club warehouse stores, to display for information regarding the source of certain foods. Food products covered by this law include muscle cut and ground meats such as lamb, goat, and chicken. Fish/shellfish, fresh and frozen fruits and vegetables, peanuts, pecans, and macadamia nuts and ginseng are also covered by this law. In addition to the country of origin labels for fish/seafood must contain how they are raised, if it was wild-caught or farmed. Assignments are provided by the USDA of establishments to be inspected. There are two types of inspections, initial and follow-up inspections. Initial inspections are first-time inspections for the establishment. Follow-up inspections are done at locations where the prior year's inspection revealed that further review of records are required. COOL information can be conveyed through tags, rubber

bands, twist ties, stickers, banners or any other way that is easily seen by consumers. In FY 22 the EPSD conducted **52** initial inspections. No follow-up inspections were requested by USDA this fiscal year.

Community Outreach and Training Program:

ESS Vodcast Series: On Demand CEU's

During FY 2022, ESS developed an alternative option for AZDA licensees to obtain continuing education credits remotely. The Environmental Services Section through their YouTube channel will be producing pesticide related Vodcasts where licensees may sign up to watch these Vodcasts, complete an affidavit of completion to obtain 1 hour of continuing education. Before the next licensing cycle ESS plans on developing four CEU episodes. To subscribe to our channel please visit: https://www.youtube.com/channel/UC5aYvp0sovNIqQzj6UuHjVQ



Community Presentations

Throughout the year ESS inspectors are available to community and professional organizations for presentations regarding regulations enforced by our section, how to comply and about the services ESS offers. ESS inspectors provided presentations for the annual Arizona Inter-Agency Farmworker's Coalition, AZDES's Ag Employers Conference, Yuma Safe Produce Council's annual supervisor's refresher training and for several agriculture employers.



Annual Recertification Course

ESS provides licensees who need continuing education units (CEUs) to renew their AZDA licenses, training at the Annual Recertification Course. This course has historically been presented at multiple locations throughout the state. Attendees are eligible to receive 3 CEUs for the morning session and an additional 3 CEUs for the afternoon session, free of charge. In FY 2021, ESS offered this course online due to COVID. For FY 2022 we returned to an in-person format where our team of inspectors and guest presenters offered courses in Phoenix, Marana and Yuma. A total of **237** licensees attended this year.



Pesticide Safety Trainer Course (PSTC)

During FY 2022, AZDA's Pesticide Safety Trainer Courses were offered both online and in person. Online participants were still required to appear in person at set testing locations to take the mandatory exam. Our EPA approved Worker Protection Standard course is 4 hours long. Those wishing to renew their certificate must attend the same course. All pesticide safety trainer courses are offered in English and Spanish. During FY2022, 163 trainer candidates took and successfully completed AZDA's PSTC to become trainers of workers and handlers; 41 current trainers attended the course to renew their certificate. In addition, 36 trainers successfully completed the worker-only trainer course. Of these 5 were renewing their trainer certificate.



Plant Services Section (PSS)

Through inspection and compliance efforts, the Plant Services Section safeguards the State through early detection of hazardous plant pests to minimize the impact of the introduction and the cost to stakeholders to mitigate it.

Safeguarding Market Access and Facilitating Commerce

- Safeguarding the State through early detection of hazardous plant pests to minimize the impact of the introduction and the cost to stakeholders to mitigate it.
- Intensive inspection and certification (federal and state) of vegetables, nuts, citrus, ornamentals and various other commodities for domestic and international export; minimization of trade barriers.
- Establishment and enforcement of quarantines to prevent introduction of hazardous plant pests from other states that threaten agriculture (i.e. exotic fruit flies), the environment (i.e. cactus moth) and the public (i.e. red imported fire ant).
- Issuance of compliance agreements and permits to facilitate commerce among businesses within and outside of the state.



Funding to Support Agri-business and Commerce

Plant Services Section received funding through General Fund (\$2.7 million) and Federal (\$1 million) sources to support the safeguarding, production, market access and domestic/international movement of numerous Arizona produced commodities.

Fiscal Year (FY) 2022 Impact

Seed is a commodity certified for international export from Arizona and over 130 different types of seeds are exported to over 59 countries. The Plant Services Section's priorities are:

1) Safeguarding - pest detection activities for early detection/validation of pest freedom to support market access. 2) Certification and related inspection activities for international and domestic commodity export. 3) Quarantine compliance inspections.

Threats from plant pests and diseases of concern to our State are ever-present as PSS inspection staff conducted 9,929 inspections of high risk commodities resulting in 2,347 pests intercepted within the state's interior with 147 identified as serious pests of concern to Arizona's agricultural and horticultural industries.



Below is a summary of some of the activities PSS undertakes. Plant agriculture and exports continues to diversify and expand, as an example:

- International Export Inspections and Certifications: a total of 2,300 international export certificates were issued during FY 2022.
- **Domestic Export Inspections and Certifications:** a total of 2,399 domestic inspection certificates were issued during FY 2022.
- **Nursery Certifications Issued** (required for domestic shipment of nursery stock): 242 certificates were issued during FY 2022.
- **Commercial Date Plantation acreage** requiring trapping to safeguard against pests and maintain market access for exports: Remained at the same levels as FY 2021.
- **Commercial Pecan acreage** requiring trapping to safeguard against pests and maintain market access for exports decreased 5.49% (CY21 to CY22).
- **Actionable pest interceptions:** 88 Rejections were written and 56 additional actionable pest interceptions were identified during FY 22.

Commitment to Service

The Plant Services Section continues its progressive efforts to improve the timeliness, efficiency and quality of customer service delivery in order to meet the demands of an expanding agricultural industry. PSD demonstrates a commitment to service through the following:

ON-LINE RESOURCES - Stakeholder access and interaction
with PSS is enhanced through web-based regulatory
information, guidance and resources by industry grouping;
fillable application forms and electronic submission to request
certification services; and direct connections to local
resources, including Plant Services Section's regional offices,
for expedited service.



- **EXPORT CERTIFICATION** Exports contribute significantly to Arizona Agriculture's \$23.3 billion economic impact on the State. PSS staff conduct numerous, intensive inspections annually as requested by various industry stakeholders to facilitate the time-critical domestic (2,399 Domestic Phytosanitary Export Certificates were issued in the state FY 2022) and international (7,684 International Phytosanitary Export Certificates were issued in Federal FY 2022 to 67 different countries with 2,300 certificates issued by PSS personnel in the state FY 2022) for movement of agricultural commodities.
- VOLUNTARY NURSERY CERTIFICATION PROGRAM During FY 2022, 395 applications were received
 from Arizona nurseries requesting inspection and certification to comply with the import requirements of other
 states. Following inspection of each applicant's property, production practices and commodities to be
 exported, 242 certificates were issued.

Export Enhancement

Arizona's economy benefits greatly from the PSS's strict maintenance of its aggressive pest detection program. In previous years, government quarantine officials from the People's Republic of China, Chile, Argentina, Israel and Mexico reviewed our pest detection efforts resulting in additional, or continued, market access for Arizona agricultural commodities and robust industry growth.

Driving Efficiency and Customer Service through Technology

Digital Imaging System for Sample Identifications:

- Reduced costs to stakeholders with rapid determinations of interdicted pests
- Faster release of regulated products into the stream of commerce
- Facilitates immediate access to identification specialists around the globe

Comprehensive Database Applications:

- Real-time, results-based management data to direct priorities and safeguarding activities for cost avoidance and improved short- and long-term effectiveness
- Centralized ordering of supplies and inventory control = cost savings

GPS/GIS Systems:

- Enhanced accountability
- Improved logistics in routing inspectors through inspection/survey sites
- Ability to define situational areas for accurate cost assessments and execution of eradication/control projects

Pest Management Division (PMD)

INSPECTIONS

Pesticide Use Inspections

One of the duties of PMD Compliance is to perform Pesticide Use Inspections (aka Use Inspections). These inspections involve monitoring an applicator applying, storing or disposing of a product. PMD believes that monitoring compliance protects the public by reducing the number of pesticide misuses. The number of Use Inspections performed for FY 2022 amounted to 1077. The categories of inspections were as follows:

	General Pest / Public Health	484
	Wood Destroying	411
	Turf and Ornamental	126
	Antimicrobial	0
	Right of Way / Weeds	45
6	Fumigation	5
7	Aquatic Pest	6

Non-Use Inspections

Non-use Inspections are inspections that do not involve the actual "monitoring of pesticides". They are Inspections of pesticide treatment records at the business licensee's office or at a food, healthcare, school or child care facility to ensure individuals servicing such accounts are licensed (as required by law). Such inspections also involve vehicle inspections (ensuring labels, safe working equipment and personal protective equipment are onboard), office records (e.g. dates employees licensed) **PMD compliance staff conducted 972 non-use inspections.** The categories of inspections were as follows:

Office Transations	ΓΛO
Office Inspections	508
Vehicle Inspections	445
Certified applicator treatment records	11
Child Care visits	11
Health Care Inspections	2
Municipality Inspections	3
School Inspections	7
*The figures listed amount to more than	
972 inspections as some may be more	
than one type (e.g. Office inspection and	
municipality that has an office).	
Therefore, those figures are electronically	
deducted by the inspection database.	

Consumer Protection Monitors

Inspectors utilize Pretreat Tag Monitors, also known as "Consumer Protection Monitors (or CPMs)", to determine if consumers received a termite pretreatment that complies with state and federal requirements. This monitoring program does not disrupt the work schedule of a business, qualifying party or applicator, because it does not involve them, unless a violation is found. The inspector visits newly constructed areas, views the pretreatment tag the applicator is required to attach to the site after pretreatment. Then, the inspector measures the site, calculates the amount of termiticide that should be applied and compares his findings with the information the applicator documents on the tag. The inspector use the pretreat tag to not only verify the proper quantity, strength and dosage of termiticide to a site, but also to determine if the business performing the treatment is reporting the treatments to the Office as required by Law. **In FY 2022, PMD inspectors performed 286 Consumer Protection Monitors.**

Investigations

The Division conducted 102 inquiry investigations in FY 2022. Inquiries, threshold investigations, are basically preliminary investigations. They take 30 to 60 calendar days and provide information for Compliance staff to determine if there is evidence of a violation. Inquiries come from consumers, licensees, agency Staff or referrals from the EPA or other State or local government agencies. If violations are found, the inquiries then become complaints. The inquiry categories were as follows in Fiscal Year 2022:

Category	Inquiries Open
Misuse	31
Unregistered applicator	10
QSD	3
Uncertified applicator	5
TARF	5
Unlicensed Activity	24
Failure to complete Final	13
Grade	
WDIIR	4
Record Violations	7

Complaints

PMD issues a citation only after the Associate Director, Attorney and the Agency Director have conducted a review of the investigative report and have determined that a violation meriting disciplinary action has occurred. To maintain consistency, the Associate Director utilizes Enforcement Response Protocols (ERP) located in the back of the Arizona Administrative Codes. By utilizing the ERP the Associate Director is to able to recommend discipline to the Agency Director that is unbiased and uniform. Penalties may include a warning, suspension or even civil penalties of up to \$1000 for egregious violations. **In FY 2022 the PMD completed 57 complaints.**

The categories for the complaints are as follows:

Category	Complaints Completed
Failure to complete Final Grade	16
Misuse	6
No Qualifying Party (QP)	2
Improper Quantity	4
Record Violations	2
Failure to submit TARFs	4
Unlicensed Activity	11
Unregistered employee	8
WDIIR violations	2
Uncertified Applicator	2

Consumers can visit http://www.sb.state.az.us/ComplaintSearch.php and view the complaint history of any respondent whom the PMD has opened and resolved a complaint.

Type of Disciplinary Action	<u>Number</u>
Administrative Warnings (total individuals from all of the cases)	61
Civil Penalties	\$13,975.50
Number of cases that involved Civil Penalties	26
License Suspensions	0
License Revocations	2
Dismissals	6
Cease and Desist Orders	11

Continuing Education Applications

Individuals holding an applicator certification and those holding a certified qualified applicator license are required to obtain 6-hours of Continuing Education (CE) and 12 hours of CE respectively per year. CE providers must submit CE applications which contain a copy of the material or an outline of the training to the PMD. CE can address pesticide technologies, application equipment, application techniques, Laws, entomology, pesticide safety and the environment and business practices. PMD staff reviews each CE course to determine if it meets the qualifications as outlined in Arizona Administrative Code. Staff then provides a specific numbers of hours for each course submitted for credit. For FY2022, PMD staff approved 490 PMD CE course applications and 267 Agricultural CE course applications.

Industry Outreach

In FY2022 PMD staff spoke to industry members or participated in CE classes. Staff provided a total of 25.5 hours outreach in the topics of Laws and Rules. Additionally, staff provided a total of 40.5 hours of outreach in the topic of, legally working without a license (aka Landscaper Exemption), to 20 attendees. **Therefore, for FY2022, the PMD provided a total of 66 outreach hours.**

School and Childcare Visits

State law requires pesticide applications in schools and child care facilities be performed only by *licensed* persons and only after the licensee provides the school or child care facility with a minimum of 72-hours advance notification (pursuant to ARS 32-2307). **For FY2022, PMD staff visited 18* facilities (11 child care and 7 school visits)** to confirm that pesticides were applied by appropriately licensed persons and that employees, students and parents were provided the proper information and warnings of impending pesticide treatments.

*This number is drastically small for a few reasons. #1. The Covid-19 Pandemic has resulted in school and child care staff prohibiting outsiders from visiting their facilities and #2. The PMD is currently operating on a skeleton crew since 3 of it's current inspectors are still undergoing training. Therefore, resources have been allocated toward consumer related complaints as well as termite treatments / consumer protection monitors.

State Agricultural Laboratory

The Arizona Department of Agriculture State Agricultural Laboratory (SAL) provides quality agricultural laboratory analysis, identification, certification, technical consultation and training services to various regulatory divisions of the Department and others as provided by law. To maintain the integrity of its test results, the Laboratory operates Independently of the Department's regulatory divisions and follows a stringent quality assurance program.

The Department's laboratory re-located to the City of Chandler in 2019, where all its employees are under one roof again for the first time since 2010. The table below illustrates the type of testing conducted:

Testing Currently Performed	Testing Which Could Be Performed With Additional Resources
Seed - Regulatory/Export	Dairy Aflatoxin
Brucellosis - Milk	Dairy Antibiotics
Food Safety - Meat	Dairy Pesticides
Food Safety - Specialty Crops	Entomology - Taxonomic
Dairy Microbiology	Entomology - Genetic
Animal Feed	Food Safety Emergency Response
Pet Food	Seed - Customers
Fertilizer	
Pesticide Formulations	
Forensic Analysis - Chemical Residue	
Hemp-Total THC	

Homeland Security Testing

The SAL continues to maintain its capabilities to provide assistance to the State and the Nation in the event of a homeland security emergency. Federal, State and local governments continue to work together to produce a network of laboratories capable of responding to emergencies. The SAL continues to secure its place within the laboratory emergency response infrastructure.

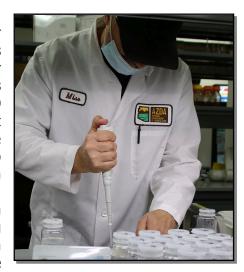
Food Emergency Response Network (FERN) - FERN is a network of state and federal laboratories that are committed to analyzing food samples in the event of a biological, chemical, radiological outbreak or terrorist attack in this country. The SAL is a member of the FERN for both chemical and microbiological testing.

Quality Assurance Program

Quality assurance is an integral part of the Lab's analytical operations. It is the meticulous attention to quality assurance standards that enables each of the laboratory's customers to act upon test results with utmost confidence.

Quality manuals define the laboratory policies, systems, programs, procedures and instructions to assure the quality of the test results. Standard Operating Procedures (SOPs) referenced in the quality manual detail laboratory processes, test methods, as well as proper use and maintenance of equipment. These procedures ensure uniformity of work accuracy and reproducibility of test results.

The laboratory continues to monitor the increasing International demand for Organization Standardization (ISO) accreditation for laboratories providing regulatory testing. The evolving standard for laboratories similar to the SAL is ISO 17025:2017. As federal agencies complete the implementation of ISO accreditation for their own labs, the federal government has begun to require state laboratories to become similarly accredited. The SAL has obtained specialty crop block grant funding to aid it in achieving ISO accreditation for some of its food safety testing protocols. In addition, during FY22, the SAL received general funding to add a scientist dedicated to activities necessary for obtaining and maintaining accreditation. The laboratory has begun the steps necessary to obtain ISO accreditation by the



end of calendar 2022. As part of the ISO accreditation, the SAL also added leafy greens testing as part of the microbiology LGC proficiency program utilized by the lab.

Laboratory Audits

The dairy microbiology lab undergoes on-site laboratory audits that are conducted every three (3) years by the U.S. Food and Drug Administration (FDA) Laboratory Evaluation Officers (LEO's). Such audits, combined with analyst participation in an annual proficiency testing program, ensure the quality of the analyses conducted by the dairy microbiology laboratory.

In addition, the laboratory is audited by the United States Department of Agriculture (USDA) for the laboratory's meat pathogen testing program. Similar audits will be necessary when the laboratory becomes accredited to the ISO 17025:2017 standard.

The Environmental Protection Agency (EPA) performs audits of the SAL quality assurance program as a function of the cooperative agreement between AZDA and EPA for the regulation of pesticides in AZ.

In-house audits are required as a component of the ISO accreditation. The laboratory has created an audit program to perform these activities.

Laboratory Certification

The State Agricultural Laboratory provides mandatory certification of laboratories providing agricultural laboratory services to agencies and departments of this State or its political subdivisions, including those laboratories that are a part of any state agency. Laboratories interested in certification by the State Agricultural Laboratory may visit our <u>Laboratory Certification</u> page on the AZDA website.

Laboratory Approval

Scientists from the State Agricultural Laboratory are certified by the U.S. Food and Drug Administration as Laboratory Evaluation Officers. As such, they provide FDA mandated audits and inspections of dairy testing laboratories. When compliance is reached, the laboratories achieve "Approved" status for testing, enabling producers access to the interstate marketplace.

Reference Standards and Reference Materials

Certified reference materials and internal quality control protocols are used regularly to ensure the accuracy of test results. The Arizona Department of Agriculture collection of arthropods houses one of the largest and most comprehensive ant collections in Arizona. It is part of an insect collection made up of over 20,000 individual specimens, representing more than 250 families of insects. This important reference collection is used by staff in identifying samples of beneficial and harmful insects, which are introduced or established in the state. In FY22, the SAL donated 14 entomology specimen cabinets to the Arizona State University Hasbrouck Insect Collection.

Proficiency Test Programs (PTPs)

Analytical performance is validated by participation in several proficiency test programs. PTPs provide unknown samples for analysis by the SAL and provide feedback as to how well the lab did in detecting and/or enumerating test results. Examples include: feed sample PTP by the American Association of Feed Control Officials; fertilizer sample PTP by Magruder's Fertilizer Check Sample Data Program; PTP for meat pathogen analyses required by the USDA; dairy sample PTP by the Laboratory Proficiency and Evaluation Team of the Food and Drug Administration; seed sample PTP by the Association of Official Seed Analysts; pesticide product PTP by the American Association of Pesticide Control Officials; pesticide residue PTP by the Environmental Protection Agency, mycotoxin sample PTP by the American Oil Chemists Society, pesticide residue sample PTP by the Food Emergency Response Network, and total THC sample PTP by the University of Kentucky. The SAL also added a new PTP for total THC in oil by the University of Kentucky to analyze oil products that are manufactured from hemp seed.

Animal Disease Detection

Last year, the laboratory continued to test raw milk for the bacteria responsible for causing brucellosis, a severe reproductive disease in cattle and other animals. In humans, the disease

is known as undulant fever. Brucellosis may be transmitted from animals to humans through non-pasteurized milk. Since the 1940s, the USDA has sought to eradicate brucellosis from the U.S., resulting in the current Cooperative State Federal Brucellosis Eradication Program. States are designated brucellosis free when none of their cattle or bison are found to be infected for twelve (12) consecutive months under an active surveillance program. Arizona has been brucellosis-free since 1987. Due to the relocation of the laboratory and loss of funding, the SAL has not tested animal blood samples for brucellosis since 2009.

Food Safety

The laboratory participates in the Department's Food Safety and Quality Assurance Program by testing agricultural commodities for food-borne pathogens. Raw meat, ready-to-eat products, animal carcass swabs and environmental samples are tested in support of the State's Meat and Poultry Inspection Program. This is a cooperative program between AZDA and the U.S. Department of Agriculture Food Safety and Inspection Service.

The U.S. Food and Drug Administration certifies the dairy microbiology lab and individual analysts to perform testing on dairy products, dairy product containers and environmental



dairy water samples to allow export of Arizona's milk and milk products to other states. Tests conducted at the SAL include: bacteriological analyses, enzyme activity for proper pasteurization of dairy products, antibiotic residues and other indicators of milk safety and quality.

The SAL is currently expanding its food safety testing to include leafy green products and associated environmental sample testing in support of Arizona's produce industry.

Forensic Testing

The SAL scientists test samples collected during investigations of off-target application of agricultural chemicals, incorrect application of pesticides to homes for the prevention of termite infestations or insect control, illegal discharge of pesticides into the environment, or failure to take necessary actions to protect industry workers. These regulatory samples are collected by AZDA or other regulatory investigators and delivered to the laboratory utilizing stringent chain of custody procedures. Sample types received include: pet food, water, soil, produce, foliage, animal tissues, air sorbents, clothing and surface swabs. Complicating the analytical testing process are the more than 11,000 pesticide products registered for use in Arizona, any one of which could need to be detected as part of an investigation. Analysis of these forensic samples requires advanced scientific tools and experience.

Consumer Protection

The expertise of the Lab's personnel with the chemistry of pesticides is further used to protect Arizona's consumers and industry through the provision of analysis of home-use, commercial

and agricultural pesticide products. The Department collects samples each year from the consumer and commercial marketplace. Chemists then perform analyses to determine whether the content and quality of the active ingredients are correctly displayed on the product label. This regulation not only protects the end user from potential financial losses, but also plays a key role in protecting pesticide applicators and farm workers against harmful exposure.

The laboratory also analyzes commercial feed and fertilizer products to determine whether the amount of ingredients guaranteed on the label are accurate. This ensures that consumers receive agricultural products that meet the label guaranteed quality. For example, a fertilizer may have a grade guarantee of 10-20-5, which indicates the product must contain 10% nitrogen, 20% phosphorous and 5% potassium. In turn, the lab would run tests for all three (3) ingredients. Similarly, a feed product may be guaranteed for protein, calcium, phosphorous or other nutrients requiring multiple testing.

The SAL analysts conduct testing of commercially available seed products for purity, germination rate and weed seed content to benefit Arizona's farmers, landscapers, homeowners, golf courses and seed export companies. Analyses are completed on seed samples to provide assurance that the seed label matches its guaranteed performance when planted and does not contain excess harmful noxious weeds. The SAL's seed analysts are certified by the Association of Official Seed Analysts (AOSA).

Hemp Potency Testing

On December 20, 2018 the 2018 Federal Farm Bill was signed into law and legalized industrial hemp ("hemp") by excluding it from the definition of marijuana. On May 14, 2018, Senate Bill 1098 was signed by Governor Ducey that authorized the Arizona Department of Agriculture to license qualified applicants to grow and process industrial hemp. The Department began issuing licenses on May 31, 2019.

In support of the Arizona Department of Agriculture's Industrial Hemp Program, the SAL began testing industrial hemp THC levels in September of 2019. While the laboratory's role as primary testing body for hemp THC potency was predicted to be short-lived, difficulties in certifying third party laboratories to take over this testing resulted in the SAL analyzing all hemp samples until September 2020. The SAL continues to test samples as a referee lab to confirm results from a certified lab.

In addition, Law Enforcement Agencies utilize the SAL to determine whether cannabis samples collected as evidence from a criminal investigation are hemp or marijuana. Crime labs are currently unable to determine the quantity of THC present in cannabis (or cannabis product) samples; they only test for presence/absence. This has caused an increase in the forensic testing section of the SAL.

The SAL's permanent role in this pilot program will be certifying third party laboratories to run official regulatory samples, performing samples for Arizona law enforcement entities to discriminate hemp from marijuana and testing samples as needed by the AZDA's regulatory officials. Currently, there is one (1) external lab testing facility certified to do Hemp testing and has taken over 100% of the testing.

Laboratory Equipment Modernization

During the 2021 Legislative session, the laboratory received one-time general funding of \$2.5M for FY22 to replace much of the SAL's equipment and instrumentation. The average age of instrumentation at the SAL was greater than 16 years old at the end of FY21. Some pieces of equipment in use were more than 30 years old, including one instrument utilized for milk testing that still ran on the Disk Operating System (DOS).

Modernizing the instrumentation and other laboratory equipment was a huge endeavor during FY22. The project expended the entire appropriation and was very successful. In total, the laboratory purchased more than 165 pieces of equipment. The metrics for the project illustrate the improvements. The average equipment age was reduced from 16.5 years to 2.5 years. The equipment availability index improved from 57% to 88% (this will continue to increase as the laboratory implements the new systems received late in the FY). A website was created to show the progress of the project (https://sites.google.com/azsal.gov/equipment-replacement-project/home).

Position Classification and Salary Equality

During FY22, the laboratory received ongoing general funding to restore equality between scientists that work for the Department of Agriculture Laboratory and those that work at the Department of Health Laboratory. The successful reclassification of its scientific staff restoring job classification equivalency repairs a error made just prior to the Great Recession when the classifications between the two agencies were unlinked. This led to many scientists being trained at the SAL and leaving to do the same job for the Health Department for substantially more money. This was identified as a key strategic issue related to our agency's succession planning for the laboratory.

Weights and Measures Services Division (WMSD)

Primary Responsibilities

The Arizona Department of Agriculture, Weights and Measures Services Division ("WMSD") promotes equity and integrity in the Arizona marketplace through a variety of agency functions...

- We license commercial devices that weigh, measure, meter, or count as part of determining the direct cost of commodities. WMSD inspects and tests these devices to ensure proper use, correct installation, and measurement accuracy. Common examples of commercial devices licensed by WMSD are scales, fuel dispensers, propane meters, and timing devices.
- We conduct price posting and price verification inspections to ensure that consumers are provided with clear, conspicuous, and accurate pricing information when shopping for goods and services.
- We verify the net contents of packaged goods by comparing the labeled quantity of a package versus the actual quantity of useable product contained in the package. Packaging inspections cover a variety of categories including groceries, firewood, office supplies, building materials, and more.
- We oversee two air quality programs in vehicle emissions control areas: gasoline vapor recovery and Cleaner Burning Gasoline (CBG).
- We collect and analyze fuel quality samples to verify that fuel purchased within the State of Arizona meets vehicle performance and emissions control standards.
- We inspect fuel dispensers for credit card skimming devices and aid law enforcement in financial crime investigations related to skimmers.
- We maintain custody of the State reference standards through our metrology lab. The metrology lab ensures that all standards used to test and calibrate weighing and measuring devices within the State of Arizona are accurate and traceable to the National Institute of Standards and Technology (NIST).
- We investigate consumer complaints in regards to commercial devices, pricing practices, packaged goods, fuel quality, and more.
- We provide continuing education to industry and the public through Weights and Measures Week events, WMSD Advisory Council meetings, public workshops, media interviews, and electronic communication.

Major Accomplishments

- WMSD worked with its Advisory Council to develop a risk-based inspection plan, and prepare this plan for the initial phase of implementation in Fiscal Year 2023.
- WMSD worked with stakeholders to develop a proposed rule that will allow the sale of E15 motor fuel statewide, remove unnecessary rules, and improve the overall clarity and

- consistency of the rules. The Notice of Proposed Rulemaking was published on July 22, 2022, and WMSD is currently continuing through the formal rulemaking process.
- WMSD provided inspector training for Weights and Measures inspectors and administrative staff working for the Navajo Nation Business Regulatory Department.
- WMSD staff participated in 13 local media interviews and one national media interview to provide education to the public regarding marijuana packaging, motor fuel dispenser accuracy, motor fuel quality, and retail price accuracy.
- WMSD worked with industry representatives to inventory the number of commercial marijuana scales in the marketplace, which ultimately resulted in the cancellation of 765 unnecessary scale licenses.
- WMSD received a new LPG meter test trailer that is helping to improve our efficiency in conducting LPG meter inspections.

WMSD by the Numbers

Number of Licenses Issued (Including Devices and Persons): 122,464

Inspections Conducted: 7,875

Total Devices Tested: 24,277

Fuel Dispenser Tests: 16,980

Scale Tests: 4,450

Price Posting and Price Verification (UPC) Inspections: 3,382

Tests of the Net Contents of Packaged Goods: 1,028

Fuel Quality Samples Analyzed: 571

Credit Card Skimmers Reported/Found: 0

Consumer Complaint Inspections: 1,065

Overall Inspection Compliance Rate: 90% pass

Notices of Violation Issued: 763

Civil Penalty Amount Assessed: \$465,000

Metrology Lab Tests Performed: 8,916