



# 2020 Report of the Tribal Center for Food Safety, Outreach, Education, Training, and Technical Assistance



UNIVERSITY OF  
ARKANSAS

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## **Message from the Director – Colby D. Duren, J.D.**

The Indigenous Food and Agriculture Initiative at the University of Arkansas School of Law (IFAI) began in 2013 with a mission to empower Tribal governments and individual Native farmers and ranchers through policy research and analysis, education, outreach, and training in the space of food and agriculture. As part of that mission, we have been fortunate to partner with the U.S. Food and Drug Administration (FDA) to establish the Native American Tribal Center for Food Safety Education, Outreach, and Training.

Through this partnership with FDA, as well as the U.S Department of Agriculture and key stakeholders across Indian Country, IFAI has been able to deliver relevant food safety training for hundreds of Native growers on the Food Safety Modernization Act (FSMA) Produce Safety Rule and develop a culturally appropriate modified curriculum for Native growers. This work would not have been possible without our partners and our stakeholders, especially those who served on our Steering Committee and Modified Curriculum Working Group. We extend our deep gratitude to each of those individuals.

In all our work on this project, we have started from a place that acknowledges and honors the extensive history of Indigenous food science knowledge that facilitated the growth, harvest, and trade of foods between Tribal Nations for thousands of years. Indigenous food science and cultural food traditions have provided food for their people and for inter-Tribal trade across this continent, including the lands on which the University of Arkansas sits.

Colonization of Native lands brought new, different food safety risks and altered the food systems that Native people had maintained for centuries. However, Indigenous people continue to grow, raise, harvest, share, trade and sell food products in today's food system, yet often lack access to culturally appropriate fresh produce safety outreach, education, and technical assistance on the regulations which could impact their farms and markets, particularly as it pertains to FSMA. Our work through this cooperative agreement with FDA ensures that Tribal fresh produce producers receive this access and builds the infrastructure to necessary to ensure the sustainability of produce safety efforts through a national integrated food safety network.

Across Indian Country, we are seeing Tribes assess establishing new food processing facilities. Under a new cooperative agreement with FDA starting September 2020, we are excited to expand our work to include the FSMA Preventive Controls for Human Foods rule, which could cover those same food processing and packaging operations.

Our dedicated team at the Indigenous Food and Agriculture Initiative looks forward to continuing this work supporting Native producers.

## Executive Summary

The most recent National Census of Agriculture, conducted every five years by the United States Department of Agriculture, counted nearly 80,000 American Indian and Alaska Native (AI/AN) producers. Collectively, these producers make agricultural production in Indian Country a \$3.5 billion industry and significant contributor to the American economy as a whole. But while Native producers have been maintaining robust food economies, managing inter-Tribal trade of food, developing principles of Indigenous science and food management addressing food and food safety, and stewarding lands on this continent for thousands of years, changes to Native food systems and foodways brought on by colonization introduced new food safety risks to today's on-farm agricultural production. These new risks, in combination with evolving federal laws and food safety regulation represented by the Food Safety Modernization Act (FSMA) and the Produce Safety Rule (PSR) promulgated by the Food & Drug Administration (FDA) pursuant to that law, necessitated the development of a culturally appropriate modified curriculum and training series for Native growers on the PSR.

In 2016, the Indigenous Food and Agriculture in the University of Arkansas School of Law (IFAI) received a cooperative agreement from FDA to conduct outreach, technical assistance, and training for Native producers and Tribal communities, focused on the PSR. This cooperative agreement designated IFAI as the Native American Center for Food Safety Outreach, Education, Training, and Technical Assistance. IFAI, staffed by a dedicated team of legal and policy experts focusing on federal Indian law and agri-food policy, developed and implemented a multi-faceted approach to accomplishing the goals of the cooperative agreement, including the development of a modified curriculum for Native growers on the PSR. The curriculum was developed with stakeholder input, as gathered from a needs assessment that remained open for feedback for the duration of the agreement. A steering committee and advisory body of Tribal agriculture experts further ensured that work conducted under this cooperative agreement was meaningful to its intended stakeholders and aligned with FDA goals. During the performance period, IFAI staff conducted 32 food safety grower trainings, with 436 individuals attending, representing over 95 Tribes. IFAI staff additionally conducted 48 webinars on food safety topics with over 500 participants.

This report discusses the full scope of the work IFAI conducted pursuant to this cooperative agreement with FDA and represents the culmination of four years of outreach, curriculum development, and collaboration with IFAI stakeholders and FDA.

## **About the Indigenous Food and Agriculture Initiative**

The Indigenous Food and Agriculture Initiative at the University of Arkansas School of Law (IFAI) focuses on putting tribal sovereignty in food sovereignty by promoting tribally driven solutions to revitalize and advance traditional food systems and diversified economic development throughout Indian Country. IFAI provides Tribal governments, food producers, and food businesses with educational resources, policy research, and strategic legal analysis as a foundation for building robust food economies.

Collectively, our staff is composed of legal and policy experts specializing in Federal Indian law and agri-food policy. As of this report, four (4) IFAI staff have received training as trainers under the Produce Safety Alliance (PSA) to teach the course recognized as the standardized curriculum by FDA under §112.22(c) of the Produce Safety Rule. Two (2) of these staff have been recognized by PSA with lead trainer status.

## Meet Our Team



Colby Duren, J.D.  
Director  
(Trainer)



Erin Parker, J.D., LL.M  
Research Director and Staff Attorney  
(Lead Trainer)



Carly Hotvedt, J.D., M.P.A.  
Director of Tribal Enterprise  
*Cherokee Nation*



Blake Jackson, J.D.  
Policy Officer and Staff Attorney  
(Lead Trainer)  
*Choctaw Nation of Oklahoma*



Josiah Griffin  
Program and Policy Specialist  
(Trainer)  
*Hawaiian*



Brenton Jones  
Budget and Grant Specialist



Whitney Sawney  
Communications Manager and  
Program Specialist  
*Cherokee Nation*

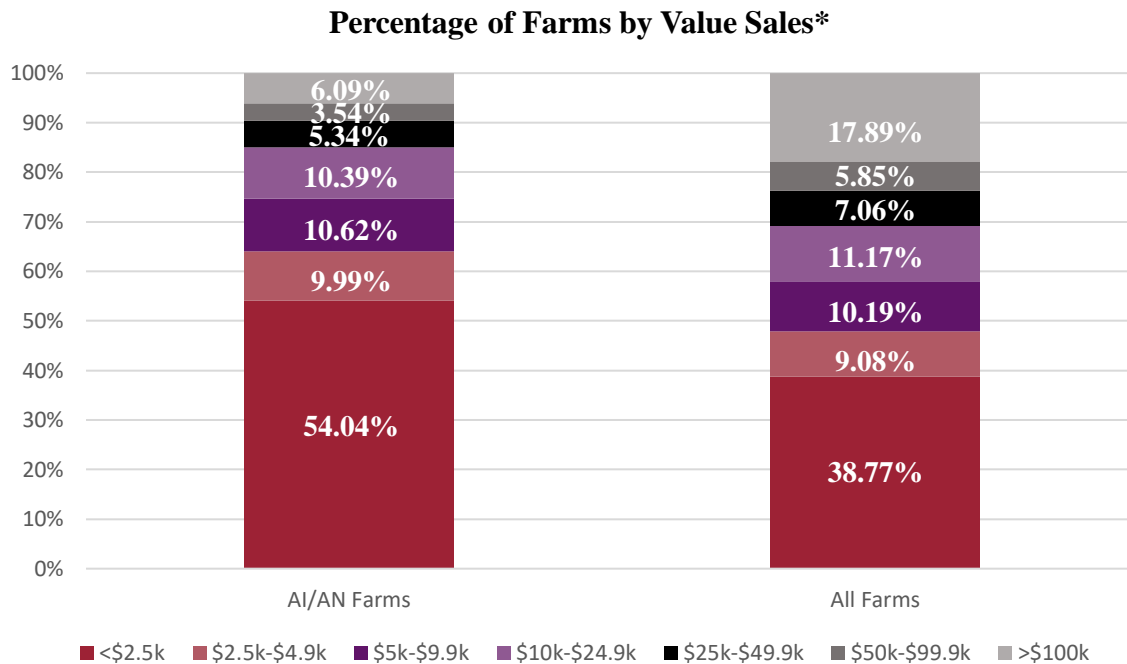


Nikki Young  
Administrative Assistant

## Indian Country Agriculture Profile

Every five years, the U.S. Department of Agriculture National Agricultural Statistics Service releases a Census of Agriculture providing a snapshot landscape of domestic agricultural commodity production by farms that either sold or could have sold at least \$1,000 of market value produce during the year.<sup>i</sup> Data published by the Census of Agriculture is anonymized to the county level, with aggregate data also published on 73 Tribal reservations.<sup>ii</sup> Federal agencies use this data to map out funding and staffing priorities,<sup>iii</sup> and partners like IFAI commonly reference Census of Agriculture findings when speaking to American Indian and Alaska Natives (AI/AN) commodity production. IFAI encourages all Tribal growers to participate in the Census of Agriculture to ensure it more adequately represents the true landscape of food growers on and off Indian reservation lands.

While some may think of AI/AN producers as operating solely within the boundaries of Indian reservations, the 2017 Census of Agriculture tells a different story: Tribal producers farm and ranch in counties nationwide.<sup>iv</sup> Tribal food systems are as vibrant and diverse as the communities they feed, including traditional and more mainstream agricultural practices. While AI/AN peoples compose approximately one (1) percent of the population,<sup>v</sup> Tribal agriculture operations make up three (3) percent of all farms.<sup>vi</sup> Collectively, on-farm Tribal agriculture alone is a \$3.5 Billion industry.<sup>vii</sup>



*Notes:*

\* The Census of Agriculture represents values of commodities sold as the market value of a commodity that is or normally would have been sold during the reporting year.

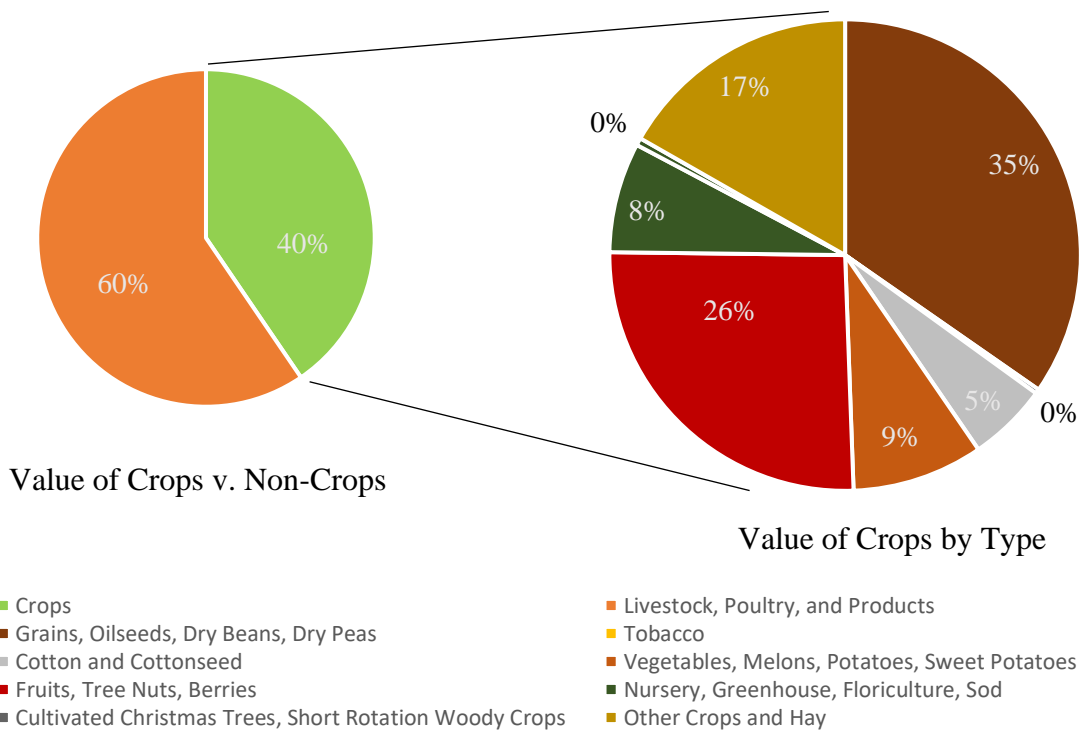
The above chart statistically aligns with Census of Agriculture data representing that approximately 51 per cent of farms operated by an AI/AN producer maintain under 50 acres



land. Of the approximately 60,000 farms operated by an AI/AN producer, 96 percent operate as family farms, with six percent report as selling directly to consumers.

As this report talks through Tribal agricultural production, it is important to recognize how Tribal farms are represented in the Census of Agriculture from 2012 to 2017. Altogether, the Census of Agriculture reports a seven (7) percent increase in farms with AI/AN producers and the market value of crops increasing by 1.8 percent.<sup>viii</sup> Expanding crop sales should not be understated as it represents a 24 percent increase in fruit and tree nut farming and a 20 percent increase in greenhouse, nursery, and floriculture.

### Crop Production by AI/AN Growers (Percent of Crop Sales)

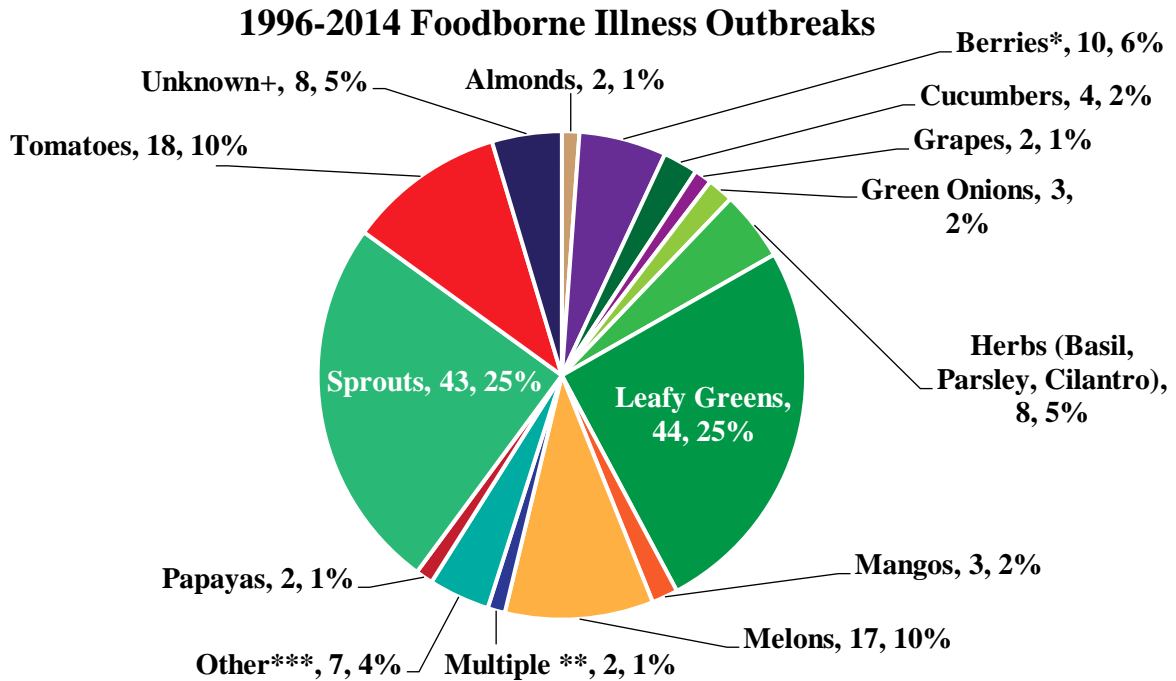


The pie charts included here illustrate the breadth of crop production by AI/AN growers. These charts utilize Census of Agriculture data to explore the types and value of crops produced by AI/AN growers across the United States, including fresh fruits and vegetables likely to be covered by the FSMA PSR, as well as additional crops, such as trees and floriculture, that would not be covered. Of AI/AN crop producers, the combined categories of Fruits, et al.; Vegetables, et al.; and Nursery, et al. are the key categories implicated by the PSR. These categories, when combined, comprise approximately half (42.31 percent) of the value of crops produced by AI/AN growers and over one-third (34.82 percent) of AI/AN crop farms.<sup>ix</sup> While two of these slices indicate zero (0) percent of crops produced, production of these commodities should not be discounted, with the percentage reflecting a comparison, not lack, of crops produced.

IFAI staff continues to predigest materials like the Census of Agriculture for our partners as well as Native agricultural producers, utilizing our network to encourage Native farmer and rancher participation in Census of Agriculture. The appendix includes a “Farm to Data Table” infographic that provides much of this information in a way that is easily accessible and allows readers to identify key Census points and share relevant information quickly.

## Food Safety Modernization Act Produce Safety Rule Overview

Nationwide, between 1996-2014, 172 produce-related outbreaks caused 17,156 foodborne illnesses resulting in 2,067 hospitalizations.<sup>x</sup> As of 2015, foodborne illnesses instigated losses of productivity and medical expenses totaling over \$15.5 billion in the U.S. each year. Many foodborne illnesses remain unreported or unsolved.



Congress enacted the Food Safety Modernization Act, establishing legal standards for food safety practices across the food-supply chain, in 2011 with the U.S. Food and Drug Administration (FDA) under the Department of Health and Human Services as the sole administrator.<sup>1</sup> Recognizing the complexity of these systems and the weight of an entirely new body of regulatory compliance on farms, manufacturers/processors, and distributors, FDA released seven (7) regulations (rules).

- **Food Safety Modernization Act Rules**
  - Produce Safety Rule
  - Preventive Controls for Human Food
  - Preventive Controls for Animal Food
  - Foreign Supplier Verification Programs
  - Accreditation of Third-Party Auditors/Certification Bodies
  - Sanitary Transportation of Human and Animal Food
  - Prevention of Intentional Contamination/Adulteration

<sup>1</sup> P.L. 111-353.

FDA published the PSR in 2015 which establishes standards for on-farm food safety practices related to growing, harvesting, handling, and packing fresh fruits and vegetables for commodities that are not otherwise rarely consumed raw or destined to be processed under a “kill-step” that reduces human pathogens, such as cooking or pasteurization.<sup>xii</sup> Factors impacting food safety outbreaks play a role in PSR requirements such as rolling compliance dates and qualified exemptions for farms under a sales threshold selling to qualified end users. Farms are not subject to PSR or “not covered” if they fall under \$25,000 annual (gross) produce sales adjusted for inflation since 2011, while produce is not covered if it is identified by FDA as rarely consumed raw, exempt under FDA’s discretionary authority, or will undergo documented commercial processing reducing the presence of human pathogens.<sup>3</sup>

Produce sales thresholds referenced in compliance dates are averaged over the previous three (3) years on a rolling basis. Farms with less than \$250,000 produce sales must generally comply with the PSR by January 27, 2020; with between \$250-500,000 produce sales must generally comply by January 28, 2019; and with more than \$500,000 must generally comply by January 26, 2018.<sup>xiii</sup> Compliance dates for specific provisions under the rule, e.g. qualified exemption labels or the use of agricultural water, vary, with charts available for reference in the appendix.

FDA delegated inspection and audit authority to State agencies, including State Departments of Agriculture, for all farms operating on non-Tribal lands, including farms owned by American Indians and Alaska Natives. The rule permits Tribes, in addition to States and countries, to request a variance if local growing conditions do not prove conducive for implementing PSR provisions and the operating jurisdictional authority can attest that alternative practices will allow for the same public health protections and that produce grown under these jurisdictions will not be adulterated.<sup>4</sup>

### **About the Produce Safety Network**

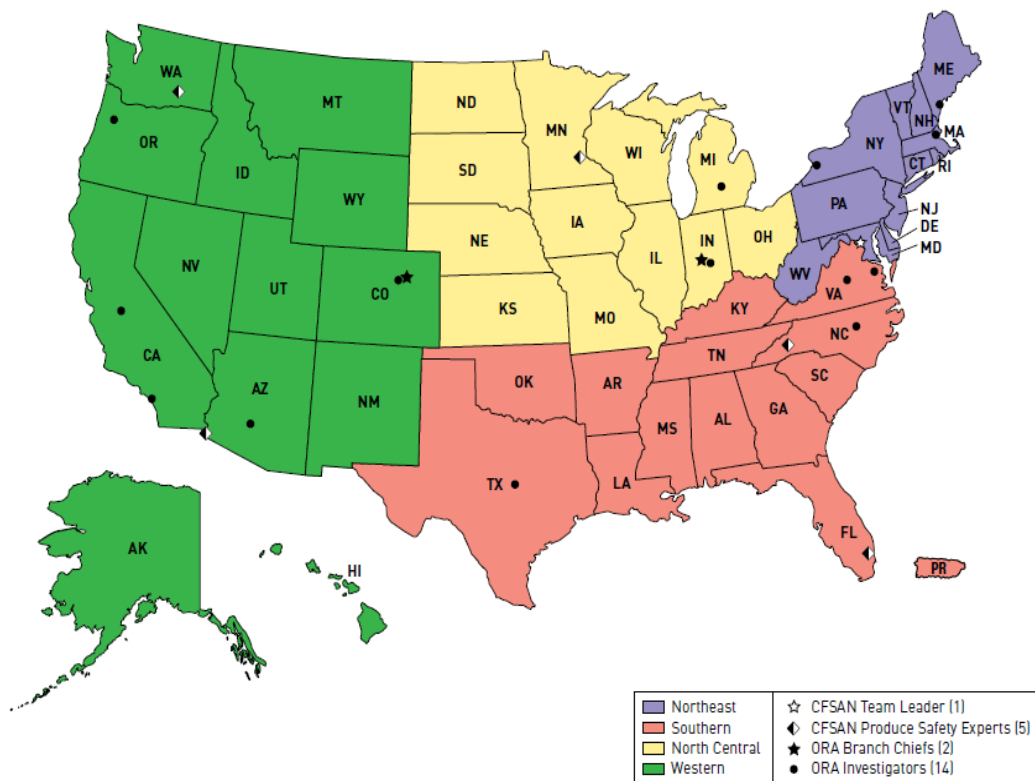
Following release of the Produce Safety Rule, FDA began developing a Produce Safety Network (PSN) to support agricultural producers, regulators, Tribes and other stakeholders.<sup>xiii</sup> FDA staffs this network with six (6) produce safety specialists and one team leader, in addition to 14 investigators and two branch chiefs. These staff provide more direct technical assistance and guidance about the Produce Safety Rule and implementation strategies, while collaborating with other regional staff for a consistent approach nation-wide.

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<sup>2</sup> 21 CFR §112; §112.2.

<sup>3</sup> §112.2-4.

<sup>4</sup> §112.2, Subpart P.



Supporting this unified response is a [Technical Assistance Network](#) (TAN) of FDA information specialists, subject matter experts, and lawyers that are available to provide answers for complex Food Safety Modernization Act questions.<sup>xiv</sup> The TAN published a list of [frequently asked questions](#) on food safety requirements and recommendations, with the opportunity to submit additional questions for review.

### About the Produce Safety Alliance and Regional Centers

As part of this rule, at least one supervisor for each covered farm is required to take a food safety training recognized by FDA.<sup>5</sup> The Produce Safety Alliance (PSA)—a collaboration between Cornell University, FDA, and the U.S. Department of Agriculture (USDA)—established the first food safety grower training curriculum recognized by FDA for this purpose. Unless otherwise indicated in this report, food safety grower trainings will refer to the curriculum designed by PSA.

<sup>5</sup> 21 CFR §112.2.

The PSA uses a multi-pronged approach in its training and outreach activities. As part of these processes, PSA designates and approves individuals to train on its curriculum; however, each training must have an individual recognized by PSA as a lead trainer overseeing the delivery of training components. PSA partners with the Association of Food and Drug Officials (AFDO) to manage grower training certificates.

Alongside established Produce Safety Network regions, FDA and USDA sought to designate regional centers for food safety, with the express goal of developing and expanding food safety outreach, training, and technical assistance opportunities for all producers within each region, and now USDA is the sole funding agency for the regional centers for food safety.<sup>xv</sup> The Western Regional Center to Enhance Food Safety is based out of the Oregon State University; the North Central Region Center for FSMA Training, Extension, and Technical Assistance in Iowa State University; Southern Center for Food Safety Training, Outreach, and Technical Assistance at the University of Florida; and the Northeast Center to Advance Food Safety at the University of Vermont. These Centers partner with State agencies, extension agent, growers, and other agriculture technical assistance providers to conduct regular outreach, training, and education, while also liaising local concerns and questions to USDA.

## **Native American Tribal Center for Food Safety Outreach, Education, Training and Technical Assistance**

In January 2016, FDA released a request for applications (RFA) for a cooperative agreement to develop and provide training, education, outreach, and facilitate identification of appropriate technical assistance for produce farming and food processing members of federally recognized tribes. The IFAI applied and was identified by an objective review panel to serve as this Native American Center for Food Safety Outreach, Education, Training, and Technical Assistance under this RFA.

Under the cooperative agreement, IFAI focused on the following key deliverables to help prepare Tribal fruit and vegetable growers for upcoming compliance dates:

- **Conduct a Needs Assessment** to prioritize training, education, and technical assistance activities.
- **Develop produce/food safety educational materials** that are science-based and culturally appropriate.
- **Identify and characterize** Tribal production of agriculture.
- **Conduct outreach** to raise awareness of training opportunities.
- **Collaborate** with FSMA Alliances like the Produce Safety Alliance to adapt existing materials when appropriate..
- **Evaluate** training curricula to ensure that it is effective for Tribal audiences.

To accomplish these tasks and others associated with the RFA, four (4) members of IFAI's staff received training to serve as trainers from PSA for the food safety grower curriculum, with at least two (2) staff receiving Lead Trainer status.

A characterization of Native agriculture is provided in the "Indian Country Agriculture Profile" section, with the remaining report speaks to each of these components in greater detail. IFAI recognizes the importance of this work and the implication of food safety to many other activities supporting safe, viable food systems.

### **Steering Committee**

None of this work happens in a vacuum, and food safety practices are relevant to every area of agricultural operations from growing, harvesting, and packaging to recordkeeping. To guide the work conducted under this cooperative agreement and ensure the target audience was reached, IFAI established a Steering Committee that could speak to how Tribal nations and AI/AN people grow, manage, and engage their foods. This Committee would directly inform how IFAI's team of Federal Indian law and agricultural policy experts establish and build out both partnerships, events, and projects.

IFAI is grateful to the below persons for sitting on this Steering Committee. Organizations corresponding to each Steering Committee member were current as of their time of service.

### Steering Committee Members:

- **Verna Billadeaux**, Blackfeet Reservation Extension Office
- **Cheryl Crazy Bull** (*Sicangu Lakota*), American Indian College Fund
- **Zach Ducheneaux** (*Cheyenne River Sioux*), Intertribal Agriculture Council
- **Jeff Farrar**, U.S. Food & Drug Administration
- **Virginia Harris**, U.S. Department of Agriculture National Agricultural Statistics Service
- **Beatrice Herbert** (*Navajo*), U.S. Department of Agriculture-- Food Safety Inspection Service, Office of Outreach, Employee Education and Training
- **Lillian Hsu**, U.S. Food & Drug Administration
- **Ken Keck**, U.S. Department of Agriculture-- Agricultural Marketing Service
- **Ross Racine** (*Blackfeet*), Intertribal Agriculture Council
- **Michelle Radice**, U.S. Department of Agriculture-- National Agricultural Statistics Service
- **Scarlett Salem**, U.S. Food & Drug Administration
- **Angela Shaw**, Iowa State University
- **Leanne Skelton**, U.S. Department of Agriculture- Agricultural Marketing Service, Specialty Crops
- **Susan Stokes**, Minnesota Department of Agriculture
- **Maria Givens** (*Coeur d'Alene*), National Congress of American Indians
- **Fazila Shakir**, U.S. Food & Drug Administration

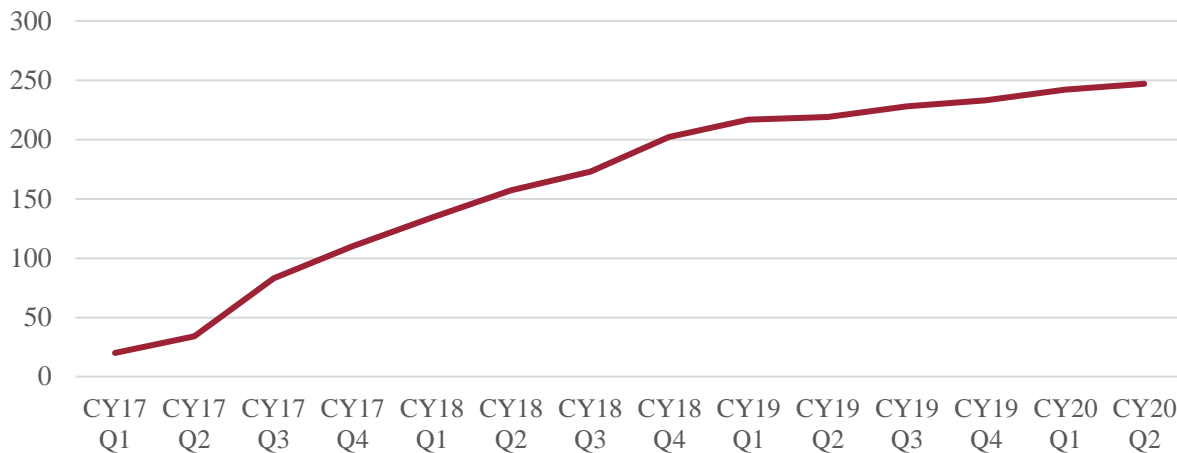
The Steering Committee met four times in 2017: March, August, October, and December. Throughout these meetings, IFAI kept the Steering Committee abreast on metrics, training and webinar schedules, and food safety updates. During the third quarter, Committee members agreed that IFAI will prioritize establishing a working group to review and adapt PSA's food safety training curriculum. In 2018, IFAI reconvened the Steering Committee as a Curriculum Working Group, with their input discussed subsequently in this report.



## Interpreting the Needs Assessment Survey

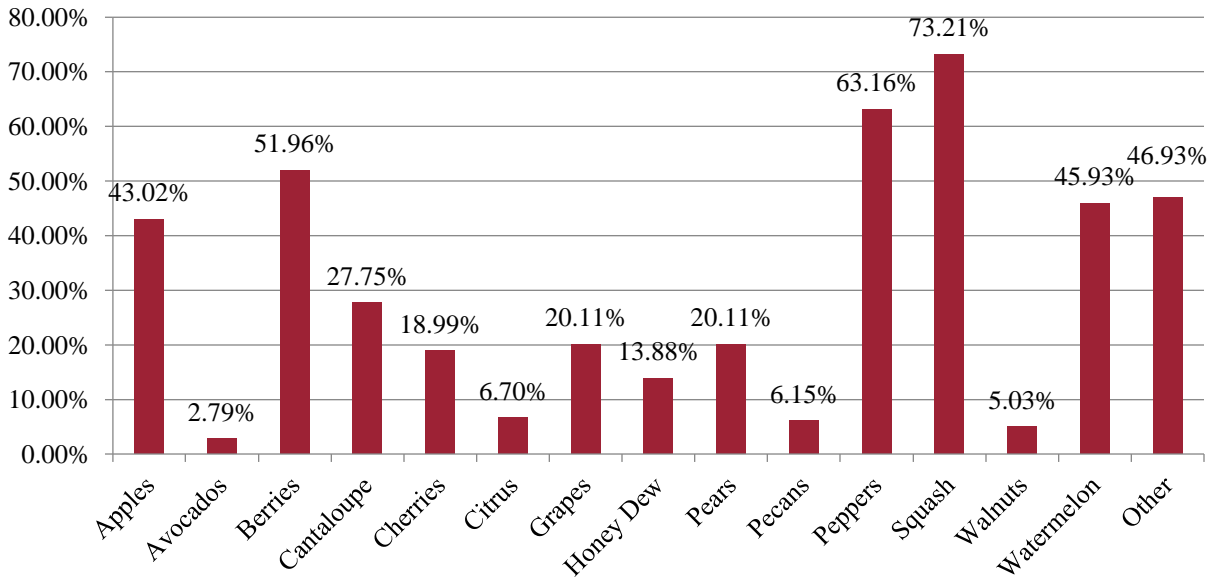
While the Census of Agriculture provides a reference baseline for agricultural activities throughout Indian Country, the Census is a static representation of commodity production and does not identify ongoing interest areas or demonstrate needs. A needs assessment, however, allows for regular ground truthing as people throughout Indian Country can continue to submit responses as their environment changes. IFAI therefore engaged in a needs assessment to provide a data collection mechanism that could identify needs of their stakeholders on an ongoing basis. The needs assessment process began with the creation and release of a survey, following University-mandated protocols. The University of Arkansas requires that any human-subjects research survey released by a staff office first be approved by the University's Internal Revenue Board (IRB). This survey fell under the legal definition of human-subjects research, and thus required IRB review. IFAI first received IRB approval in December 2016 which IFAI later renewed in July 2019. Needs Assessment questions requested feedback and demographic information relevant to multiple aspects of the FSMA.

**Aggregate Needs Assessment Respondents  
(Period Over Period)**

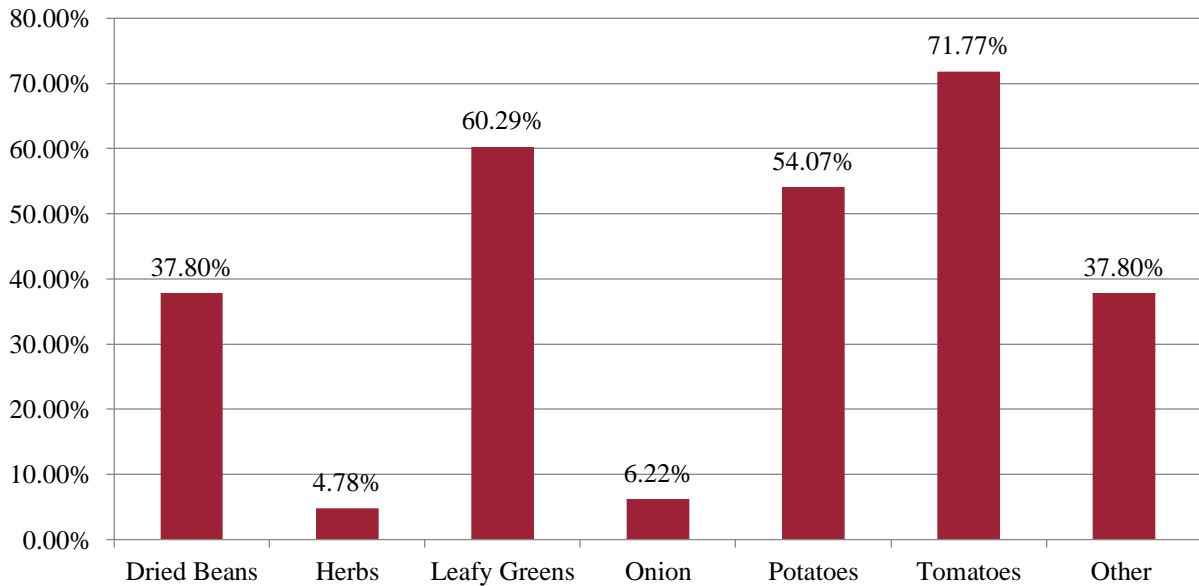


The above chart indicates a quarter over quarter aggregation of needs assessment submissions. Of these respondents, 84 percent reported their operation produces fruits or vegetables. A vast majority of these operations are engaged in direct marketing to consumers (60.6 percent), while only a quarter sell to retailers, such as grocers, restaurants, or convenience stores (28.8 percent). Approximately half of these fruit/vegetable growers (48.4 percent) indicated at least part of their produce is intended for commercial processing.

### What Sort of Fruit Do You Grow?



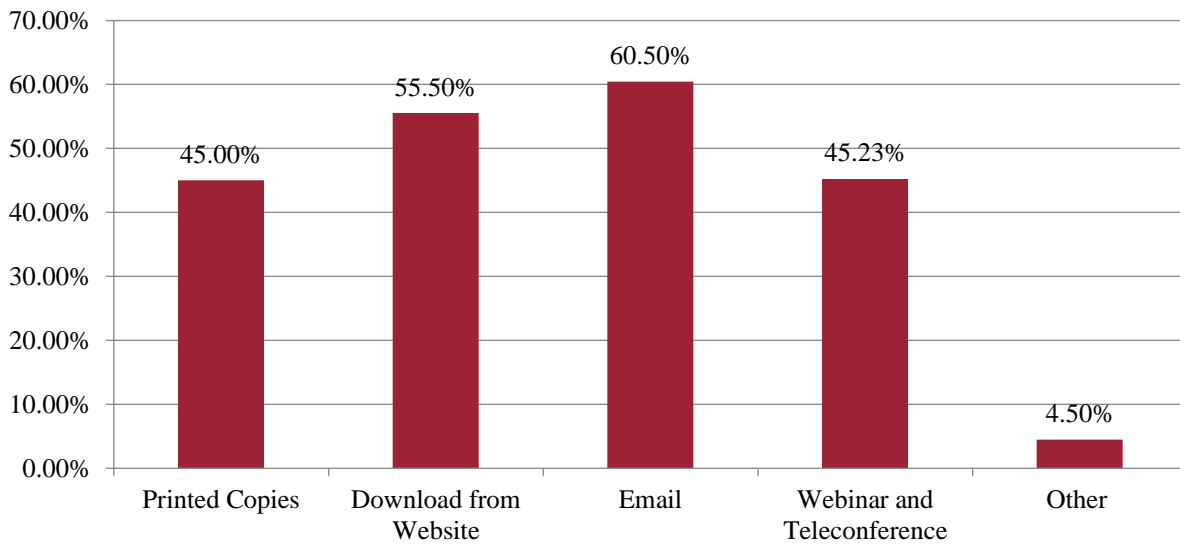
### What Sort of Vegetables Do You Grow?



While half of producers indicated they have not received food safety training, over 75 percent reported wanting information on regulations and legal requirements, technical and science-based food safety requirements, and information on the causes and prevention of foodborne illnesses. Most notably, 96.1 percent mentioned they would attend a class on food safety located in their region, with 63.64 percent of respondents to date indicating that one (1) to four (4) percent of people associated with their respective operation would need training.

The question then arises for how respondents would prefer to receive information on these opportunities, news, and related announcements. Needs assessment submissions indicate a preference first by e-mail, followed closely by website updates, and lastly by printable copies. Webinars and teleconferences nearly tie with printed copies as the lowest prioritized medium for receiving updates, including educational materials. In referring this data, IFAI received the majority of needs assessment surveys through its website, and IFAI staff continue to hear anecdotal evidence on the importance of live, in-person consultations.

### **How Would You Prefer to Receive Educational Materials and Information?**



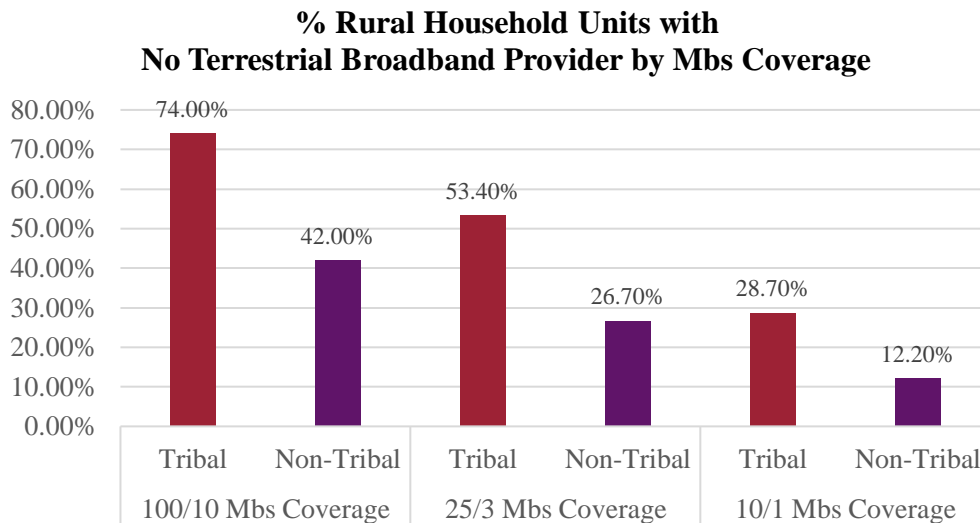
## Engaging Tribal Governments, Growers, and Food Systems

Ultimately, during this cooperative agreement period, IFAI staff engaged partners and stakeholders through 179 live events, reaching over 11,100 attendees collectively. To accomplish this result, IFAI employed a multi-pronged approach to effective engagement of effectively engaging Tribal governments, growers, and food systems requires a multi-pronged approach. Providing meaningful, relevant information, education, and resources to farmers is the crux of any effective food safety training and education strategy. The needs assessment, Census of Agriculture findings, Federal Communications Commission (FCC) data, Steering Committee recommendations, discussions with FDA, and experience of IFAI staff all played a role in defining how IFAI managed outreach and communications throughout this cooperative agreement.

### Utilizing Census of Agriculture and FCC Data to Shape Effective Communications

One of the challenges of communicating with growers in rural and remote areas, like many growers in Indian Country, is a lack of broadband access. To shape an effective communications strategy, IFAI staff explore communications data routinely and attempt to find ways to fill gaps in an increasingly digital communications world. Both the Census of Agriculture and the FCC maintain relevant data for IFAI’s stakeholder audience; those data are explored briefly here to contextualize IFAI’s communications strategy and challenges.

While the Census of Agriculture indicates that 66 percent of farms with AI/AN producers have internet access,<sup>xvi</sup> this rate is not uniformly applied across the U.S. with AI/AN growers in some states reporting as low as 32 percent.<sup>xvii</sup> Based on data from service providers to the U.S. Federal Communications Commission, universal access to internet at any bandwidth remains a barrier to accessing information.<sup>xviii</sup> Notably, the FCC reports that this data has “shortcomings.”



Referencing this data as a baseline, Tribal household units in rural areas lack access to the same broadband speeds as non-Tribal households by a nearly 2 to 1 ratio. While this data does not

speak to the capacity or production level of Tribal agricultural operations, access to fixed broadband services are essential for retrieving information on financing opportunities and regulatory updates, streaming videos of best practices, and connecting with technical assistance providers, educators, and financiers including those managed by federal agencies.

To reach as many AI/AN growers as possible, IFAI's inclusive outreach and communication strategy incorporated in-person as well as digital communications efforts. In-person efforts included direct outreach at national and regional intertribal conferences where IFAI staff were speaking about food safety and other food systems topics. Digital strategies included email, webinar, website, and social media messaging directed to end-users (growers), governing officials, and food safety partners, including both Native and non-Native ally organizations. A key piece of this messaging was situating all educational materials in their appropriate context. Food safety is an integral part of food systems management, and Tribal experts and partners continue to relay that no conversation about food safety should happen in a vacuum but should be addressed holistically. By referencing food safety in this manner, IFAI has worked to craft messaging that is culturally appropriate to stakeholders, which further drives interest and relevancy to the significance of these food safety practices.

In addition to inclusivity and cultural appropriateness of messaging, IFAI maintained an appropriate frequency of messaging to stakeholders as well. In communications work it is important not only to send the right message, but to send it at the right time and avoid overwhelming stakeholders with constant updates and information. In an effort to strike the right balance between informative and overwhelming, IFAI releases a weekly newsletter on upcoming events, activities, and related announcements through a general listserv. Where timely and actionable, newsletter stories included updates to food safety guidance and best practices, in addition to food safety grower training and monthly webinar registration weblinks. IFAI cross-posted priority newsletter headlines, including any food safety activity, to social media via the handles [@IndigenousFoodandAg](#) for Facebook and [@IFAIUArk](#) for Twitter.

IFAI also employed a communications strategy that took into account different methods of communicating information. In addition to emails, newsletters, and social media updates, IFAI utilized webinars to drive interest and connect with stakeholders. Over 500 participants joined IFAI for 48 webinars on a rotating schedule of FSMA related topics. One webinar per cycle discussed a component (module) of the PSA's training curriculum, with the addition of four (4) new webinars designed specifically by IFAI to help broaden and inform discussion on food safety and PSR issues:

- *Microbiology Basics*, divided into parts I and II;
- *Intersection of Business Planning, Risk Management, and Food Safety*;
- *So You Think You're Exempt?*, discussing the complexity of whether an operation is covered under the PSR; and
- *Legal Issues in Tribal Food Safety*.

An ad hoc webinar discussed the FSMA Preventive Controls for Animal Food Rule, providing a sense of the variety of subject areas under FSMA's purview beyond on-farm food safety compliance. A breakdown of attendance by webinar topic is available in the appendix. Recordings for all webinars are available through [www.nativefoodsafety.org](http://www.nativefoodsafety.org).

[Nativefoodsafety.org](http://Nativefoodsafety.org) serves as a central website for congregating all IFAI food safety events, activities, announcements, and other food safety record and planning templates, webinar recordings, and partner resources. Those involved in Native food systems often do not have time to search for information or answers before the next pressing issue arises. Creating a “one-stop shop” for these topics allows Native agriculturalists in any position the opportunity to quickly find what they need in a way that is meaningful and relevant to them.

## Training Indian Country Fruit & Vegetable Growers

The FSMA Produce Safety Rule (PSR) requires that “at least one supervisor or responsible party for [each] farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.”<sup>6</sup> As of this report, the Produce Safety Alliance is the standardized curriculum where grower attendance would meet PSR training requirements.

### Produce Safety Alliance Curriculum and Training Certificates

PSA’s training curriculum includes PSR requirements, recommendations and principles of Good Agricultural Practices (GAPs), and co-management information, dividing these components into seven distinct modules:

- Module 1, *Introduction to Food Safety*;
- Module 2, *Worker Health, Hygiene, and Training*;
- Module 3, *Soil Amendments*;
- Module 4, *Wildlife, Domesticated Animals, and Land Use*;
- Module 5.1 and 5.2, *Agricultural Water*;
- Module 6, *Postharvest Handling and Sanitation*; and
- Module 7, *How to Write a Food Safety Plan*.

Attendees of any PSA-authorized in-person grower trainings must be present for each module to receive a certificate of course completion from AFDO. This certificate is not required under the Produce Safety Rule but provides a formal record of attending a food safety training recognized by FDA for this purpose. During COVID-19, PSA has authorized the use of remote (virtual) grower trainings to support social distancing, effective as of this report until December 31, 2020.<sup>xix</sup> PSA recently established a self-paced online grower training that is expected to take approximately 15-30 hours of time.<sup>xx</sup>

Attending a grower training, however, does not qualify someone to teach or train others using PSA’s curriculum. PSA requires each training be instructed by at least one Lead Trainer, with the option of an additional Trainers as instructors, so long as they have completed a PSA Train-the-Trainer (TTT) course. Prior to attending a TTT, PSA expects prospective Trainers to carry a basic competency in four subject areas:

1. Produce Safety Scientific Knowledge and Experience
2. Fruit and Vegetable Production
3. Effective Training Delivery
4. Knowledge of the FSMA Produce Safety Rule

Only after someone has taken the TTT course can that person submit a Supplemental Lead Trainer application and evaluation. PSA traditionally requires attendees for any training pay a fee for the cost of materials and the training certificate or, in the case of a Lead Trainer applicant, the review panel’s time.

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<sup>6</sup> 21 CFR 122.22(c)

## Delivery of Produce Safety Alliance Grower Trainings

As previously mentioned, four (4) members of IFAI's team have completed a PSA TTT course and are trainers for PSA curriculum; two (2) of IFAI's staff have additionally achieved Lead Trainer status. This team, in collaboration with extension and Tribal partners, continues to host in-person and remote grower trainings as authorized by PSA. To accommodate as many Native growers as possible, IFAI utilized its cooperative agreement funding to cover applicant training costs and associated fees.

Coordinating PSA trainings in Indian Country can vary greatly from site-to-site and region-to-region. Below is a brief synopsis of the steps IFAI takes to engage stakeholders and set-up PSA trainings. Through IFAI's extensive network and relationships, staff receive invitation to speak and participate at events throughout Indian Country. At these events, IFAI staff discuss their work, including IFAI's contribution as the Native American Tribal Center for Food Safety Outreach, Education, Training and Technical Assistance. Networking and engaging attendees identifies local points of contact in Indian Country who may be interested in attending a grower training. Having and strengthening these connections is critical for the success of IFAI hosted grower trainings, with these relationships adding credibility and trust during this training. These relationships are critical to the success of trainings; the right contact in a community can ensure growers are contacted, sign up, and attend the trainings as well as implement food safety practices.

Once IFAI identifies the appropriate contact person within a community to help organize a training, which may take several phone calls, emails, and research, staff work with that person to determine the number/types of producers in the community who need/want training, the audience, the best dates and times for trainings based on producer availability, and determine the best location to hold the training. Training locations can vary greatly, with most located in remote areas in Indian Country, intending to maximize convenience for participating growers.

Staff work with the local contacts to determine an appropriate meeting place that is accessible to Native growers, offers enough space for seating, supports audio/visual needs for projecting training slides, and is conveniently located near hotel(s). Sometimes hosting a training in a bigger city nearby a Tribe works best, but that option does not work everywhere.

Next, the identified Lead Trainer for that training submits a form to AFDO at least two weeks in advance. On the forms, Lead Trainers can select the option of posting training registration publicly on the PSA website.

IFAI primarily selects to not post them on PSA's website. The cooperative agreement financing these activities specifically target Native and Tribal producers in the domestic United States. Controlling for attendance allows IFAI to adhere to these cooperative agreement authorities and target Native growers and their partners more directly. Additionally, many of IFAI's grower trainings are site-specific, with a select group of growers identified in advance. By posting registration at [www.nativefoodsafety.org](http://www.nativefoodsafety.org), IFAI staff can better monitor and drive traffic to the Native producer specific resources on our website and allow for trainings to be Tribal producer focused.



After determining these logistics, IFAI partners with the local contact to develop outreach tools for each training such as advertisements, email blasts to regional contacts, fliers, calls, etc. to encourage participation. While a training's audience may be identified through previous discussion, this additional outreach allows for more growers to sign-up in advance of the training, promoting awareness of those households that may otherwise have limited internet access. Logistics, outreach, and pre-training follow-up may occur up to the training day.

One of the most important pieces to this process is IFAI's reputation, expertise, and experience working with tribes, tribal organizations, and tribal producers throughout the country. This recognition helps establish the importance of this training and allows for more meaningful conversations regarding FSMA's impacts to Native producers to occur throughout the training.

Upon completion of the training, the Lead Trainer and IFAI staff compile a sign-in sheet with the attendees contact information and submit this form to AFDO. In order for each participant who completes the training to receive a certificate, attendees must then submit a post evaluation form emailed to them by the (Lead) Trainer. IFAI and PSA take these evaluations seriously and reviews this feedback to provide future trainings in a way that matters to growers.

Commenters indicated the need to understand why FSMA matters for Indian Country given the history of food safety expertise managed by Native producers, including the need to effectively network with Tribal partners on training curriculum. In light of these comments, IFAI staff in trainings regularly speak to this history and the need to recognize new the diversity of food safety risk factors at play in today's environment. The underlying microbiology may sound complicated, but best practices promoting food safety practices can be tailored to farms across Indian Country.

Since 2016, IFAI directly held or partnered in hosting 33 food safety grower trainings with 436 growers and partners recognized by the Association of Food and Drug Officials. While it is important to train growers, it is equally important to have trainers that understand the cultural and legal nuances associated with growing in Indian Country. In addition to grower trainings, 71 individuals with an expertise and awareness in working in Tribal communities became PSA trainers over three (3) TTT courses. These trainers will continue to enlist Native fruit and vegetable growers in future food safety trainings, broadening awareness of Produce Safety Rule requirements nationwide. A breakdown of these trainings is available in the appendix.

## **Modifying Grower Training Curriculum**

The PSA took great care to design a curriculum for growers blending an understanding of PSR compliance requirements, recommendations for good agricultural practices, and co-management strategies balancing environmental and grower considerations. How components of this training apply to food producers will vary based on what their operation grows, the size of their operation, their irrigated water source and application method, and many other factors, and PSA modules speak to each of these factors in detail. Growers in Indian Country face additional considerations.

### **Rationale for Modifying Curriculum**

Following year one of the cooperative agreement, IFAI, with feedback from its Steering Committee and information received in evaluations from prior TTT and PSA trainings, prioritized the development of a modified curriculum as an alternative to the Produce Safety Alliance training materials. Modified curriculum principles would reinforce the following realities seen across Indian Country:

Agricultural production in Indian Country predates colonization, with Tribes operating complex trade routes for foods, textiles, medicines, and related products for thousands of years on this continent. Native growers and their communities managed complex food production practices in all manner of climates and environments, growing these foods in a way that respected the health of their communities and their environments. Trainings conducted to Native audiences should first respect the culture and identity of the nations represented and the extensive history of work in food safety. For example, while wildlife intrusion into fresh fruit and vegetable growing operations represents an important food safety consideration for a grower, certain animals may be culturally significant in some cultures, and the methods of addressing animal intrusion prevention will need to incorporate additional, culturally relevant steps as part of Indigenous food safety and food systems management. These are the kinds of considerations IFAI worked to include in the Modified Curriculum.

Based on the feedback from the evaluations, it was apparent that trainings for Native producers should recognize culture and tradition, the curriculum must also encompass the unique legal conditions relevant to Tribal nations, and specify that it could be different and vary depending on a number of factors. This feedback guided our development of the modified curriculum, and we include discussions of it throughout. The PSR carries the weight of general applicability under law, with Tribal nations able to apply for variance. Outside this variance, Tribes may still carry their own laws and regulations on agricultural production, environmental interactions, and process controls along their food systems.

PSA curriculum consistently refers to adult learning concepts as a way of ensuring that attendees consider PSR requirements long after they attend a session. Indigenous people commonly look at the world in a holistic manner, understanding events not as singular instances but as a part of a larger story. By reframing activities in how they relate to one another, trainings in Indian Country can better meet this intent.

## Curriculum Working Group

Following those initial Steering Committee meetings, as IFAI reoriented its deliverables to focus on developing a curriculum to that offered by the Produce Safety Alliance. The Steering Committee similarly shifted its focus to represent a Curriculum Working Group (CWG).

The CWG allowed for continuing input from Tribal experts in farming and agricultural food systems throughout this process. Developing this curriculum aligned with the following process, where IFAI:

- Drafted a modification to a PSA module with input from the Advisory Curriculum Working Group;
- Submitted the modification to FDA for review, with FDA providing feedback through edits, comments, and questions;
- Addressed each line of inquiry with feedback from the CWG; and
- Submitted a final draft to FDA for approval as an equivalent, food safety curriculum.

FDA established a rubric of learning objectives for alternate curriculum to be recognized. Training curriculum slides must fulfill this list of objectives, with ongoing dialogue between IFAI and FDA on this approach. The contributions, knowledge, and expertise of CWG members cannot be understated to supporting a curriculum that respects and recognizes the diversity of Native agricultural production and Tribal communities. Each of the below persons shared invaluable expertise with the CWG.

### **CWG Members Included:**

- **Loren Birdrattler** (*Blackfeet Nation*), Blackfeet Agricultural Resource Management Plan (ARMP)
- **Gleyn Bledsoe**, University of Wyoming
- **Steven Bond** (*Chickasaw and Choctaw Nations*), Intertribal Agriculture Council
- **Meg Forcia** (*Bad River Band of Ojibwe*), University of Minnesota
- **Lucas Humblet** (*Oneida Nation*)
- **Rodney Holcomb**, Oklahoma State University
- **Valerisa Joe**, University of Arizona
- **Buck Jones** (*Cayuse*), Columbia River Inter-Tribal Fish Commission
- **Barbara Ann Rasco**, University of Wyoming
- **Electa Hare-RedCorn** (*Pawnee Nation*), Intertribal Agriculture Council
- **A'dae Briones-Romero** (*Cochiti/Kiowa*), First Nations Development Institute
- **Will Seeley**, Blackfeet ARMP
- **Susan Sekaquaptewa** (*Hopi*), University of Arizona
- **Kendra Teague**, American Indian College Fund
- **Trent Teegerstrom**, University of Arizona

## **Delivering Training and Resources for Other FSMA Rules**

Native agriculture embodies growing, processing, and distribution of foods. Tribal communities face challenges and barriers along the food supply-chain, particularly those communities in remote, rural areas. Many Tribes have been exploring and enacting governance structures, e.g. Tribal Departments of Agriculture, and new enterprises to better serve their citizens and surrounding communities. For example, in 2017, the Quapaw Nation of Oklahoma became the first Tribe to open a USDA-inspected meat processing facility and graciously opens its doors for other Tribes interested in strategizing how to establish their own plant.<sup>xxi</sup>

In identifying this expanding interest, two other rules established by FDA following the Food Safety Modernization Act come into play: The Preventive Controls for Human Foods rule (PCHF) and the Preventive Controls for Animal Foods rule. Established in a grant by FDA to the Illinois Institute of Technology for Food Safety and Health, the Food Safety Preventive Controls Alliance (FSPCA) manages the training curriculum corresponding with both rules.<sup>xxii</sup>

IFAI staff collaborated with FSPCA trainers to host three (3) FSPCA Preventive Controls for Human Food courses, with 35 attendees receiving certificates and meeting training requirements in the PCHF rule. These trainings blend an awareness of practices commonly recognized as Hazard Analysis Critical Control Points with an understanding of steps necessary to meet compliance in PCHF provisions. Three of IFAI staff directly participated in these training events to increase staff awareness of food safety principles and rule requirements.

To make these trainings possible, IFAI partnered with Tribal communities interested in receiving more information on the PCHF rule to secure a training location and schedule training dates with FSPCA trainers. Similarly, with the delivery of Produce Safety Rule trainings, IFAI supported outreach and communication to encourage interested participants to register, with all registration fees covered by this cooperative agreement.

Due to the complexity of sprout production and food safety liability associated with growing sprouts, producers must still be compliant with the Produce Safety Rule; however, the Sprout Safety Alliance (SSA) manages this training curriculum. SSA is also a partnership established between the Illinois Institute of Technology for Food Safety and Health and FDA.<sup>xxiii</sup>

## Lessons Learned and Best Practices

While IFAI hopes to continue serving Indian Country as an educational and training resource on food safety needs for many years to come, IFAI can also offer future partners and educators in this space the benefit of lessons learned and best practices for serving Tribal communities and growers in a culturally appropriate and relevant way. Those lessons and practices are as follows.

Begin this work with an acknowledgment of the thousands of years of Indigenous science that supported the management and cultivation of safe, robust food systems on this continent prior to colonization. Understand that the need for food safety training in Indigenous spaces today does not speak to a lack of food safety knowledge on the part of Indigenous people, but rather speaks to the long-lasting effects of colonization, including the permanent alteration of traditional food systems and foodways. As those food systems were altered in the process of colonization, and as Indigenous peoples were removed from the food systems they had maintained for thousands of years, new and different food safety risks production developed. Those changes are the reason this work is needed. External partners engaged in food safety work with Indigenous communities must start by first cultivating a respect for Indigenous science in order to be successful in developing the connections and partnerships necessary to deliver education and training.

Connections and partnerships are key to doing good work in Indian Country. As discussed above in the communications strategy section of this report, a significant number of AI/AN growers lack reliable internet access, making it difficult to reach everyone who needs training on the PSR with a purely digital strategy. IFAI's robust partnerships with national and regional intertribal organizations as well as the direct relationship IFAI staff have with Tribal growers, Tribal food business professionals, and Tribal leaders helped to fill the gap between the information and training IFAI offered on the PSR and the growers who needed to access that training. Connecting with partners in Tribal communities is the best way to make sure not only that growers know about trainings offered, but also that trainings are located in spaces that are geographically central for growers and scheduled at a time that facilitates attendance.

Locate the correct point of contact within Tribal governance structures for food and agriculture-related matters, and share information on trainings and educate with those individuals. This is a challenge: there are 574 Federally recognized Tribal governments and over 80 state-recognized Tribal governments, and although there may be some common themes, each of those Tribal nations is a distinct sovereign with its own individual governance structure. This may make it challenging to conduct outreach directly to the arm of the Tribal government responsible for agriculture, but it is important to try to make those points of contact if possible. Sending mailings about trainings only to Tribal government headquarters often results in significant delays in getting information directly to stakeholders—it is essentially the equivalent of sending a letter to the White House mail room and waiting for it to find its way to the Secretary of Agriculture. Although it does take some significant time and effort to locate the correct point of contact within each individual Tribal governance structure, laying that groundwork for communications up front will yield better results and connections long-term.

## Sustaining Operations: Post Award Management

In July 2020, FDA awarded IFAI with a new round of funding a cooperative agreement to support Native growers, manufacturers and Tribally owned food businesses with further FSMA education, training, and technical assistance. Under this new cooperative agreement, which will build on the foundational work completed through this initial agreement, IFAI will partner with technical assistance specialists and the FSMA Alliances across the country to establish an integrated network for training growers and manufacturers on the PSR and PCHF rule requirements. By late 2020, IFAI intends to begin training food growers using a newly accredited modified PSR curriculum, with a modification of PCHF curriculum recognized by FDA as equivalent in late 2021/early 2022.

IFAI looks forward to the opportunity to continue this service to Indian Country. Throughout these activities, staff stand ready to partner with Tribal nations, communities, and growers, supporting food and agriculture activities in a manner that respects Tribal sovereignty, recognizes the unique nature of Native enterprises, and complies with FSMA requirements. Food safety considerations speak to every other aspect of food and agriculture production and processing. Providing training and consultation in a way that respects Tribal sovereignty and maximizes access to Indian Country food systems ensures that those who must comply with FSMA know what steps they must take.

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<sup>i</sup> Sonny Perdue and Hamer, Hubert, *2017 Census of Agriculture: United States Summary and State Data*, Vol. 1 Pt. 51 (AC-17-A-51), U.S. Department of Agriculture (USDA) National Agricultural Statistics Service (NASS), Washington, D.C., April 2019.

<sup>ii</sup> Sonny Perdue and Hamer, Hubert, *2017 Census of Agriculture: American Indian Reservations*, Vol 2 Pt 5 (AC-17-S-5), USDA NASS, Washington, D.C., August 2019.

<sup>iii</sup> “Census of Agriculture: Frequently Asked Questions,” USDA NASS, December 2019.  
<https://www.nass.usda.gov/AgCensus/FAQ/2017/index.php>.

<sup>iv</sup> USDA, “2017 Race, Ethnicity and Gender Profiles,” NASS, August 2019,  
[https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/Race,\\_Ethnicity\\_and\\_Gender\\_Profiles/](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/Race,_Ethnicity_and_Gender_Profiles/)

<sup>v</sup> Tina Norris, Paul Vines, and Hoeffel, Elizabeth, *The American Indian and Alaska Native Population: 2010* (C2010BR-10), U.S. Census Bureau, January 2012.

<sup>vi</sup> *2017 Census of Agriculture: United States Summary and State Data*, Tables 53 and 61.

<sup>vii</sup> *2017 Census of Agriculture*, Table 61.

<sup>viii</sup> Ibid; Tom Vilsack and Clark, Cynthia, *2012 Census of Agriculture: United States Summary and State Data*, Vol 1 Pt. 51 (AC-12-A-51), May 2014, Table 61.

<sup>ix</sup> *2017 Census of Agriculture*, Table 61.

<sup>x</sup> “Census of Agriculture: 2017 Race, Ethnicity and Gender Profiles,” USDA NASS, October 2019, available at <https://www.nass.usda.gov/AgCensus/index.php>.

<sup>xi</sup> *FDA Fact Sheet: Produce Safety Rule (21 CFR 112) “Rarely Consumed Raw” Produce*, U.S. Food and Drug Administration, n.d., <https://www.fda.gov/media/107445/download>.

<sup>xii</sup> “FSMA Compliance Dates,” U.S. Food and Drug Administration, n.d., [https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-compliance-dates#Produce\\_Safety](https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-compliance-dates#Produce_Safety).

<sup>xiii</sup> “Produce Safety Network,” U.S. Food and Drug Administration, March 2020, <https://www.fda.gov/food/food-safety-modernization-act-fsma/produce-safety-network>.

<sup>xiv</sup> “FSMA Technical Assistance Network,” U.S. Food and Drug Administration, October 2019,  
<https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-technical-assistance-network-tan>.

<sup>xv</sup> “FDA Announces Grant Award to Establish Regional Centers for Food Safety Training, Outreach, and Technical Assistance,” U.S. Food and Drug Administration, February 2016, <https://www.fda.gov/food/cfsan-constituent-updates/fda-announces-grant-award-establish-regional-centers-food-safety-training-outreach-and-technical>.

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<sup>xvi</sup> 2017 *Census of Agriculture*, Table 61.

<sup>xvii</sup> “Census of Agriculture: 2017 Race, Ethnicity and Gender Profiles,” USDA NASS, October 2019, available at <https://www.nass.usda.gov/AgCensus/index.php>.

<sup>xviii</sup> *Report on Broadband Deployment in Indian Country, Pursuant to the Repack Airwaves Yielding Better Access for Users of Modern Services Act of 2018*, U.S. Federal Communications Commission, May 2019.

<sup>xix</sup> Produce Safety Alliance, “Temporary PSA Grower Training Course Policy Update,” Cornell University, July 2020, <https://producesafetyalliance.cornell.edu/training/covid-19-outbreak-temporary-policy/>.

<sup>xx</sup> Produce Safety Alliance, “Grower Training Courses,” Cornell University, n.d., <https://producesafetyalliance.cornell.edu/training/grower-training-courses/>.

<sup>xxi</sup> *Quapaw Tribe to Open \$5 million meat processing plant*, Associated Press, September 2017, [https://apnews.com/3455dddabafa4707bc3cd7864634ddf5/Quapaw-Tribe-to-open-\\$5-million-meat-processing-plant](https://apnews.com/3455dddabafa4707bc3cd7864634ddf5/Quapaw-Tribe-to-open-$5-million-meat-processing-plant).

<sup>xxii</sup> Food Safety Preventive Controls Alliance, “The Alliance,” Illinois Institute of Technology Institute for Food Safety and Health, n.d., <https://www.ifsh.iit.edu/fspca/alliance>.

<sup>xxiii</sup> Sprout Safety Alliance, “About SSA,” Illinois Institute of Technology Institute for Food Safety and Health, n.d., <https://www.ifsh.iit.edu/ssa/about>.

# Appendices



# Farm to Data-Table Infographic



## INDIAN COUNTRY DATA FARM-TO-TABLE

### 2017 Census of Agriculture Update

American Indian/Alaska Native (AI/AN) farms make up 3% of all farms in the United States.



Market value of agricultural products sold by AI/AN producers increased 9.12% from \$3.24 billion in 2012 to \$3.5 billion in 2017.

#### Market Value of Agricultural Products Sold by AI/AN Producers

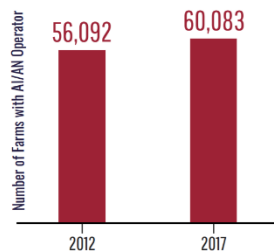


Market value of livestock, poultry, and related products increased 15% from 2012 to 2017.



Market value of crops, including greenhouses and nurseries, increased 1.8% from 2012 to 2017.

#### Number of Farms Counted with an AI/AN Producer



**7% increase**

in number of farms counted with an AI/AN producer from 2012 to 2017



**↑ 24%**



Fruit and tree nut farming increased 24% from 1853 farms counted in 2012 to 2302 farms counted in 2017.

**↑ 20.2%**



Beef cattle ranching and farming increased by 20.02% from 20617 ranches counted in 2012 to 24744 ranches counted in 2017.

**↑ 34.03%**



Sheep and goat farming increased by 34.03% from 6817 operations counted in 2012 to 9137 counted in 2017.

**↑ 20%**

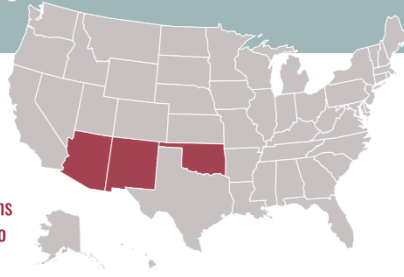


Greenhouse, nursery, and floriculture farming increased by 20% from 650 counted in 2012 to 779 counted in 2017.

58% of AI/AN producers are operating in 3 states

**Arizona**  
**New Mexico**  
**Oklahoma**

There was a 3% increase in land in farms counted from 57 million acres in 2012 to 58.7 million acres in 2017.



Sources: USDA, National Agricultural Statistics Service: 2017 Census of Agriculture, Tables 61. (Selected Farm Characteristics by Race: 2017) and 63. (Selected Producer Characteristics by Race: 2017); USDA, National Agricultural Statistics Service: 2012 Census of Agriculture, Tables 61. (Selected Farm Characteristics by Race: 2012) and 63. (Selected Operator Characteristics by Race: 2012).



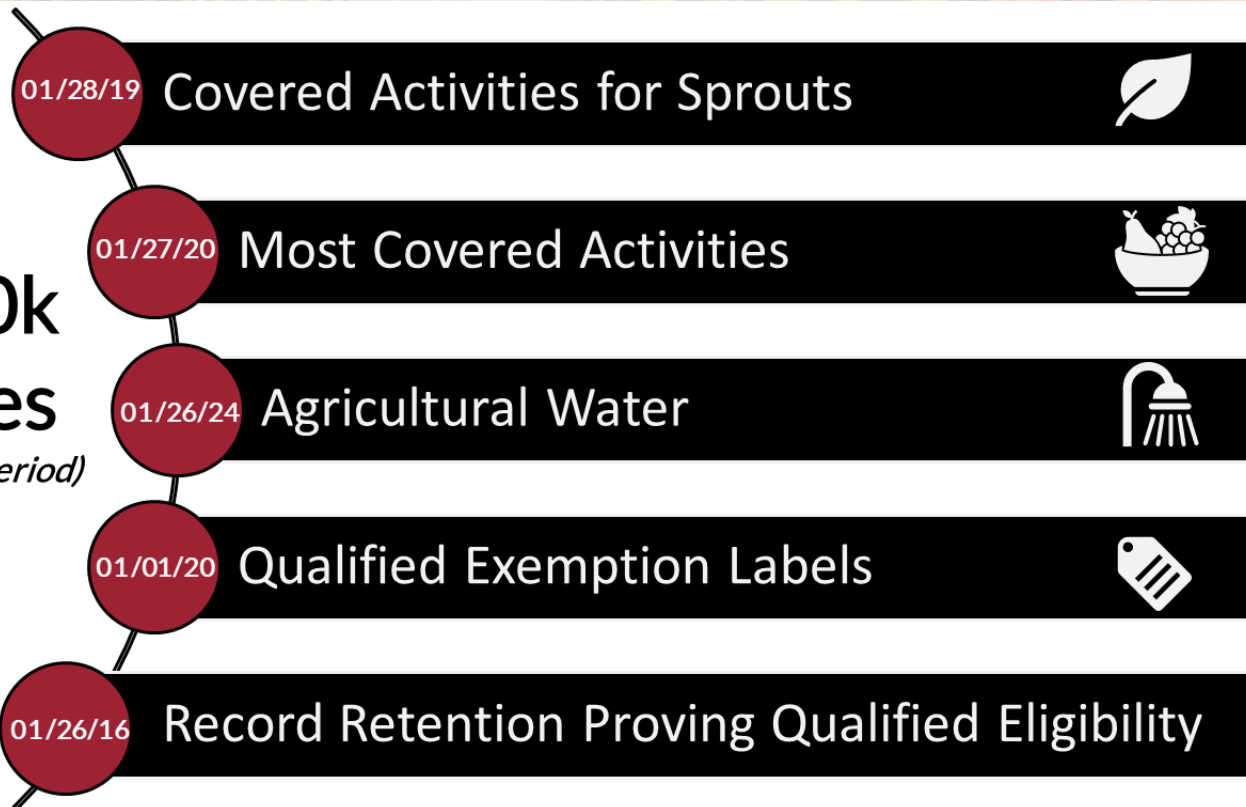
For more information, please contact: Colby D. Duren, *Director*, at [cduren@uark.edu](mailto:cduren@uark.edu) or Erin Parker, *Research Director and Staff Attorney*, at [eshirl@uark.edu](mailto:eshirl@uark.edu).

[www.IndigenousFoodAndAg.com](http://www.IndigenousFoodAndAg.com)

# VERY SMALL BUSINESSES FSMA PSR Compliance Dates



**Less than \$250k  
in Produce Sales**  
*(Averaged Over Previous 3-Year Period)*



Notes:

- Requirements for covered activities related to sprouts are covered under Produce Safety Rule Subpart M
- Requirement deadlines for most covered activities relate to those conducted on to non-sprout covered produce.
- Requirement deadlines for agricultural water relate to agricultural water for non-sprout covered produce.

# SMALL BUSINESSES FSMA PSR Compliance Dates



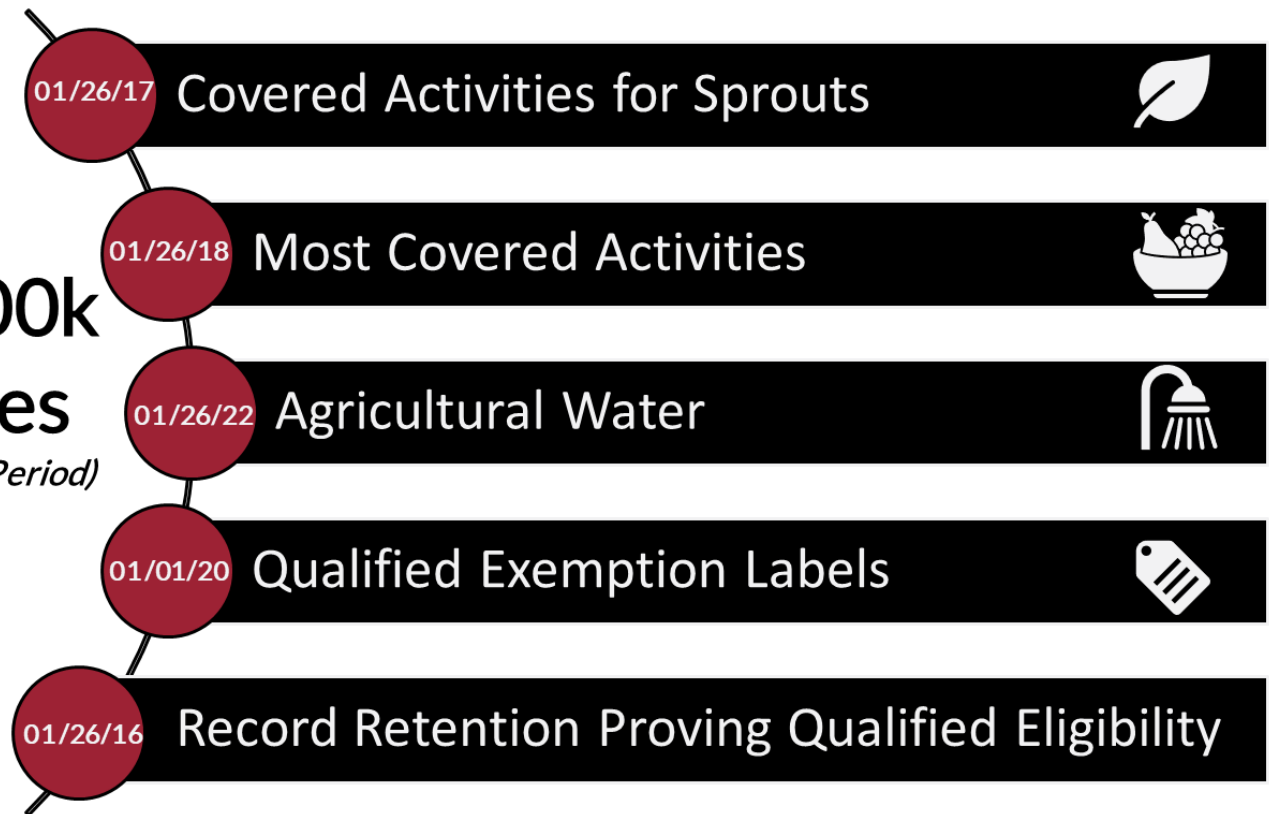
## Notes:

- Requirements for covered activities related to sprouts are covered under Produce Safety Rule Subpart M
- Requirement deadlines for most covered activities relate to those conducted on to non-sprout covered produce.
- Requirement deadlines for agricultural water relate to agricultural water for non-sprout covered produce.

# ALL OTHER BUSINESSES FSMA PSR Compliance Dates



More Than \$500k  
in Produce Sales  
*(Averaged Over Previous 3-Year Period)*



## Notes:

- Requirements for covered activities related to sprouts are covered under Produce Safety Rule Subpart M
- Requirement deadlines for most covered activities relate to those conducted on to non-sprout covered produce.
- Requirement deadlines for agricultural water relate to agricultural water for non-sprout covered produce.

## Growers Trained by Size

|                    | Growers trained by IFAI to date |
|--------------------|---------------------------------|
| Large              |                                 |
| Small              |                                 |
| Very Small         | 7                               |
| <\$25k Not covered | 114                             |
| Qualified Exempt   |                                 |

\*In many cases, trainees have not specifically identified their farm size relating to Produce Safety Rule categories. IFAI continues to cross-reference trainee Native affiliations and states of residence to Census of Agriculture findings.

## Table for IFAI on PSA Grower Training

|   |     |
|---|-----|
| <b># by Native Affiliations Reported</b>                  | 96  |
| <b># of Individuals with Native Affiliations Trained*</b> | 418 |
| <b># PSA Trainings (Total)</b>                            | 35  |
| <b># PSA Trainees (Total)</b>                             | 496 |

\*Native Affiliations are self-reported and may include individuals working with a Native community that may not otherwise identify as American Indian, Alaska Native, or in few cases Native Hawaiian.

| Tribe / Native Affiliation Name   | Total Trained |
|---|---------------|
| Alabama-Coushatta Tribe of Texas  | 1             |
| American Samoa  | 1             |
| Apache Tribe of Oklahoma  | 2             |
| Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation, Wisconsin | 1             |
| Bay Mills Indian Community, Michigan  | 8             |
| Blackfeet Tribe of the Blackfeet Indian Reservation of Montana  | 9             |
| Burns Paiute Tribe  | 1             |
| Cherokee Nation   | 16            |
| Cheyenne and Arapaho Tribes, Oklahoma   | 2             |
| Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota                            | 13            |
| Chickasaw Nation  | 45            |
| Chippewa Cree Indians of the Rocky Boy's Reservation, Montana   | 3             |
| Choctaw Ebarb Tribe of Louisiana  | 1             |
| Choctaw Nation of Oklahoma  | 2             |
| Coeur D'Alene Tribe   | 3             |
| Comanche Nation, Oklahoma   | 1             |
| Confederated Salish and Kootenai Tribes of the Flathead Reservation                                   | 4             |
| Confederated Tribes and Bands of the Yakama Nation  | 3             |
| Confederated Tribes of the Colville Reservation   | 4             |
| Confederated Tribes of the Umatilla Indian Reservation  | 2             |
| Confederated Tribes of the Warm Springs Reservation of Oregon   | 6             |
| Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota                                    | 2             |
| Crow Tribe of Montana   | 4             |
| Eastern Shawnee Tribe of Oklahoma   | 1             |
| Fort Belknap Indian Community of the Fort Belknap Reservation of Montana                              | 9             |
| Hannahville Indian Community, Michigan  | 1             |
| Ho-Chunk Nation of Wisconsin  | 2             |
| Hoop Valley Tribe, California   | 17            |
| Hopi Tribe of Arizona   | 8             |
| Houlton Band of Maliseet Indians  | 1             |
| Hualapai Indian Tribe of the Hualapai Indian Reservation, Arizona                                     | 1             |

|  |    |
|--|----|
| Iowa Tribe of Kansas and Nebraska  | 1  |
| Kashia Band of Pomo Indians of the Stewarts Point Rancheria, California      | 1  |
| Kiowa Indian Tribe of Oklahoma   | 1  |
| Little River Band of Ottawa Indians, Michigan                                | 2  |
| Little Traverse Bay Bands of Odawa Indians, Michigan                         | 7  |
| Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota         | 1  |
| Lummi Tribe of the Lummi Reservation   | 2  |
| Menominee Indian Tribe of Wisconsin  | 1  |
| Minnesota Chippewa Tribe - Bois Forte Band (Nett Lake)                       | 1  |
| Minnesota Chippewa Tribe - Fond du Lac Band                                  | 1  |
| Minnesota Chippewa Tribe - Grand Portage Band                                | 1  |
| Muscogee (Creek) Nation  | 4  |
| Native Hawaiian  | 6  |
| Navajo Nation, Arizona, New Mexico & Utah                                    | 71 |
| Nez Perce Tribe  | 8  |
| Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana | 2  |
| Oglala Sioux Tribe   | 5  |
| Omaha Tribe of Nebraska  | 1  |
| Oneida Nation  | 2  |
| Osage Nation   | 4  |
| Pawnee Nation of Oklahoma  | 4  |
| Penobscot Nation   | 1  |
| Prairie Band Potawatomi Nation   | 2  |
| Prairie Island Indian Community in the State of Minnesota                    | 3  |
| Pueblo of Cochiti, New Mexico  | 1  |
| Pueblo of Isleta, New Mexico   | 2  |
| Pueblo of Jemez, New Mexico  | 6  |
| Pueblo of Laguna, New Mexico   | 3  |
| Pueblo of Pojoaque, New Mexico   | 2  |
| Pueblo of San Ildefonso, New Mexico  | 1  |
| Pueblo of Santo Domingo  | 1  |
| Pueblo of Taos, New Mexico   | 2  |
| Pueblo of Tesuque, New Mexico  | 2  |
| Quapaw Nation  | 2  |
| Red Lake Band of Chippewa Indians, Minnesota                                 | 11 |
| Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota          | 5  |
| Saginaw Chippewa Indian Tribe of Michigan                                    | 1  |
| San Carlos Apache Tribe of the San Carlos Reservation, Arizona               | 1  |
| Seminole Nation of Oklahoma  | 1  |
| Seneca Nation of Indians   | 5  |
| Sherwood Valley Rancheria of Pomo Indians of California                      | 1  |
| Shinnecock Indian Nation   | 1  |
| Shoalwater Bay Indian Tribe of the Shoalwater Bay Indian Reservation         | 1  |
| Shoshone-Bannock Tribes of the Fort Hall Reservation                         | 1  |



|  |   |
|--|---|
| Shoshone-Paiute Tribes of the Duck Valley Reservation, Nevada          | 8 |
| Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, South Dakota | 1 |
| Spirit Lake Tribe, North Dakota  | 4 |
| Spokane Tribe of the Spokane Reservation                               | 5 |
| St. Croix Chippewa Indians of Wisconsin                                | 2 |
| Standing Rock Sioux Tribe of North & South Dakota                      | 3 |
| Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota | 1 |
| Tohono O'odham Nation of Arizona                                       | 1 |
| Tule River Indian Tribe of the Tule River Reservation, California      | 2 |
| Turtle Mountain Band of Chippewa Indians of North Dakota               | 3 |
| Upper Sioux Community, Minnesota                                       | 1 |
| Ute Indian Tribe of the Uintah & Ouray Reservation, Utah               | 2 |
| Valdez Native Tribe  | 1 |
| White Mountain Apache Tribe of the Fort Apache Reservation, Arizona    | 8 |
| Wind River Indian Reservation  | 3 |
| Winnebago Tribe of Nebraska  | 1 |
| Yankton Sioux Tribe of South Dakota                                    | 1 |
| Yavapai Apache Nation of the Camp Verde Indian Reservation, Arizona    | 3 |
| Yavapai-Prescott Indian Tribe  | 2 |
| Yurok Tribe of the Yurok Reservation, California                       | 2 |
| Zuni Tribe of the Zuni Reservation, New Mexico                         | 8 |

### Training Log by Trainee BIA Region of Residence

| BIA Region       | PCHF        |           | PSR         |           | PSR.TTT     |           |
|------------------|-------------|-----------|-------------|-----------|-------------|-----------|
|                  | # Trainings | # Trained | # Trainings | # Trained | # Trainings | # Trained |
| Virtual          | 0           | 0         | 1           | 14        | 0           | 0         |
| Alaska           | 0           | 0         | 0           | 1         | 0           | 0         |
| Eastern          | 0           | 0         | 3           | 40        | 1           | 25        |
| Eastern Oklahoma | 1           | 11        | 6           | 108       | 0           | 0         |
| Great Plains     | 0           | 0         | 2           | 10        | 1           | 11        |
| Midwest          | 0           | 0         | 2           | 26        | 0           | 0         |
| Navajo           | 0           | 0         | 2           | 28        | 0           | 0         |
| Northwest        | 0           | 0         | 3           | 22        | 0           | 0         |
| Pacific          | 0           | 0         | 3           | 29        | 0           | 0         |
| Rocky Mountain   | 0           | 0         | 3           | 49        | 0           | 0         |
| Southern Plains  | 0           | 0         | 0           | 0         | 0           | 0         |
| Southwest        | 0           | 0         | 1           | 19        | 1           | 35        |
| Western          | 2           | 24        | 6           | 104       | 0           | 0         |

## Training Log by Trainee State of Residence

| State   | PCHF       |           | PSR         |           | PSR.TTT     |           |
|---------|------------|-----------|-------------|-----------|-------------|-----------|
|         | #Trainings | # Trained | # Trainings | # Trained | # Trainings | # Trained |
| Virtual | 0          | 0         | 1           | 14        | 0           | 0         |
| AK      | 0          | 0         | 0           | 1         | 0           | 0         |
| AL      | 0          | 0         | 0           | 1         | 0           | 0         |
| AR      | 0          | 0         | 0           | 0         | 0           | 0         |
| AZ      | 0          | 0         | 4           | 52        | 0           | 0         |
| CA      | 0          | 0         | 3           | 29        | 0           | 0         |
| CO      | 0          | 0         | 0           | 2         | 0           | 0         |
| CT      | 0          | 0         | 0           | 0         | 0           | 0         |
| DE      | 0          | 0         | 0           | 0         | 0           | 0         |
| FL      | 0          | 0         | 0           | 0         | 0           | 0         |
| GA      | 0          | 0         | 0           | 0         | 0           | 0         |
| HI      | 0          | 0         | 0           | 0         | 0           | 0         |
| IA      | 0          | 0         | 0           | 0         | 0           | 0         |
| ID      | 0          | 0         | 1           | 13        | 0           | 0         |
| IL      | 0          | 0         | 0           | 0         | 0           | 0         |
| IN      | 0          | 0         | 0           | 0         | 0           | 0         |
| KS      | 0          | 0         | 0           | 0         | 0           | 0         |
| KY      | 0          | 0         | 0           | 0         | 0           | 0         |
| LA      | 0          | 0         | 0           | 0         | 0           | 0         |
| MA      | 0          | 0         | 0           | 0         | 0           | 0         |
| MD      | 0          | 0         | 0           | 0         | 0           | 0         |
| ME      | 0          | 0         | 0           | 1         | 0           | 0         |
| MI      | 0          | 0         | 1           | 20        | 0           | 0         |
| MN      | 0          | 0         | 1           | 24        | 0           | 0         |
| MO      | 0          | 0         | 0           | 0         | 0           | 0         |
| MS      | 0          | 0         | 0           | 0         | 0           | 0         |
| MT      | 0          | 0         | 3           | 49        | 0           | 0         |
| NC      | 0          | 0         | 0           | 0         | 0           | 0         |
| ND      | 0          | 0         | 0           | 2         | 1           | 11        |
| NE      | 0          | 0         | 0           | 0         | 0           | 0         |
| NH      | 0          | 0         | 0           | 0         | 0           | 0         |
| NJ      | 0          | 0         | 0           | 0         | 0           | 0         |
| NM      | 0          | 0         | 2           | 30        | 1           | 35        |
| NV      | 2          | 24        | 3           | 67        | 0           | 0         |
| NY      | 0          | 0         | 2           | 18        | 0           | 0         |
| OH      | 0          | 0         | 0           | 0         | 0           | 0         |
| OK      | 1          | 11        | 6           | 108       | 1           | 25        |
| OR      | 0          | 0         | 1           | 7         | 0           | 0         |
| PA      | 0          | 0         | 0           | 0         | 0           | 0         |
| RI      | 0          | 0         | 0           | 0         | 0           | 0         |

|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| SC | 0 | 0 | 0 | 0 | 0 | 0 |
| SD | 0 | 0 | 2 | 8 | 0 | 0 |
| TN | 0 | 0 | 0 | 0 | 0 | 0 |
| TX | 0 | 0 | 0 | 0 | 0 | 0 |
| UT | 0 | 0 | 0 | 0 | 0 | 0 |
| VA | 0 | 0 | 0 | 0 | 0 | 0 |
| VT | 0 | 0 | 0 | 0 | 0 | 0 |
| WA | 0 | 0 | 1 | 2 | 0 | 0 |
| WI | 0 | 0 | 1 | 2 | 0 | 0 |
| WV | 0 | 0 | 0 | 0 | 0 | 0 |
| WY | 0 | 0 | 0 | 0 | 0 | 0 |

## Food Safety Webinars Hosted Under Cooperative Agreement

| Module       | Topic  | #Webinars | #Attendees | Attendance Rate<br>(Over Registrants) |
|--------------|--|-----------|------------|---------------------------------------|
| IFAI Est.    | Microbiology Basics  | 8         | 72         | 37.89%                                |
|              | Intersection of Business Planning, Risk Management, and Food |           |            |                                       |
| IFAI Est.    | Safety   | 3         | 42         | 46.15%                                |
| IFAI Est.    | So You Think You're Exempt?                                  | 2         | 42         | 42.42%                                |
| IFAI Est.    | Legal Issues in Tribal Food Safety                           | 4         | 79         | 33.91%                                |
| Module 1     | Introduction to Produce Safety                               | 8         | 98         | 46.89%                                |
| Module 2     | Worker Health, Hygiene, and Training                         | 4         | 21         | 26.58%                                |
| Module 3     | Soil Amendments  | 4         | 47         | 36.43%                                |
| Module 4     | Wildlife, Domesticated Animals, and Land Use                 | 4         | 34         | 33.01%                                |
| Module 5.1   | Agricultural Water Part I                                    | 3         | 43         | 37.07%                                |
| Module 5.2   | Agricultural Water Part II                                   | 3         | 27         | 27.55%                                |
| Module 6     | Post-Harvest Handling and Sanitation                         | 4         | 39         | 28.06%                                |
| PCAF         | Preventive Controls for Animal Food                          | 1         | 10         | 52.63%                                |
| <b>Total</b> |  | <b>48</b> | <b>554</b> |                                       |

\*Registered attendees received a recorded copy of each webinar whether or not they attended these sessions live.