U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL

VERSION 4.1

INTRODUCTION & OVERVIEW

U.S. Soy production is based on a national system of sustainability and conservation laws and regulations combined with careful implementation of best production practices by the nation's 270,851 soybean farms.[1] In addition, most U.S. Soy producers participate in certified and audited voluntary sustainability and conservation programs.

The U.S. Soy Sustainability Assurance Protocol (SSAP) is an aggregate approach audited by third parties that verifies sustainable soy production on a national scale. The U.S. approach is quantifiable and results-driven with international verification available.

The U.S. Soy Sustainability Assurance Protocol describes the regulations, processes and management practices that ensure sustainable soy production. This Sustainability Assurance Protocol is one part of the overall U.S. Soy producer sustainability program. These processes and practices of U.S. farmers contribute to the improvement of environmental, social and economic sustainability outcomes over time. These science-based outcomes for U.S. Soy production are included in Field to Market: The Alliance for Sustainable Agriculture National Indicators Report, which is updated every five years. The SSAP is organized into four Directives and 11 Impact Categories that align with 14 of the 17 U.N. Sustainable Development Goals. The SSAP Impact Categories also align with the eight environmental indicators that Field to Market reports as critical indicators of sustainable agriculture (Biodiversity, Energy Use, Greenhouse Gases, Irrigation Water Use, Land Use, Soil Carbon, Soil Conservation and Water Quality).[2]

THE U.S. SOY SUSTAINABILITY ASSURANCE PROTOCOL DIRECTIVES AND IMPACT CATEGORIES	U.N. SUSTAINABLE DEVELOPMENT GOALS
1. **Biodiversity and High Carbon Stock Production Control Measures and Regulations** 1.1 Land Use, Sensitive Habitats & Biodiversity	
2. Production Practices Control Measures and Regulations 2.1 Soil Health & Productivity 2.2 Crop Health & Agricultural Best Management Practices 2.3 Waste & Pollution 2.4 Greenhouse Gas Emissions, Fossil Fuel Use & Air Quality	
3. Public and Labor Health and Welfare Control Measures and Regulations 3.1 Water Quality & Quantity 3.2 Plant Protection & Nutrient Management 3.3 Working Conditions & Labor Relations 3.4 Worker & Public Safety 3.5 Community Relations	
4. Continuous Improvement of Production Practices and Environmental Protection Control Measures and Regulations 4.1 Continuous Improvement	

The United Nations 17 Sustainable Development Goals (SDGs),[3] adopted in 2015, are the heart of the 2030 Agenda for Sustainable Development and represent "a shared blueprint for peace and prosperity for people and the planet, now and into the future." The SDGs were developed as a call to action for all countries of the world as strategies to "improve health and education, reduce inequality and spur economic growth" while addressing climate change and preserving oceans and forests. These aspirational goals provide a framework for governments, businesses, Non-Governmental Organizations (NGOs), universities and financial institutions to collaborate and support priority areas for improvement. Producer actions associated with the SSAP support 14 of the SDGs, but especially SDG 2.4—Sustainable Food Production and Resilient Agricultural Practices. Appendix 1 shows that many of the SSAP Impact Category Compliance Criteria align with multiple targets in the SDGs.[4] Likewise, many of these criteria align with other international agricultural sustainability standards.

The U.S. Soy Sustainability Assurance Protocol (SSAP) is one way U.S. farmers can demonstrate their commitment to sustainability and continuous improvement.

The U.S. Soy Sustainability Assurance Protocol (SSAP) was positively benchmarked against the European Feed Manufacturers' Federation's (FEFAC) Soy Sourcing Guidelines 2023 through the independent International Trade Centre (ITC) customized benchmark tool at standardsmap.org/fefac.

Examination of publicly available data sources on the national scale indicates that between 1980 and 2015, U.S. farmers increased soy production by 120% while decreasing energy used for production per bushel by 35%.[136]

Soy is a part of a diverse crop rotation plan produced on 26% of U.S. cropland.[137]

In the U.S., 78 million hectares of land are protected national forests and grasslands.[138]

When including Inflation Reduction Act spending on conservation and climate-related activities, USDA is projected to spend in excess of $79 billion during fiscal years 2025 to 2034—making conservation- and climate-related financial and technical assistance larger than that of commodity support programs.[139]

AUDIT PROCEDURES

1. Over 99%[5] of U.S. soybean acreage participates in the U.S. Farm Program and is subject to audit. For the last eight years, an average of 21,609[6] Compliance Status Reviews occurred annually.
2. An annual internal audit is conducted by producers and filed with the U.S. Department of Agriculture.
3. Third-party independent audits of producers are performed to ensure the accuracy of internal audits made by producers. Third-party audits are conducted annually by the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) which has technical staff in over 2,500 offices across the Nation.

NONCOMPLIANCE CONSEQUENCES

Soybean production is limited by federal law, and noncompliance leads to federal fines and lawsuits. Noncompliance with the USDA conservation compliance provisions means enrolled producers are ineligible to receive benefits for most programs administered by the USDA, and penalties ranging from temporary exemptions with time to correct the violation to a determination that the producer is ineligible for any USDA farm payment and must pay back current and prior years' benefits.

INTERNATIONAL CERTIFICATION

Soybean Export Sustainability, LLC, provides shipment-specific recordkeeping and documentation information to ensure proper accounting of SSAP-compliant soy, up to the point of export. The SSAP verifies the sustainable production of all soy grown in the U.S., as well as U.S. Soy products for export, including GMO, non-GMO and organic.

U.S. SOYBEAN PRODUCER SUSTAINABILITY PERFORMANCE INDICATORS

The following reports document producer performance for:

- **Environmental and Socioeconomic Indicators for Measuring Outcomes of On-Farm Agricultural Production in the United States.**

View the Report ***https://bit.ly/35M98Rg***

- **U.S. Soy: A Better Environmental Footprint**

View the Report ***https://solutions.ussec.org/wp-content/uploads/2023/06/USSOY_Sustainability-Brochure-General.pdf***

DIRECTIVE 1

BIODIVERSITY & HIGH CARBON STOCK PRODUCTION CONTROL MEASURES & REGULATIONS

The United Nations Sustainable Development Goals

1.1 LAND USE, SENSITIVE HABITATS & BIODIVERSITY

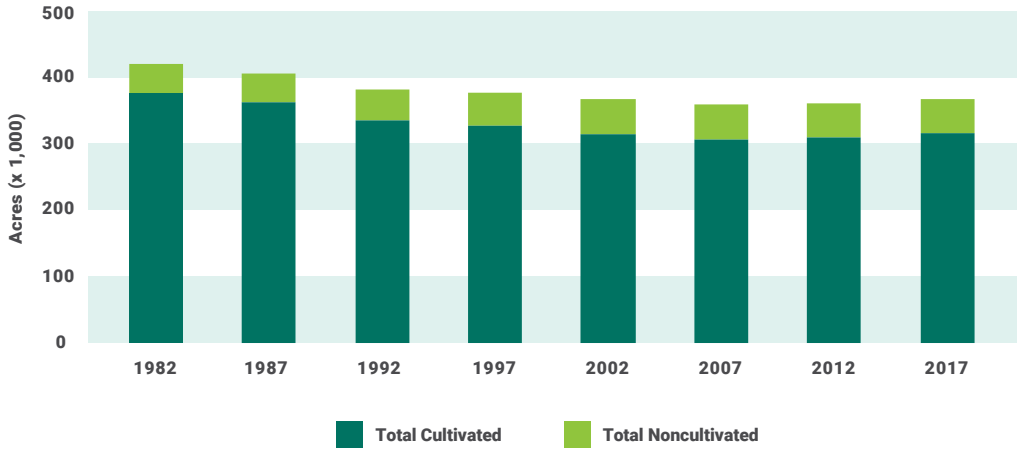
BENCHMARK AND ASPIRATIONAL GOALS

In the top 10 soybean-producing states (Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio and South Dakota), the amount of forest and land increased between 1980 and 2017 by 1.23 million hectares.[140]

Land use efficiency and crop yield are interdependent. Maintaining higher crop yields can minimize the need to expand agricultural lands. When agricultural land expansion does occur, sensitive habitats should be avoided, and biodiversity should be maintained. The Field to Market Land Use aspirational goals are conserving native habitat and continued improvement of land use efficiency by increasing productivity.[7] The Compliance Criteria for the **Land Use, Sensitive Habitats & Biodiversity Impact Category** aligns with the aspirational goal of habitat conservation.

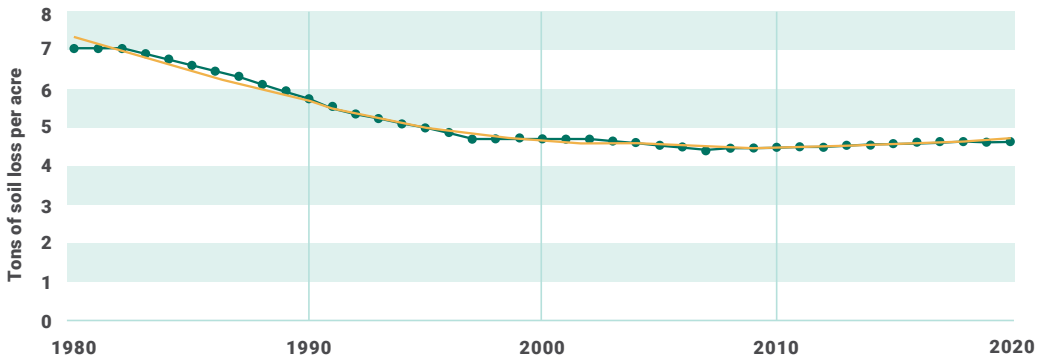
Annual soil erosion was reduced from 7.4 tons per acre per year in 1980 to 4.8 tons per acre per year in 2020.

CULTIVATED AND NONCULTIVATED CROPLAND



Source: https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/nri/results/

ANNUAL SOIL EROSION PER BUSHEL OF SOYBEANS



Source: Field to Market, 2021 National Indicators Report.

IMPACT CATEGORY COMPLIANCE CRITERIA

1.1 U.S. soybean farmers respect and obey federal, state and local laws in the area of land use, sensitive habitats and biodiversity, as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services, and national and state soybean checkoffs and associations.

Between 1982 and 2017, the amount of cropland in the U.S. decreased by over 21.3 million hectares.[125]

Soybean production was limited after January 1, 2008, in the following areas:

1.1.1 Producers adopt conservation practices like crop rotation, cover crops, no-till, early successional habitat development, field borders, riparian herbaceous cover, restoration of rare or declining communities, stream habitat improvement, structures for wildlife, upland wildlife habitat management, wetland creation, wetland enhancement, wetland restoration, wildlife habitat planting and vegetated buffer strips to improve wildlife habitat.

1.1.1.1 Producers ensure their land is suitable for current and planned farming activities in accordance with existing federal and state laws and regulations. Producers participating in FSA programs comply with land use reporting requirements. Producers have access to and use NRCS's Web Soil Survey in order to understand the inherent characteristics of the native soil types at a specific location and improve land use and management decisions.

1.1.2 On-farm biodiversity is maintained and protected through the preservation of native vegetation where possible. Producers are encouraged to participate in conservation programs that provide an incentive for the preservation of native vegetation. Producers follow state regulations regarding prohibited noxious weeds, including eradicating them where required. Producers avoid introducing or cultivating known invasive species.

1.1.2.1 Soybean growers comply with the U.S. Endangered Species Act[8] to protect listed animal and plant species from extinction by preserving the ecosystems in which they survive. State-enforced regulations protect privately owned property from unauthorized hunting, fishing and trespassing.

1.1.2.2 Producers comply with the Federal Migratory Bird Treaty for the protection of shared migratory bird resources.

1.1.2.3 Producers comply with U.S. laws that prohibit altering the habitat of endangered or threatened species in a way that disrupts essential behavioral patterns, including but not limited to breeding, feeding and sheltering. Producers comply with the Convention on the International Trade in Endangered Species of Wild Fauna & Flora.

Soil erosion rates on all U.S. cropland decreased 35% between 1982 and 2017.[125]

1.1.2.4 A Habitat Conservation Plan (HCPs)[9] is required as part of an application for private entities undertaking projects that might result in the destruction of an endangered or threatened species. HCPs describe measures designed to ensure that species will be conserved and that any actions contribute to their recovery. HCPs may not jeopardize any listed species, including plants, and the U.S. Fish and Wildlife Service recommends including conservation measures for listed plant species in developing an HCP.

1.1.2.5 Soybeans are not produced on highly biodiverse grassland.

1.1.2.5.1 The USDA Conservation Reserve Program[10] (CRP) Grasslands provides rental payments and cost-share assistance to enrolled producers to maintain and protect grassland, including rangeland and pastureland, with an emphasis on plant and animal biodiversity.

1.1.2.6 Soybeans are not produced on wetlands or on peatland or in areas that would impact Ramsar wetlands.

1.1.2.6.1 Producers are in compliance with U.S. Wetlands Conservation provisions, which prohibit the conversion of wetlands or peatlands for the production of an agricultural commodity after December 23, 1985, or conversion activities that would make possible the production of an agricultural commodity on wetlands or peatlands after November 28, 1990.[11]

1.1.2.6.1.1 Wetland is defined as an area that has a predominance of hydric soils; and is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of water-tolerant vegetation typically adapted for life in saturated soil conditions.

1.1.2.6.1.2 USDA NRCS will make and keep a record of wetland determinations, which remain in effect as long as the land is used for agricultural purposes. Producers may obtain aerial imagery of their farms and a printout of their farm and tract records from the local USDA office administering their farm.

1.1.2.6.1.3 Producers planning to make changes that could impact wetlands must notify USDA for appropriate technical determination.[12]

1.1.2.6.1.4 Producers must file Form AD-1026[13] with the USDA Farm Service Agency certifying adherence to Highly Erodible Lands Conservation and Wetland Conservation provisions and Form FSA-578[14] Report of Acreage to meet eligibility conditions to receive any USDA loans or other program benefits. The submission of these forms gives USDA authorization to enter and inspect all farms in which the producer has an interest.

1.1.2.6.2 Producers will maintain compliance with wetland conservation regulations by not draining or converting wetlands.

1.1.2.6.3 Producers follow applicable state laws that prohibit changing peatland without a regulated permit.

1.1.2.6.4 Producers will not plant on a converted wetland.

1.1.2.6.5 Producers will not convert a wetland to make the production of an agricultural commodity possible.

1.1.2.6.6 Producers follow Section 404 of the Clean Water Act regarding agricultural impacts on wetlands.[15]

1.1.2.6.7 The USDA Farmable Wetlands Program provides rental payments to producers for restoring and establishing plant cover on wetlands and wetland buffer zones that were previously farmed.[16]

1.1.2.6.8 The NRCS Agricultural Conservation Easement Program (ACEP)[17] provides financial and technical assistance to conserve agricultural lands and wetlands. The program restores cropland to its previous natural wetland condition in either 30-year or permanent easements.

1.1.3 Soybeans are not produced on land that was primary forest or continuously forested land.

1.1.3.1 Producers follow U.S. laws regarding the conversion of primary forests to other uses. Use or occupancy of National Forest System land is prohibited without special-use authorization.[18]

1.1.3.2 Producers follow U.S. laws prohibiting the use, occupancy, or conversion of public lands in National Forests and Grasslands.

1.1.3.3 The NRCS Healthy Forests Reserve Program provides owners with 10-year restoration agreements and 30-year or permanent easements for conservation actions intended to improve biological diversity, increase carbon sequestration or help threatened or endangered species.[19] Forestland that is part of a working farm or ranch can also be protected by permanent easements in the NRCS Agricultural Conservation Easement Program.[20]

1.1.4 Soybeans are not produced in designated protected areas, including UNESCO World Heritage Sites and IUCN Green List sites, and are subject to all applicable fines and penalties for damaging or destroying protected areas.

1.1.4.1 Producers follow U.S. laws that prohibit the production of soybeans on land in the National Wilderness Preservation System (45 million hectares/112 million acres).[21]

1.1.4.2 Producers follow U.S. laws that prohibit the production of soybeans on land protected by the U.S. Forest Service in the National Forests and Grasslands (78 million hectares/193 million acres).[22]

1.1.4.3 Producers follow U.S. laws that prohibit the production of soybeans on land protected by the Bureau of Land Management in the National Conservation Lands (15 million hectares/37 million acres).[23]

1.1.4.4 Producers follow U.S. laws that prohibit the production of soybeans on land protected in the National Park System by the National Park Service (34 million hectares/85 million acres).[24]

DIRECTIVE 2

PRODUCTION PRACTICES, CONTROL MEASURES & REGULATIONS

The United Nations Sustainable Development Goals

2.1 SOIL HEALTH & PRODUCTIVITY

91% of U.S. Soy travels to export position by barge or rail.[141]

BENCHMARK AND ASPIRATIONAL GOALS

Soils play a critical role in crop production and are greatly affected by land management and environmental conditions. Sustaining soil health requires the conservation of soil quantity and the maintenance or improvement of soil quality by preserving soil organic carbon and avoiding nutrient depletion and salinization. The Field to Market Soil Conservation aspirational goal is the continued reduction in soil erosion on all U.S. cropland.[25] The Compliance Criteria for the **Soil Health & Productivity Impact Category** align with those aspirational goals.

The USDA Economic Research Service reported in 2018 that no-till and mulch-till were used on about 70% of soybean acres in 2012, with about 40% of that being no-till.[142]

IMPACT CATEGORY COMPLIANCE CRITERIA

2.1 U.S. soybean farmers respect and obey federal, state and local laws in the area of soil health and agricultural productivity, as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

2.1.1 Producers will utilize best management practices to maintain or improve soil quality and soil carbon and avoid erosion.

2.1.1.1 Producers will adopt conservation practices like crop rotation, cover crops, nutrient management and contour farming to improve soil health.

2.1.1.2 Producers will adopt conservation tillage methods, including no-till, strip-till and mulch-till, as appropriate to increase soil health and organic matter, increase moisture retention, reduce soil compaction and soil erosion, and contribute to carbon sequestration.

2.1.1.3 Producers will implement best management practices like terracing, strip cropping, riparian buffers, filter strips, field borders, grassed waterways, conservation buffers or other strategies to minimize soil erosion.

2.1.1.4 Producers will monitor and maintain or improve soil health.

2.1.1.4.1 The NRCS recommends soil testing every 3–5 years and more frequently if manure is applied or if attempting to make large nutrient or pH changes in the soil. Soil sampling is provided by most county extension offices and state university cooperative extension services as a free or low-cost service.

2.1.1.4.2 Precision farming techniques utilizing the Global Positioning System (GPS) can help producers implement grid soil sampling.

2.1.1.5 Producers will comply with the USDA Highly Erodible Land Conservation program.[26]

2.1.1.5.1 Highly erodible land is defined as soils that have an erodibility index of eight or more. The USDA keeps records of highly erodible land. Producers may obtain aerial imagery of their farms and a printout of their farm and tract records from the local USDA office administering their farm.

NRCS employs over 10,000 people in conservation programs and compliance.

2.1.1.5.2 Producers will maintain compliance with highly erodible land regulations by creating and implementing a required conservation system plan.

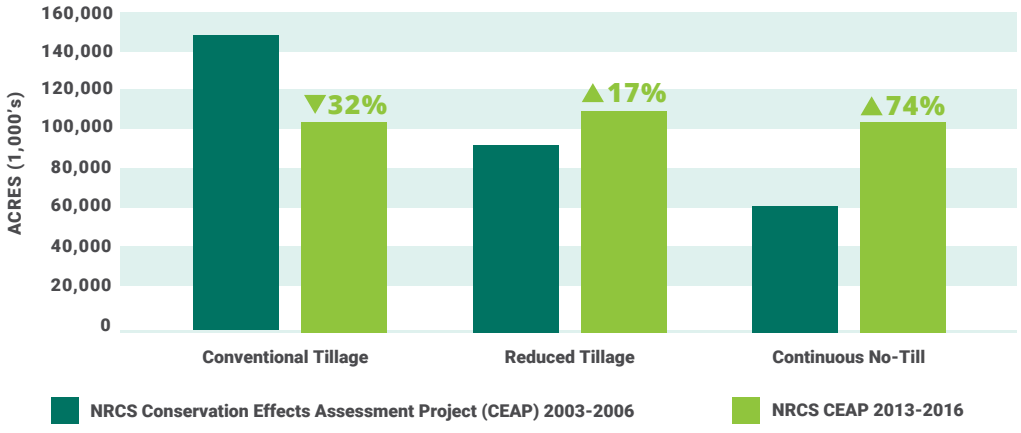
2.1.1.5.3 Producers file Forms AD-1026[27] and FSA-578[28] with the USDA Farm Service Agency certifying adherence to Highly Erodible Lands Conservation provisions and an annual report of acreage. The submission of Forms AD-1026 and FSA-578 gives USDA authorization to enter and inspect all farms in which the producer has an interest.

2.1.1.5.4 Producers planning to make changes that could impact highly erodible land must notify USDA for appropriate technical determination.

2.1.1.6 Producers are in compliance with the USDA Sodsaver provision[29] which helps protect native sod.

2.1.1.7 Producers will follow all local regulations pertaining to burning crop residue and leaving crop residue in place to provide desirable agronomic advantages, including water storage and soil fertility.

COMPARISON OF TILLAGE PRACTICES FROM 2003-2006 TO 2013-2016



Cultivated cropland comprises land in row crops or close-grown crops and also other cultivated cropland, for example, hayland or pastureland that is in a rotation with row or close-grown crops. Noncultivated cropland includes permanent hayland and horticultural cropland. Source: United States Department of Agriculture, Natural Resources Conservation Services webinar. Structural Practices and Conservation Tillage on Cultivated Cropland: CEAP Conservation Practice Adoption Reports: 10 years of change. June 25, 2020.

Some 10 million hectares (25 million acres) are enrolled in the Conservation Reserve Program to protect the environment by conserving grasslands, safeguarding wetlands, improving wildlife habitat and ensuring water quality.[143]

2.1.1.8 Producers may utilize the Web Soil Survey (WSS),[30] which provides soil data and information produced by the National Cooperative Soil Survey. The WSS is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95% of the Nation's counties and anticipates having 100% in the near future. The site is updated and maintained online as the single authoritative source of soil survey information.

2.1.1.9 Producers can access resources for soil carbon management and assessment through online resources like the NRCS Soil Health webpage.[31]

2.1.1.10 The NRCS Rapid Carbon Assessment (RaCA)[32] provides statistically reliable quantitative estimates of amounts and distribution of carbon stocks for U.S. soils under various land covers and, to the extent possible, differing agricultural management. RaCA data also provide the following:

2.1.1.10.1 RaCA data can be used to support model simulations of soil carbon change related to land-use change, agricultural management, conservation practices and climate change.

2.1.1.10.2 RaCA data provides a scientifically and statistically defensible inventory of soil carbon stocks for the U.S.

2.2 CROP HEALTH & AGRICULTURAL BEST MANAGEMENT PRACTICES

BENCHMARK AND ASPIRATIONAL GOALS

Crop health is closely tied to production and yield and affects land use efficiency. The Field to Market Land Use aspirational goals include continued improvement of land-use efficiency by increasing productivity.[33] The Compliance Criteria for the **Crop Health & Agricultural Best Management Practices Impact Category** aligns with the aspirational goal of improved land-use efficiency through increased productivity.

IMPACT CATEGORY COMPLIANCE CRITERIA

2.2 U.S. soybean farmers respect and obey federal, state and local laws in the area of crop health, good agricultural practices and integrated pest management as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services, and national and state soybean checkoffs and associations.

2.2.1 Producers use best management practices to protect and improve the quality of plant stocks and crops. Recommendations for Best Management Practices were

developed by the USDA to support coexistence across U.S. soybean production platforms.[34]

2.2.2 Soybean seed commerce complies with the Federal Seed Act[35] regarding fair trade and proper labeling.

Over 19 million hectares (47 million acres) of land are enrolled in the Conservation Stewardship Program.[144]

2.2.2.1 The Federal Seed Act (FSA) protects producers against purchasing contaminated or defective seed and requires that they be informed of what they are buying and protects seed purchasers against any alteration of that seed. The FSA requires interstate shippers to keep and make available for inspection a complete record of each lot of seed shipped in interstate commerce. The complete record must include a file sample and records of receiving, variety, conditioning and blending, tests, labeling, sales, and shipping and disposition and must be kept for three years so the seed may be traced from where it is officially sampled back to the grower, if necessary. Buyers of seed should keep the grower's declarations of kind, variety or type. All records should include lot numbers to identify seeds. It is a violation of the FSA for anyone to disseminate any false advertisement concerning seed. The FSA is supplemented by state seed laws, which protect purchasers at the point of inspection and sale.[36]

The U.S. Government established conservation programs in the 1930s. In 1985, the Food Security Act greatly increased conservation efforts monitored by USDA through the enactment of the Conservation Compliance Highly Erodible Land and Wetland Conservation Provisions.[145]

2.2.3 Producers comply with Plant Protection Act[37] regulations regarding the use of biological control organisms and the import of plants and plant products.

2.2.4 Producers' crops will be grown under the federal government's Coordinated Framework for Regulation of Biotechnology, which is a coordinated, risk-based system to ensure that new biotechnology products are safe for the environment and human and animal health.[38]

2.2.4.1 The USDA's Animal and Plant Health Inspection Service (APHIS)[39] is responsible for protecting agriculture from pests and diseases, including regulatory oversight over products of modern biotechnology that could pose such a risk. The APHIS Plant Protection and Quarantine (PPQ) program protects against the entry, establishment and spread of economically and environmentally significant pests, and the Federally Recognized State Managed Phytosanitary (FRSMP) program provides consistency in actions against certain pests at point of entry and at interstate travel.

2.2.4.2 Through a registration process, the Environmental Protection Agency (EPA) regulates the sale, distribution and use of pesticides in order to protect health and the environment, regardless of how the pesticide was made or its mode of action. This includes regulation of those pesticides that are produced by an organism through techniques of modern biotechnology.

2.2.4.3 The Food and Drug Administration (FDA) is responsible for ensuring the safety and proper labeling of all plant-derived food and feed, including those developed through genetic engineering.

Land use (planted acres per bushel) for U.S. soybean production has decreased by 53% since 1980.[146]

2.2.4.3.1 Producers acquire legally approved seeds from trustworthy seed companies and will follow the guidelines provided by these seed companies on using the seeds in a safe and responsible manner.

Energy use (BTUs per bushel) for U.S. soybean production has decreased by 55% since 1980.[130]

2.2.4.3.2 Producers will handle genetically modified organisms (GMOs) in accordance with the law and follow seed company guidelines.

2.2.5 The Plant Variety Protection Act (PVPA) provides intellectual property protection to breeders of varieties of seed propagated and asexually-reproduced plants. New varieties are certified through the USDA Agricultural Marketing Service Plant Variety Protection Office (PVPO), working with the International Union for the Protection of New Varieties of Plants (UPOV). It is a violation of the PVPA to claim that a variety is plant-variety-protected when it is not.[40]

2.2.6 U.S. soybean farmers who participate in USDA programs, including Agriculture Risk Coverage (ARC), Price Loss Coverage (PLC), marketing assistance loans and loan deficiency payments, are required to submit an annual Crop Acreage Report. Failure to report can result in fines and loss of program benefits. Farmers must report crop and crop type or variety, the intended use of the crop, number of acres of the crop, map with approximate boundaries for the crop, planting date(s), planting pattern when applicable, producer shares, irrigation practice(s) and acreage prevented from planting when applicable.[41] Producers must provide yield data[42] (known as the Actual Production History) for each crop year. This data is used to compute crop insurance premiums.

2.2.7 Land-grant university and county extension offices provide information and technical assistance for Best Management Practices (BMPs) to avoid disease spread in crops.

2.2.8 Producers will consider Precision Farming Techniques as appropriate utilizing Global Positioning System (GPS) and other advanced technologies for yield mapping.

2.2.9 The U.S. Internal Revenue Service (IRS) requires farmers to keep appropriate records of expenses, income, deductions, profits and assets for tax purposes. U.S. law requires that taxes be filed annually and stresses the importance of recordkeeping for farmers. Resources for agriculturally-related income and self-employment tax information can be accessed at the IRS Farmer's Tax Guide (updated annually)[43] and at ruraltax.org.

2.2.9.1 Producers negotiate their harvest using different types of contracts in which quality, price, volume, payment terms and conditions are addressed. Contract types include cash contracts, forward contracts, futures contracts and options contracts.

2.2.9.2 Producers continuously assess and incorporate new technologies to optimize crop yield and reduce their environmental impacts as appropriate to their growing conditions, needs and operational and economic capabilities. These include the adoption of yield and soil maps, automated guidance systems and the use of variable rate technologies that allow the optimization of seed rates, plant spacing, volumes of crop nutrients and plant protection products, as well as the reduction of fossil fuel consumption. Producers are also adopting digital agriculture information technologies, which contribute to keeping track of inventory and optimizing the use of assets, farm inputs and activities, which support data-driven decision-making on farm operations.

Greenhouse Gas Emissions (CO_2-e per bushel) from U.S. soybean production has decreased by 58% since 1980.[130]

2.2.10 The Federal Grain Inspection Service[44] provides inspection services on grains, pulses, oilseeds, and processed and graded commodities. These services facilitate the efficient and effective marketing of U.S. grain and other commodities from farmers to domestic and international end users. Inspection for grade involves analyzing the sample according to the quality factors listed in the official U.S. Standards for Grain and certifying the applicable numeric grade designation, the quality factors responsible for the grade assignment and any other quality factors the customer requests.

2.2.11 Producers ensure the safety, sustainability and quality of their soybeans and other crops via training and education of all their employees (permanent, temporary and seasonal) and via advice received from a qualified advisor. Topics included in the training are the handling, use, application and storage of fuel, fertilizers, plant protection products (PPPs) and other hazardous substances, safety at work, client requirements, handling genetically modified organisms and MRLs, in addition to client-specific requirements in the area of quality, sustainability and traceability.

2.3 WASTE & POLLUTION

BENCHMARK AND ASPIRATIONAL GOALS

In addition to plant protection and nutrients, agricultural operations utilize fossil fuels, oil and degreasing agents for their equipment, and some management strategies incorporate the burning of crop residue. These potential pollutants should be properly recycled or disposed of to avoid adverse environmental or human impacts.

The NRCS operates easement programs to provide financial and technical assistance to conserve agricultural lands and wetlands. The wetland easement programs restore cropland to its previous natural wetland condition in either 30-year or permanent easements. To date, 1.2 million hectares (nearly 3 million acres) of cropland have been enrolled in the program and restored to wetlands.[147]

IMPACT CATEGORY COMPLIANCE CRITERIA

2.3 U.S. soybean farmers respect and obey federal, state and local laws in the area of waste and pollution as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

2.3.1 Producers will take measures to reduce and recycle waste and meet all local regulations related to waste recycling.

2.3.2 Producers will follow all local regulations pertaining to burning crop residue.

2.3.3 Producers will comply with Clean Water Act Law 40 Parts 116–117, which regulates discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and State Agencies of any unauthorized discharge of a reportable quantity of a designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.[45]

2.3.3.1 Watersheds with stream reaches with demonstrated water quality concerns are listed by each state government on the U.S. EPA Clean Water Act Section 303(d) list.[46]

2.3.3.2 State governments may require monitoring under the Clean Water Act Section 319 to ensure the implementation of best management practices and to determine how conservation measures affect water quality.

2.3.3.3 Producers will comply with National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides and chemical pesticides that leave a residue in waters of the U.S.[47]

2.3.3.4 The use of sewage sludge in agriculture is regulated by the Clean Water Act, which establishes pollutant limits as well as monitoring, recordkeeping, and reporting requirements. Land-applied sewage sludge for agriculture must meet stringent requirements for pollutants, pathogens and attractiveness to vectors like rodents, flies or mosquitoes. The Clean Water Act defines sewage sludge as the residue generated during the treatment of domestic sewage in a treatment works. Land application of untreated sewage is not allowed for agriculture.[48]

2.3.4 The Oil Spill Prevention, Control, and Countermeasure (SPCC) program of the Water Resources Reform and Development Act (WRRDA) regulates oil and oil product storage by farmers who store more than 2,500 U.S. gallons in aboveground containers and requires them to have an oil spill prevention plan (SPCC Plan).[49]

2.3.4.1 Producers have access to NRCS Conservation Standard 319, On-Farm Secondary Containment Facility, to control the accidental release of oil and petroleum products to prevent contamination of groundwater and surface waters and provide measures for a safe, effective and timely cleanup of a spill or leak.[50]

For more than 100 years, the amount of forested land in the United States has stayed relatively constant and is currently at 309 million hectares.[148]

2.3.5 The Resource Conservation and Recovery Act (RCRA) requires that farmers storing more than 25 gallons of used oil in underground or aboveground tanks must ensure that tanks meet EPA underground or aboveground technical requirements.[51]

2.3.6 Underground storage tanks (USTs) with a capacity of more than 1,100 gallons of motor fuel are regulated by state and federal regulations that specify design, construction, installation, notification, monitoring, operating, release detection, reporting to regulatory agencies, owner recordkeeping, corrective action, closure and financial responsibility.[43]

2.4 GREENHOUSE GAS EMISSIONS, FOSSIL FUEL USE & AIR QUALITY

BENCHMARK & ASPIRATIONAL GOALS

The Field to Market Greenhouse Gas Emissions Indicator and Energy Use Indicator for U.S. Soy (grown for grain and grown for silage) have been steady over the last five years after generally improved environmental performance trends when comparing 2020 data to 1980 data. Field to Market lists among its aspirational goals for U.S. crop production as continuing improvement in energy use efficiency and reduction in greenhouse gas (GHG) emissions.[52] The Compliance Criteria for the **Greenhouse Gas Emissions, Fossil Fuel Use & Air Quality Impact Category** are aimed at helping U.S. Soy producers improve their energy use efficiency and reduce their GHG emissions.

IMPACT CATEGORY COMPLIANCE CRITERIA

2.4 U.S. soybean farmers respect and obey federal, state and local laws in the area of greenhouse gas emissions, fossil fuel use and air quality as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

2.4.1 Producers will adopt best management practices to reduce Greenhouse Gas Emissions. Producers are encouraged to participate in USDA surveys and to use Greenhouse Gas (GHG) emissions tracking tools such as Field to Market's Fieldprint Calculator, in order to measure and monitor sources of on-farm emissions.

2.4.1.1 Producers will implement conservation practices under the Inflation Reduction Act (IRA) to directly improve soil carbon, reduce nitrogen losses, or reduce, capture, avoid or sequester carbon dioxide, methane or nitrous oxide

emissions.[53]

2.4.1.2 Producers will reduce energy usage by adopting on-farm facilities, equipment and management strategies that provide increased energy efficiency, such as conservation tillage, irrigation water management, replacing or repowering stationary engines and other methods as appropriate.

2.4.1.3 Producers will monitor and reduce fossil fuel use and/or switch to renewable energy to increase enterprise viability.

2.4.1.4 The NRCS maintains four energy tools[54] to increase awareness and help farmers identify energy reduction potential in their operations. The estimators can be used to estimate potential energy savings for irrigation, nitrogen fertilizer use, animal housing and tillage systems.

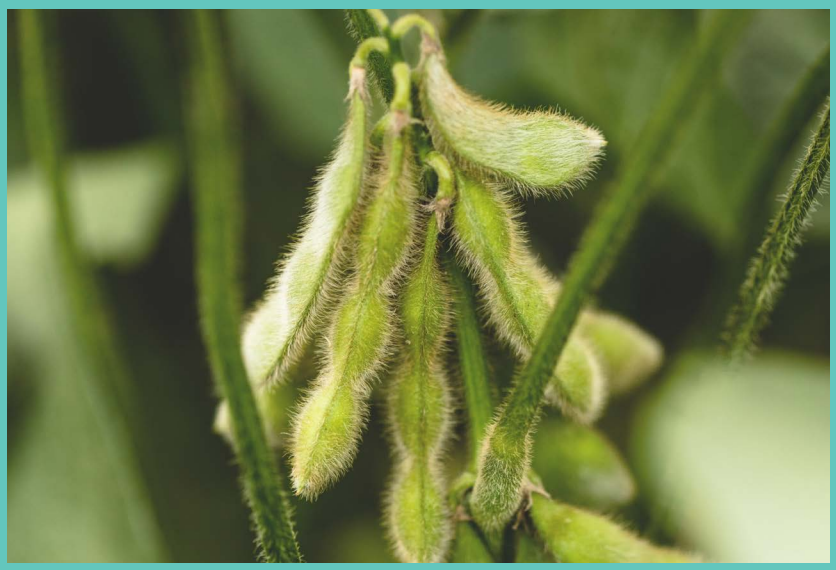
2.4.1.5 Producers will utilize renewable energy resources like biofuels, biogas, wind and solar power, when possible, to reduce fossil fuel use.

2.4.1.6 Producers and grain handlers should, when possible, utilize transportation methods such as barge and rail to reduce greenhouse gas emissions and fossil fuel use.

2.4.2 Producers comply with the Clean Air Act and its amendments to protect and enhance air resources to promote public health and welfare.[55]

2.4.3 Producers will consider Precision Farming Techniques as appropriate, utilizing Global Positioning System (GPS) and other advanced technologies to optimize fossil fuel use and fertilizer application.

2.4.4 U.S. soybean farmers will maintain equipment and machinery to ensure safety and proper, efficient functionality. Equipment loans and equipment lease or rental agreements require that machinery be maintained to proper working order.



DIRECTIVE 3

PUBLIC & LABOR HEALTH & WELFARE CONTROL MEASURES & REGULATIONS

The United Nations Sustainable Development Goals

3.1 WATER QUALITY & QUANTITY

Precision farming using GPS technology allows producers to precisely apply field inputs within millimeters.[149]

BENCHMARK AND ASPIRATIONAL GOALS

Water quality and quantity are impacted by complex environmental and land and water management practices, so numerical goals should be set on a regional basis. The Field to Market water quality and quantity aspirational goals are continued improvement in irrigation water use efficiency and conservation and continued reductions in sediment, nutrients and plant protection loads from agriculture in U.S. waterways.[56] The Compliance Criteria for the **Water Quality & Quantity Impact Category** align with those aspirational goals.

IMPACT CATEGORY COMPLIANCE CRITERIA

3.1 U.S. soybean farmers respect and obey federal, state and local laws in the area of water quality and water quantity, as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

3.1.1 Producers will protect the quality and supply of surface and groundwater by utilizing best management practices and following local, state and federal regulations.

3.1.1.1 Producers will optimize irrigation and comply with all applicable water conservation efforts in their irrigation districts to ensure effective and equitable allocation of water resources. Producers voluntarily adopt on-farm best practices in water use, implement irrigation management plans where appropriate and participate in federal government technical assistance programs that target increased efficiency in water use and irrigation. These programs include research, monitoring and water consumption reporting; the implementation of best management practices in areas such as on-farm water conveyance, application methods and irrigation scheduling; and the adoption of the appropriate irrigation equipment technology for each farm, which is adequately serviced and maintained.

3.1.1.2 Producers will adopt conservation tillage methods as appropriate to reduce water runoff.

3.1.1.3 Producers will use cover crops, terracing, strip cropping, contour farming, filter strips, conservation buffers or other strategies to minimize erosion and runoff.

3.1.1.4 Producers will comply with the Clean Water Act Law 40 Parts 116–117, which regulates discharges of designated hazardous substances. Facilities must immediately notify the National Response Center and State Agencies of any unauthorized discharge of a reportable quantity of

designated hazardous substance into navigable waters, the shorelines of navigable waters and contiguous zones. Discharge of harmful quantities of oil must also be reported immediately.[57]

3.1.1.4.1 Watersheds with stream reaches with demonstrated water quality concerns are listed by each state government in the U.S. EPA Clean Water Act 303(d) list.[58]

3.1.1.4.2 State governments may require monitoring under the Clean Water Act Section 319 to ensure the implementation of best management practices and to determine how conservation measures affect water quality.

3.1.1.4.3 Producers will comply with the National Pollutant Discharge Elimination System (NPDES) requirements on discharges of biological pesticides and chemical pesticides that leave residues in waters of the U.S.[59]

3.1.2 Producers comply with Section 404 of the Clean Water Act regarding agricultural impacts on wetlands.[60]

3.1.3 Producers comply with the Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water.[61]

3.1.4 Producers in coastal areas comply with Coastal Zone Act Reauthorization Amendments (CZARA) Section 6217 specifying management measures for agriculture sources for states to incorporate into their Coastal Nonpoint Pollution Control Programs. State authorities ensure the implementation of these measures. Recommended measures include preserving natural vegetation and avoiding development within sensitive habitats and erosion-prone areas.[62]

3.1.5 The U.S. Geological Survey (USGS) conducts water quality testing at 1.9 million sites throughout the United States.[63] USGS investigates the occurrence, quantity, quality, distribution and movement of surface and underground waters and disseminates the data to the public, state and local governments, public and private utilities and other federal agencies involved with managing our water resources.

3.1.6 Additional support to producers on water use and quality is available at the National Water Management Center (NWMC), which focuses on six key areas: environmental compliance, groundwater, hydrology and hydraulics, irrigation water management, water quality and watershed planning and rehabilitation. The NWMC team provides direct assistance, support and training to state and local Natural Resources Conservation Service offices.[64]

3.2 PLANT PROTECTION & NUTRIENT MANAGEMENT

BENCHMARK AND ASPIRATIONAL GOALS

Plant protections and nutrients can be transported from fields to surface water and groundwater, where they can create environmental impacts like the eutrophication of waterbodies and chemical toxicity to aquatic insects and fishes, as well as human impacts like high nitrate levels in drinking water. The Field to Market water quality aspirational goals are continued reductions in sediment, nutrients and plant protection loads from agriculture in U.S. waterways.[65] The Compliance Criteria for the **Plant Protection & Nutrient Management Impact Category** align with those aspirational goals. These Compliance Criteria also contribute to improved worker safety, reducing the potential for workplace injuries and fatalities from chemical handling.

IMPACT CATEGORY COMPLIANCE CRITERIA

3.2 U.S. soybean farmers respect and obey federal, state and local laws in the area of plant protection and nutrient management as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

3.2.1 Producers will adopt conservation tillage methods and other practices like crop rotation, cover crops and nutrient management as appropriate to reduce nutrient and pesticide/herbicide loss and runoff.

3.2.1.1 All soybean-producing states have regulations regarding Nutrient Management Plans (NMPs) to mandate the development of written plans that manage the quantity, source, placement and timing of fertilizers and soil amendments.[66]

3.2.1.2 Producers minimize the use of chemical crop protection products as a cost-savings strategy.

3.2.2 Producers will consider Precision Farming Techniques as appropriate, utilizing Global Positioning System (GPS) and other advanced technologies, like the following. Precision Farming Techniques like site-specific crop management (SSM) use precise global positioning and location-specific measurements to adjust treatments to the exact needs of the crop and targeted application of pesticides.

3.2.2.1 Producers will consider optimizing fertilizer and herbicide application (variable rate fertilizer and herbicide application) based on the information obtained via advanced monitoring technologies.

3.2.2.2 Producers will consider using field mapping for targeted herbicide, pesticide and fertilizer application.

3.2.2.3 Producers will develop and implement a Nutrient Management Plan (NMP), making sure only legally allowed nutrients are used, application of nutrients is targeted to the right moment and the needs of the crops and in ways that minimize harm to the environment. Producers work with fertilizer retailers to appropriately understand and follow product labels and adhere to federal and state regulations and guidance on storage, mixing and handling to prevent exposure and risk to people and the environment and ATF guidance (EPA 550-F-15-001) on fertilizer-safe storage, handling and management, as well as other OSHA regulations and industry guidelines.[67]

3.2.2.4 Between Fiscal Years 2015–2022, producers implemented Conservation Practice 590, Nutrient Management, on nearly 5 million acres in the 29 top soy-producing states.[68] Nutrient Management manages the rate, source, placement and timing of plant nutrients and soil amendments while reducing environmental impacts.

3.2.3 Producers follow the U.S. Environmental Protection Agency (EPA) Worker Protection Standard (WPS) for Agriculture Pesticides,[69] meeting regulations for: pesticide safety training to all employees on the farm who are handling pesticides, notification of pesticide application, use of personal protective equipment (PPE), restricted-entry intervals after pesticide application, decontamination supplies and emergency medical assistance.

3.2.3.1 The WPS requires that employers maintain and provide access to Safety Data Sheets (SDS) and safety and emergency information for pesticides applied on the establishment.

3.2.3.2 OSHA's Hazard Communication Standard (HCS) requires the development and dissemination of information related to chemical safety aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).[70]

3.2.4 Producers follow the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA),[71] maintaining compliance with agricultural chemical handling, storage and application regulations. FIFRA regulates the distribution, sale and use of pesticides.

3.2.4.1 All pesticides are registered with the U.S. Environmental Protection Agency (EPA) with proper labels and used in accordance with specifications, including how and under what conditions, chemicals can be applied. Pesticides must be shown to "not generally cause unreasonable adverse effects on the environment" before they can be registered. FIFRA defines the term "unreasonable adverse effects on the environment" to mean: "(1) any unreasonable risk to man or the environment, taking into account the economic, social and environmental costs and benefits of the

use of any pesticide, or (2) a human dietary risk from residues that result from a use of a pesticide in or on any food inconsistent with the standard under section 408 of the Federal Food, Drug, and Cosmetic Act."[72]

The USDA has an Integrated Pest Management (IPM) initiative led by the National Institute of Food and Agriculture (NIFA), partnered with the U.S. Land-Grant University System and the private sector. There are extension IPM implementation education and pesticide applicator safety programs in all 50 states and six territories. The USDA maintains an IPM Program website that provides IPM information and resources. NIFA maintains websites for the USDA Regional IPM Centers, which provide regional IPM information, technology advice, crop and pest data, crop profiles, and pesticide data and links to monthly newsletters and other information sources. The Natural Resources Conservation Service provides a conservation standard that is accessible online or at local Service Centers. NRCS also provides technical and financial assistance to producers to adopt IPM. The USEPA also maintains a website that provides IPM information and resources.[150]

3.2.4.2 Certification and training are required for pesticide applicators using restricted-use pesticides. EPA establishes general categories of certified applicators for private and commercial applicators. Certified applicators are required by law to maintain records for two years of the application of restricted-use pesticides, including the brand or product name and the EPA registration number of the pesticide, amount applied, location of application and size of treated area, date, and applicator's name and certification number.

3.2.4.3 Producers adhere to EPA regulations concerning the rotation of chemical active ingredients.

3.2.4.4 Pesticides are classified for general or restricted use. Restricted category pesticides may be used only under the direct supervision of certified applicators or under such other regulatory restrictions as the EPA administrator may require.

3.2.4.5 U.S. regulations provide penalties for violations of FIFRA regulations and violation of these instructions is equivalent to violating the law; consequences can include criminal prosecution, civil remedies for damages and loss of license.

3.2.4.6 FIFRA provides states the authority to regulate the sale or use of any federally registered pesticides in that state.

3.2.4.7 Producers adhere to all federal regulations and guidelines for farm chemical application and producers observe best management practices. Additionally, producers who apply World Health Organization (WHO) Class Ia, Ib, and II pesticides shall not apply them within 500 meters of populated areas or water bodies.

3.2.5 The U.S. is a signatory to the Rotterdam Convention of the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, enforcing a banned list of chemicals for producer use.[73] The U.S. is a signatory to the Stockholm Convention and the original Persistent Organic Pollutants (POPs) pesticides listed in the Stockholm Convention have been prohibited in the U.S. since 1978.[74]

3.2.6 Producers comply with the Toxic Substances Control Act[75] to regulate chemicals that pose an unreasonable risk to health or to the environment and to regulate these chemicals' distribution and use.

3.2.7 Producers follow the Resource Conservation and Recovery Act (RCRA), which controls hazardous waste, nonhazardous solid waste and underground storage tanks.[76] RCRA requires hazardous waste to be managed in compliance with technical standards for containers, tanks, drip pads and containment buildings, and regulates accumulation quantity and time limits. RCRA also requires personnel training, contingency planning for emergency procedures, preparedness and prevention procedures, land disposal restrictions, manifest tracking, waste minimization and recordkeeping for the categories of small- and large-quantity hazardous waste generators.

3.2.8 Producers follow Safe Drinking Water Act regulations to protect public health by preventing contamination of surface and ground sources of drinking water.[77]

3.2.9 The USDA has an Integrated Pest Management (IPM) initiative, led by the National Institute of Food and Agriculture (NIFA), partnered with the U.S. Land-Grant University System and the private sector.[78] The USDA's Natural Resources Conservation Service (NRCS) provides technical and financial assistance to producers to adopt IPM.[79]

3.2.10 The Emergency Planning and Community Right-to-Know Act (EPCRA) requires planning for spills and has Threshold Planning Quantity (TPQ) standards for hazardous chemicals and many common pesticides. Anyone storing more than the TPQ must file an EPCRA report to provide state and local officials and the public with information regarding potential hazards.[80] EPA regulates the storage of pesticides in small portable containers through specific storage instructions on pesticide labels.

3.2.11 EPA's pesticide containment regulations[81] establish standards for pesticide containers, containment structures and repackaging regulations, including standards for label instructions to ensure the safe use, reuse, disposal and adequate cleaning of the containers.

3.2.12 The Pesticide Environmental Stewardship (PES)[82] website provides access to pesticide handling information and educational materials.

3.3 WORKING CONDITIONS & LABOR RELATIONS

BENCHMARK AND ASPIRATIONAL GOALS

The social and economic stability and well-being of agricultural communities are critical to agricultural sustainability. Field to Market has developed five socioeconomic national-scale indicators that include Labor Productivity (calculated using USDA Economic Research Service Commodities Cost and Returns data derived labor hours).[83] The Compliance Criteria for the **Working Conditions & Labor Relations Impact Category** contribute to improved worker economic and hiring protections and improved labor productivity. U.S. soybean

growers comply with applicable local, state and federal regulations to protect the health and welfare of their farmworkers.

IMPACT CATEGORY COMPLIANCE CRITERIA

3.3 U.S. soybean farmers respect and obey federal, state and local laws in the area of working conditions and labor relations as further defined in the section below and make sure all permanent, temporary and seasonal workers have a legal right to work. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

3.3.1 Producers follow the Fair Labor Standards Act (FLSA),[84] which prescribes standards for basic minimum wage, overtime, recordkeeping, maximum hours worked, youth employment and child labor and prohibits the employment of children under age 16 during school hours and in certain jobs deemed dangerous. If state or local laws provide stricter standards, those must be followed. Every state has a compulsory education law that requires school attendance (or home school) for children in certain age ranges.

3.3.1.1 Agricultural employers are exempt from the maximum hours' provisions of the FLSA. However, the Act requires employers to pay covered employees not less than one- and one-half times their regular rate of pay for hours worked in excess of 40 in a workweek unless the employee is otherwise exempt. Some states have more restrictive labor standards that may regulate maximum hours as part of overtime regulations.

3.3.1.2 The FLSA establishes minimum wage. Employers are required to keep accurate time and payroll records for each employee for three years and provide a pay statement to each employee each pay period. Migrant and seasonal agricultural workers are protected by the Migrant and Seasonal Worker Protection Act (MSPA), which sets standards related to wages, housing, transportation, disclosures and recordkeeping. Employers are required to pay employees no less than every two weeks or semi-monthly.

3.3.1.3 The FLSA youth employment provisions for agriculture limit the types of jobs that workers under 16 years of age can do and the periods of time they may work. Young workers aged 14 and 15 may work outside of school hours in any nonhazardous agricultural occupation. States also have their own youth employment provisions, and the more protective standard (state or federal) often applies.[85]

3.3.2 Producers are in compliance with Federal Equal Employment Opportunity Law,[86] which provides the following protections:

3.3.2.1 Prohibits employment discrimination based on race, color, religion, sex or national origin.

3.3.2.2 Protects men and women who perform substantially equal work in the same establishment from sex-based wage discrimination.

3.3.2.3 Protects individuals who are 40 years of age or older.

3.3.2.4 Prohibits employment discrimination against qualified individuals with disabilities.

3.3.2.5 Prohibits employment discrimination based on genetic information.

3.3.2.6 Provides guidelines on employee selection procedures.

3.3.2.7 Protection against religious discrimination includes reasonably accommodating religious practices.

3.3.3 Producers are in compliance with the Migrant and Seasonal Agricultural Worker Protection Act[87] (MSPA), which provides safeguards to migrant and seasonal agricultural workers. Recruitment and employment practices required by applicable legislation and regulation are followed. Farm labor contractors are required to register with the U.S. Department of Labor (DOL). The MSPA gives workers the right to file a complaint with the Wage and Hour Division, file a private lawsuit and testify or cooperate with an investigation or lawsuit without being threatened, discharged or discriminated against in any manner.

3.3.4 Producers are in compliance with the Abolition of Forced Labor Act[88] in that they shall not make use of any type of forced or compulsory labor, including:

3.3.4.1 As a means of political coercion or education or as a punishment for holding or expressing political views or views opposed to the established political, social or economic system.

3.3.4.2 As a method of mobilizing and using labor for purposes of economic development.

3.3.4.3 As a means of labor discipline.

3.3.4.4 As a punishment for having participated in strikes.

3.3.4.5 As a means of racial, social, national or religious discrimination.

3.3.5 Producers are in compliance with the Victims of Trafficking and Violence Protection Act,[89] providing protection and assistance for victims of trafficking regardless of immigration status.

3.3.6 Producers will recognize the Right of Association for workers, including the right to unionize or engage in collective bargaining in accordance with applicable federal and state laws.[90]

3.3.7 **Producers actively support ongoing efforts to seek, recruit and promote women in leadership positions at all levels of the industry—farm, business, community and state and national organizations. Numerous women hold leadership positions in these organizations and often serve as public representatives on behalf of the industry.**

3.3.8 **U.S. federal laws protect all private and public employees in the United States from sexual harassment. Victims of sexual harassment can sue for damages per a 1991 amendment to Title VII of the Civil Rights Act. Victims of sexual harassment in the workplace can file a complaint with the Equal Employment Opportunity Commission (EEOC)[91] or their state or local Fair Employment Practices Agency (FEPA), file a private lawsuit against harassers or file a tort suit for personal injury damages perpetrated by harassers.**

3.3.9 **U.S. federal labor law requires that every agricultural employee receive information about the working terms and conditions of their job. Written contracts must be given to all workers who do not live permanently in the area and to permanent workers who ask for a written contract. Contracts must be in writing and in a language the employee understands and must include work location, type, time period, wage and piece rates, benefits, costs and any other working terms or conditions.[92]**

3.3.10 **Producers comply with applicable federal and state legislation regarding parental leave and sick leave, including workers' compensation in the event of work-related injury or illness.**

3.3.11 **The Affordable Care Act (ACA)[93] requires businesses with more than 50 employees to provide health insurance coverage to full-time employees working 30 or more hours per week. Under the ACA, workers are required to have health insurance or face a tax penalty unless they qualify for an exemption. Exemptions include economic hardship, income, coverage affordability, religious conscience, incarceration and undocumented status. Migrant seasonal workers and all lawfully present immigrants can purchase coverage in a public health insurance exchange (PHIE).**

3.4 WORKER & PUBLIC SAFETY

BENCHMARK AND ASPIRATIONAL GOALS

The social and economic stability and well-being of agricultural communities are critical to agricultural sustainability. Field to Market has developed five socioeconomic national-scale indicators that include Worker Safety (measured by U.S. Bureau of Labor Statistics worker illness and injury and fatalities).[94] Agricultural communities can also be affected and potentially harmed by improper management of agricultural activities. The Compliance Criteria for the **Worker & Public Safety Impact Category** contributes to improved worker safety and well-being and improved public safety and well-being. U.S. soybean growers

comply with applicable local, state and federal regulations to protect the health and welfare of their farmworkers and the public.

From 2011 to 2022, 4 million hectares (10 million acres) adopted IPM. Sustainable Agriculture Research and Education (SARE) provides national and regional education and outreach, as well as online resources on many sustainable agriculture topics, including IPM.

IMPACT CATEGORY COMPLIANCE CRITERIA

3.4 U.S. soybean farmers respect and obey federal, state and local laws in the area of worker safety and public safety, as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

3.4.1 Producers comply with the U.S. Environmental Protection Agency (EPA) Worker Protection Standard (WPS) for Agriculture Pesticides,[95] meeting regulations for annual pesticide safety training, notification of pesticide application, use of personal protective equipment, restricted-entry intervals after pesticide application, decontamination supplies and emergency medical assistance. The WPS protects workers who handle any hazardous chemicals, including fertilizers, plant protection products and fuel.

3.4.1.1 An application exclusion zone of 100 feet horizontally from application equipment is required whether the pesticide is applied by an air blast application, as a spray or fumigant, mist or fog. Applicators must suspend application if they are aware of any person in the application exclusion zone per regulation in Worker Protection Standard by Environmental Protection Agency.

3.4.1.2 Employees of soy producers, specifically pesticide handlers and agricultural workers, are covered by the WPS, which offers occupational protection and annual pesticide safety training. WPS requirements include keeping workers and others out of fields and exclusion zones during application and implementing restricted-entry intervals (REIs), providing access to labeling information, providing personal protective equipment and notifying workers through oral warnings or warning signs. Clean Water Act (CWA) permits are required for anyone who sprays pesticides on or near water. If pesticide applicators do not follow label restrictions, they may be subject to enforcement by states or the EPA.[96]

3.4.2 Producers and employees comply with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)[97] maintaining compliance with agricultural chemical handling, storage and following pesticide labeling instructions.

3.4.3 Producers comply with the Occupational Health and Safety Act (OSHA)[98] to ensure safe and healthful working conditions, including workplace violence guidelines. OSHA provides the following protections:

3.4.3.1 OSHA specifies that employers should provide training about hazards, methods to prevent harm and the OSHA standards that apply to the

workplace to their employees in a language the employees understand. Employees can be terminated for noncompliance with safety regulations, and employers are at risk when employees do not follow OSHA regulations.

3.4.3.2 U.S. federal laws entitle workers to a safe workplace free of health and safety hazards. Employees have the right to report hazards without fear of retaliation. They also have the right to request an OSHA inspection and can speak to the inspector.

3.4.3.3 Under OSHA, employers must provide a safe and healthy work environment. OSHA mandates that employees receive required safety equipment, be protected from toxic chemicals and work on machines that are safe. If employees believe working conditions are unsafe or unhealthful, they should bring them to the employer's attention. They may file a complaint with OSHA at any time. If the employer is informed of unsafe conditions but does not correct them, and a worker, with no reasonable alternative, refuses in good faith to expose themselves to a dangerous condition, the worker will be protected from subsequent retaliation.[99]

3.4.3.4 OSHA's temporary labor camp standard applies to job-related housing provided by the employer on a temporary basis for workers not at a permanent location. This standard applies to employers who provide housing to migrant agricultural workers. The site and housing must be safe and sanitary. Shelters must protect against the elements and must meet the minimum requirements of a bed for each person, lockers for clothing and personal articles, hot and cold running water and windows must be operable for ventilation. In camps where common cooking facilities are used, stoves must be provided in an enclosed and screened shelter at a rate of one stove per ten persons or two families, and sanitary facilities shall be provided for storing and preparing food. In a room where workers cook, live and sleep, a minimum of 100 square feet per person shall be provided, as well as sanitary facilities for storing and preparing food. The standard specifies the number and cleanliness of toilet facilities, laundry, handwashing and bathing facilities; and specifies requirements for lighting, refuse disposal, insect and rodent control and first aid facilities. Any charges for housing must be reasonable and disclosed in the work contract.[100]

3.4.3.5 Employers are required to provide drinking water to employees in the field for the entire work shift. Producers comply with OSHA Standards for Agriculture 1928.110 Subpart I, which stipulates the requirements regarding the availability of potable water and sanitation for field workers.[101]

3.4.3.6 Employers make sure that emergency contact details are made known to all employees and are easily accessible at the farm to meet all reasonably foreseeable emergency medical situations.

3.4.4 Producers follow federal and state regulations prohibiting assault and battery.

3.4.5 Producers comply with the Clean Air Act and its amendments to protect and enhance air resources to promote public health and welfare.[102]

3.4.6 Producers comply with the Resource Conservation and Recovery Act, which controls hazardous and nonhazardous solid waste and underground storage tanks.[103]

3.4.7 Producers comply with the Safe Drinking Water Act to protect public health by preventing contamination of surface and ground sources of drinking water.[104]

3.4.8 Producers comply with relevant federal and state legislation regarding compensation of permanent, temporary and seasonal workers for work-related accidents or illnesses.

3.4.9 Producers support and work with temporary and seasonal workers to provide timely access to information and understanding of the availability of health insurance, as applicable.

3.5 COMMUNITY RELATIONS

BENCHMARK AND ASPIRATIONAL GOALS

The **Community Relations Impact Category** Compliance Criteria are aimed at promoting and maintaining good relationships between soybean producers and the communities with which they interact.

IMPACT CATEGORY COMPLIANCE CRITERIA

3.5 U.S. soybean farmers respect and obey federal, state and local laws in the area of community relations as further defined in the section below. Producers stay informed of relevant national and local laws and regulations in this area via local USDA Service Centers, university agriculture extension services and national and state soybean checkoffs and associations.

3.5.1 Producers shall have documentation of land ownership, leases or other legal agreements to utilize land for the purpose of soybean production.

3.5.1.1 The Federal Land Policy Management Act protects public lands from exploitation without authorization or rental agreement.[105]

3.5.1.2 Land use contracts are governed by state statutory and U.S. common law. The U.S. court system is the mechanism for mediating land use disputes.

3.5.1.3 Producers shall not utilize, produce on, or otherwise impact lands owned by Indigenous Nations without authorization from those governments. The Indian Reorganization Act of 1934 (June 18, 1934, ch. 576, 48 Stat. 984, 25 U.S.C. 5101 et seq.)[106] restored sovereignty to Indigenous Nations, including legal and regulatory control over their commonly held lands.

Currently, over 2.2 million hectares are protected by easements held and enforced by the U.S. Government.[152]

3.5.2 Producers have access to information about farmland protection and stewardship through the jointly operated USDA Natural Resources Conservation Service (NRCS) and the American Farmland Trust Farmland Information Center,[107] which provides statistics, laws, organization links, literature and technical tools, as well as state-specific resources. Additionally, the USDA NRCS provides funds to help purchase development rights to keep productive farmland in agricultural use through the Agricultural Conservation Easement Program.[108] The American Farmland Trust[109] establishes programs and policies for protecting agricultural land through effective policy, conservation easement programs, planned growth with agriculture in mind, and stewardship and conservation practices.

The Environmental Quality Incentives Program (EQIP) provides funding to farmers to adopt conservation practices like nutrient management, conservation tillage, cover crops and field-edge filter strips. From 2018 through 2023, more than 7.1 billion U.S. dollars have been spent in EQIP in the 29 soy-producing states to design and implement conservation practices.[153]

3.5.3 Producers shall engage with local communities to ensure that communications of concerns, complaints or other grievances between community members and producers are understood and addressed in a collaborative manner. State and local governments have processes for public comment and formal complaints to be made.

3.5.3.1 The Emergency Planning and Community Right-to-Know Act (EPCRA) supports community awareness and response to hazardous substances used in society.[110]

3.5.3.2 The USDA Cooperative Extension System office is a nationwide educational network that provides research-based information regarding standard agricultural practices.

3.5.3.3 The Environmental Protection Agency Water Data Tool How's My Waterway[111] provides local, watershed-based information about potential watershed impairments.

3.5.3.4 Producers support the development of local resource planning groups composed of agricultural landowners and producers to address local conservation and environmental issues. Producers can join NRCS Local Work Groups[112] to help develop locally-led conservation priorities that guide NRCS conservation programs.

3.5.4 Producers support, via tax dollars, free public education for all children grades K-12.

3.5.5 Producers support agricultural-related education programs through the USDA cooperative extension system, a nationwide educational network that provides research-based information regarding agricultural practices.

3.5.6 At the local level, producers support the 4-H youth education program, whose mission is to give all youth equal access to opportunity. 4-H provides kids with community, mentors and learning opportunities to develop the skills they need to create positive change in their lives and communities, including focus STEM programs (Science, Technology, Engineering and Math), Healthy Living and Civic Engagement. 4-H membership now exceeds 6 million with about 500,000 volunteers and 3,500 staff professionals.[113]

3.5.7 Producers support the National FFA (Future Farmers of America) Organization (FFA). FFA is a dynamic youth organization preparing members for leadership and careers in the science, business and technology of agriculture. Currently, there are nearly 950,000 members in more than 9,100 local chapters in all 50 states and Puerto Rico.[114]

3.5.8 The USDA Foreign Agricultural Service (FAS)[115] administers programs that help developing countries advance their agricultural systems and trade capacity. In partnership with the U.S. Agency for International Development, FAS administers U.S. food aid programs and education programs designed to reduce hunger and improve literacy, especially for girls. Programs include the Food for Progress Program, the Local and Regional Food Aid Procurement Program, the McGovern-Dole Food for Education Program and the Bill Emerson Humanitarian Trust.

3.5.9 The USDA Food and Nutrition Service[116] administers 16 federal nutrition assistance programs to reduce hunger in the U.S. by providing food and healthful diet and nutrition education to children and low-income people. Programs include the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Supplemental Nutrition Assistance Program (SNAP), school meals and summer food service.

3.5.10 Producers support continued U.S. membership in the World Trade Organization (WTO) and support the authority of the WTO to arbitrate trade disputes and implement enforcement actions.

3.5.11 Federal law prohibits bribery and fraudulent practices and restricts conflicts of business interest.

3.5.12 The United States supports the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).[117]

3.5.13 In June of 2016, the Organization of American States (OAS), which the United States is a member state, ratified the American Declaration on the Rights of Indigenous Peoples.[118] The American Declaration on the Rights of Indigenous Peoples recognizes a suite of human and civil rights relative to the first peoples of the Americas.

DIRECTIVE 4

CONTINUOUS IMPROVEMENT OF PRACTICES AND ENVIRONMENTAL PROTECTION CONTROL MEASURES AND REGULATIONS

The United Nations Sustainable Development Goals

4.1 CONTINUOUS IMPROVEMENT

BENCHMARK AND ASPIRATIONAL GOALS

Continued improvement will require technological improvements and innovations. U.S. soybean producers can improve sustainability by continuing to adopt current best management practices and by adopting and supporting the development of new methods and technologies.

Between 2018 and 2022, the top 15 conservation practices in the 29 soy-producing states were Cover Crop, Nutrient Management, No-Till, Irrigation Water Management, Wetland Wildlife Habitat Management, Terrace, Underground Outlet, Mulch-Till, Structure for Water Control, Critical Area Planting, Conservation Crop Rotation, Grassed Waterway, Water and Sediment Control Basin, Forage Biomass Planting and Integrated Pest Management. In total, these 15 practices were installed on 9.3 million hectares (23 million acres) of cropland in the 29 soy-producing states.[138]

IMPACT CATEGORY COMPLIANCE CRITERIA

4.1.1 Producers will utilize best management practices as appropriate to optimize yield, water use, agrochemical use, soil health, water quality and to improve wildlife habitat.

4.1.1.1 USDA operates several well-funded conservation programs to incentivize improvements in soil erosion, soil health, carbon sequestration, greenhouse gas emissions, wildlife habitat, wetland restoration, nutrient efficiency, water quality, irrigation efficiency, groundwater protection and reforestation.[119]

4.1.1.2 Producers identify and implement best practices to manage field margins, boundaries and watercourses conducive to appropriate water stewardship and to preserve wildlife habitats and minimize agrochemical impacts. Measures may include structural and nature-based solutions such as terraces, grass waterways, buffer strips, ponds and lakes as appropriate and in accordance with regulations to reduce soil erosion and runoff and optimize water use for their crops. Producers apply the harvesting of surplus rainwater and the recycling of graywater, where possible and appropriate.

In 2023, NRCS announced $1.7 billion in funding to support the adoption of climate-smart agriculture practices, which have direct climate mitigation benefits, advance a host of other environmental co-benefits, and offer farmers, ranchers and foresters new revenue streams. The funding included an unprecedented $1.1 billion investment across 81 projects through the Regional Conservation Partnership Program (RCPP), which takes a voluntary approach to expand the reach of conservation efforts and climate-smart agriculture through public-private partnerships.[154]

4.1.1.3 Producers participate in federal programs that restore environmentally valuable or low-productivity areas to natural habitat, as well as Farm Bill conservation programs like the Conservation Reserve Program (CRP) and the Healthy Forests Reserve Program (HFRP) which help restore natural habitats and promote the recovery of endangered or threatened species, improve plant and animal biodiversity and enhance carbon sequestration.

4.1.2 Producers continue to adopt and support the development of innovations that improve crop production.

4.1.2.1 Genetics and Biotechnology: Advances have allowed producers to reduce tillage, pesticide usage, fuel consumption and GHG emissions while maintaining or improving yields. Producers evaluate options and work with their seed providers to select the varieties that better adapt to their soil, climate, environmental and socioeconomic factors.

4.1.2.2 Equipment: Innovations like improved no-till drills, draper heads for combining soybeans, air seeders and Y Drops for applying fertilizer in-season have improved efficiency by increasing the speed and accuracy of planting and harvesting.

In fiscal year 2023, USDA supported more than 45,000 conservation contracts, more than any year in the 89-year history of USDA's Natural Resources Conservation Service, totaling over $2.8 billion in financial assistance to producers for conservation efforts.[155]

4.1.2.3 Technology and Data: Precision agriculture technology, Global Positioning System (GPS), yield monitors and other technological advances have improved management data and helped producers optimize costs and yields.

4.1.2.4 Weather Forecasting: More accurate weather forecasting and technological improvements provide access to forecast data both in the field and remotely, enabling producers to improve decision-making, reduce risk, and more accurately meet their crops' need.

Conservation Stewardship Program – Rewards producers for overall conservation performance across entire operations.[156]

4.1.2.5 Expansion of grain uses: More value-added products expand the domestic and international marketing opportunities for producers.

4.1.3 Producers continue to adopt and support the development of innovations that improve crop management.

4.1.3.1 Cloud computing allows increased data storage, management and remote access to improve crop management decisions.

Due to farmers using conservation tillage, potential fuel use has been reduced by 763 million gallons of diesel equivalents annually, roughly the amount of energy used each year by 2.8 million average households. In addition, potential emissions have been reduced by 8.5 million tons of CO2 equivalents annually, enough to offset the annual CO2 emissions of nearly 1.7 million passenger cars.[157]

4.1.3.2 Scalable sustainability software allows producers to model and compare different management options for their fields.

4.1.3.3 Robotics systems can assist with labor management, post-harvest processing, supply chain logistics and equipment operation.

4.1.3.4 Satellite imagery allows producers to remotely monitor crops and make management decisions in near real-time.

4.1.3.5 Improvements in Hyperspectral Imaging Spectroscopy (HIS) and the development of a Global Hyperspectral Imaging Spectral-library of Agricultural-Crops (GHISA)[120] will improve modeling, mapping and monitoring of agricultural crops globally.

4.1.3.6 Smart drainage systems, infield sensors, subsurface irrigation and on-farm irrigation storage and reuse allow for improved water management and irrigation.

4.1.4 Producers continue to adopt and support the development of innovations that improve the sustainable production of soybeans.

4.1.4.1 Clean energy technologies, energy storage, energy efficiency and carbon dioxide capture measures should be adopted as possible to reduce energy use and GHG emissions.

4.1.5 Continuous improvement is supported by a variety of regulated USDA conservation programs, initiatives and technology transfer systems, available to any group or individual interested in conserving natural resources and sustaining agricultural production in the U.S., regardless of size.[121] Available programs include:

USDA requires producers and landowners to obtain a farm and tract number to participate in certain USDA programs. This requirement creates a barrier for some landowners, particularly those with heirs' property issues, who cannot enroll in these programs because they do not have—and have not been able to get—a farm and tract number. In 2024, Congress directed USDA to develop and submit a proposal that will allow these landowners to participate in USDA programs. In addition, Congress has provided $3.5 million to help producers outside of the mainland USA pay transportation costs to get their products to market.[158]

4.1.5.1 The Conservation Reserve Program (CRP) protects the most sensitive areas by providing financial assistance to set aside on a long-term basis for cropland vulnerable to soil erosion or critical to wildlife habitat.

4.1.5.2 The Conservation Stewardship Program (CSP) rewards producers for overall conservation performance across entire operations by funding further on-farm improvements through the adoption of advanced conservation practices.

4.1.5.3 The Environmental Quality Incentive Program (EQIP) provides financial and technical assistance to increase the environmental quality of farmland still in production.

4.1.5.4 The Regional Conservation Partnership Program (RCPP) provides financial and technical assistance for locally identified projects funded by both federal and partnering entities to solve issues at the regional and watershed levels by encouraging land retirement, easements, partial-field practices and conservation practices on working farmland.

In 2023, in the first year of IRA funding, producers in the 29 top soy-producing states accessed IRA funding and enrolled 877,000 hectares (2,168,000 acres) acres at a cost of $298 million in conservation practices designed to address climate change.[159]

4.1.5.5 The Conservation Effects Assessment Project quantifies the environmental effects of conservation practices and programs on the environment and develops the science base for managing the agricultural landscape for environmental quality.[122] Project findings are used to guide USDA conservation policy and program development and to help conservationists, farmers and ranchers make more informed conservation decisions.

4.1.5.6 Landscape initiatives are used to accelerate the benefits of voluntary conservation programs, such as cleaner water and air, healthier soil, and enhanced wildlife habitat. Currently, NRCS operates 12 landscape initiatives across the U.S. for wildlife, water, ecosystems, pollinators, forestry and Four Frameworks for Conservation Action, including the Northern Bobwhite, Grasslands and Savannas.[123]

Between fiscal years 2017–2022, producers in the 29 top soy-producing states adopted IPM on 2.1 million hectares (5.2 million acres).[160]

4.1.5.7 Producers apply technology transfer of Best Management Practices available through numerous informational mechanisms such as Certified Crop Advisors, Discovery Farms, online crop rotation data for specific geographies and soil types, plot tours, experimental field, and research field days and Tactical Agriculture programs.

4.1.5.8 Field Office Technical Guides customized for local soil and conditions are available to enable better production and conservation measures by producers.[124] There are also Wildlife Habitat Evaluation Guides for numerous local plants and animals.

As of June 2022, 9.8 million hectares (24.2 million acres) were enrolled in the Conservation Reserve Program (CRP).[161]

4.1.6 The National Association of Conservation Districts represents the United States' 3,000 conservation districts and the 17,000 men and women who voluntarily serve on their boards. Conservation districts are local units of government established under state law to carry out natural resource management programs at the state level.[125]

4.1.7 USDA Climate Hubs support farmers, ranchers and forest landowners to develop strategies to maintain the productivity and profitability necessary to stay on the land through assessments, demonstrations, drought resources, ecosystem services and research data.[126]

AUDIT PROCEDURES

1. Over 99%[127] of U.S. soybean acreage participates in the U.S. Farm Program and is subject to audit. For the last eight years, an average of 21,609[128] Compliance Status Reviews have occurred annually. The average rate of noncompliance was 1.6% from 2016 through 2023.

2. Annual Internal Audits are conducted by producers.

3. Third-party Independent Audits of producers are performed to ensure the accuracy of internal audits made by producers and to ensure producers are in compliance with the Highly Erodible Land and Wetland Conservation Provisions. Third-party audits are conducted annually by the U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service which has technical staff in over 2,500 offices across the United States.

ANNUAL INTERNAL AUDIT BY PRODUCERS

Each producer who receives USDA Farm Program benefits is required to conduct an annual internal audit of compliance. Using Forms AD1026 and FSA-578, the producer must submit documentation of this audit to the USDA Farm Service Agency (FSA), which must review and approve the documentation prior to the producer's participation in USDA programs.

THIRD-PARTY INDEPENDENT AUDIT OF PRODUCERS

To ensure nationwide compliance, third-party audits are conducted annually. Third-party audits are conducted by the USDA Natural Resource Conservation Service (NRCS) with technical field agents in over 2,500 offices throughout the U.S.

On average, the USDA randomly selects around 21,600 farm fields each year for an onsite compliance review, with the number selected being sufficient to accurately assess compliance at the national level. Further reviews are carried out if USDA questions the compliance of any producer, and USDA employees are required to report any suspected violations. In addition, USDA, through the USDA Office of Inspector General (OIG), operates a hotline complaint system[129] to report violations of laws and regulations, including criminal activity, such as bribery, smuggling, theft, fraud and endangerment of public health or safety. The complainant may remain confidential (i.e., known only to the USDA OIG), allow their name to be used (i.e., included in any investigation that may take place) or anonymous (i.e., unknown even to the USDA OIG). The identity of complainants is protected under the provisions of the Whistleblower Protection Act of 1989[130] and the Inspector General Act of 1978 (5 USC Ch 4: Inspectors General).[131]

The list of onsite farm compliance reviews is broken down by state and county. Upon receipt of the compliance review list at the local level, the NRCS District Conservationist shall review and reconcile the list with the local FSA office. FSA employees based in each county maintain the list of producers selected in their county. Tract numbers are reviewed and, if necessary, updated by local offices to account for changes in ownership or farm organizational changes. USDA NRCS employees will visit each site to assess compliance and perform audits throughout the year.

Only the producers identified on the national selection list are required to be audited. However, USDA employees at the state and county levels may spot-check any producer not identified on the national selection list if there is reason to question the producer's compliance or if NRCS or FSA receives a hotline referral from the OIG.

Information provided by NRCS over the past eight years shows the following compliance review data:[132]

2016 **21,919 Compliance Reviews** 2.2% noncompliance	**2020** **22,113 Compliance Reviews** 1.5% noncompliance
2017 **23,944 Compliance Reviews** 2.0% noncompliance	**2021** **21,846 Compliance Reviews** 1.7% noncompliance
2018 **23,926 Compliance Reviews** 1.3% noncompliance	**2022** **19,271 Compliance Reviews** 1.3% noncompliance
2019 **18,274 Compliance Reviews** 1.4% noncompliance*	**2023** **21,584 Compliance Reviews** 1.5% noncompliance

*2019 Reviews were reduced due to federal disaster declarations in some states.

The regulations specifying how to carry out audits are set forth in the NRCS document, the National Food Security Act Manual, and are subject to further review and oversight as deemed necessary from the OIG and the U.S. Government Accountability Office (GAO).

THIRD-PARTY INDEPENDENT AUDITORS PROCESS AND QUALIFICATIONS

A detailed description of the process and auditors is shown in the NRCS National Food Security Act Manual, Parts 510 through 520.[133] Parts 518 and 519 outline how compliance reviews are conducted and quality assurance maintained.

Audits will be randomly selected from a national database of tracts as authorized by the USDA. Audits will be performed as determined by the State Conservationist, who will conduct compliance reviews within each state, as set forth in the following paragraph:

1. Knowledge, skills and abilities to assess the status of both House Education and Labor Committee and Workers' Compensation compliance: If there are currently no employees in a county with the requisite training and knowledge, skills and abilities to perform Compliance Reviews, the Area Conservationist or the State Technical Committee (STC) shall assign another employee the responsibility for that specific county.
2. The State Conservationist or designee shall ensure Compliance Review procedures are consistent with Parts 518 and 519 and the Quality Control Manual.
3. The State Conservationist or designee shall ensure that actions taken pertaining to requests for variances are executed and completed within the specified time frame.
4. The State Conservationist or designee shall ensure that policy execution is consistent and uniform within the state and among adjacent states.
5. The State Conservationist or designee shall ensure corrective action is taken to address deficiencies found in quality reviews.
6. The State Conservationist or designee shall determine if additional reviews are required.
7. The State Conservationist or designee shall provide training and follow-up to correct deficiencies.
8. The State Conservationist or designee shall identify potential cases of fraud, waste and abuse.

Societe Generale de Surveillance (SGS) conducted a review of the USDA-Natural Resource Conservation Service (NRCS) audit process, as described above, for the purpose of assessing compliance with ISO 17021-1:2015, specifically in regard to inspectors, their training and the overview of the program. Based upon document reviews, including manuals, organizational charts, maps and compliance processes during the audit, the auditors determined that NRCS met the equivalency requirements of eight primary standards of ISO 17021-1:2015.

GOVERNANCE

Soybean Export Sustainability, LLC (SES) is a U.S. based standard-setting organization operating and managing the U.S. Soy Sustainability Assurance Protocol.

SES is an independent organization comprised of different stakeholders in the U.S. Soy market, including soybean producers and processors, traders and logistics providers as well as NGOs and scientific research institutes. SES operates through a Board of Managers (Board), an Advisory Committee (Committee) and a Secretary who is responsible for the day-to-day operations.

The Board consists of seven members with equal voting rights, representing both a diverse set of skills and experiences as well as the different stakeholders. The Board Members are appointed for a period of one year.

The Board has the freedom to delegate tasks to the Secretary.

The Board will appoint the Secretary. The Secretary could be comprised of different natural persons or represented by one person, and where needed, the Secretary is free to call in external advice.

SES has appointed a law firm that is consulted on all relevant legal matters.

INTERNATIONAL VERIFICATION

Soybean Export Sustainability, LLC, (SES) will provide shipment-specific recordkeeping and documentation information for U.S. soybeans and U.S. soybean by-products. To ensure proper accounting of U.S. soybeans compliant with this Protocol up to the point where certificates are issued for batches of compliant soy at the point of export, as well as U.S. Soy sold through the value chain, the Protocol requires the following:

1. SES, acting as the developer, owner and operator of the Protocol, will annually determine the total amount of U.S. Soy that is in compliance with the Protocol based on information provided by the authorized audit bodies.

    a. This determination will be based on a calculation of the total number of soybean-producing acres that the group has entered into the Protocol and the average yield per acre recorded by the group.

2. This information will be maintained via a recordkeeping system that resides on an internet-accessible database (the Database).

3. A unique certificate will be produced for each batch of U.S. Soy exported or transferred under this Protocol that is compliant and recorded in the Database.

4. Exporters and Customers using the Database will establish and maintain a firm-specific record that will provide the necessary information for a uniquely identified shipment-specific document to accompany individual U.S. Soy exports.

5. In order to receive the certificate of compliance with this Protocol, an exporter or customer desiring to transport certified soy must:

    a. Register as a user of the U.S. Soy Sustainability Assurance Protocol (SSAP).

    b. Establish an account-specific and secure record on the Database.

    c. Document shipment-specific information on the secure record. The record created and maintained by the firm will include, at a minimum, the volume and date of shipment of soy. Additional information may be recorded by the Shipper.

    d. Agree to allow SES access to the volume and date of shipment of soy from the U.S.

6. Each shipment of soy certified by this Protocol will be accompanied by a uniquely identified (numbered) shipment-specific document containing selected information from the Shippers' record, and an SES attestation that the specific batch of soy follows a volume of Protocol-compliant soy verified by the authorized audit body.

7. In no circumstance will an Exporter or Customer be issued a certificate if the batch in question is not from a volume of Protocol-compliant soy verified by the authorized audit body, or if the certificate would result in that soy shipment exceeding the volume of Protocol-compliant soy verified by the authorized audit body. This ensures that the volume of Protocol-compliant soy as claimed by SES-issued certificates, never exceeds the total volume of Protocol-compliant soy entered into the system (recorded in point 1 above).

8. SES will use the volume and date of shipments of soy to manage and provide necessary reporting on the Protocol. Soybean Export Sustainability, LLC, will also maintain the website and an alternative/backup system for document issuance and recordkeeping should the web-based system not be available.

For reference, the Database can be accessed at www.usses.org.

ADDITIONAL INFORMATION

The United States Department of Agriculture's Natural Resources Conservation Service and the National Agricultural Statistics Service are key agencies at work to ensure responsible agriculture production in the United States.

NATURAL RESOURCES CONSERVATION SERVICE

https://www.nrcs.usda.gov/

The mission of the Natural Resource Conservation Service (NRCS) is to provide national leadership in the conservation of soil, water and related natural resources. The NRCS provides technical assistance and incentive-based conservation programs to landowners and land managers throughout the United States as part of the U.S. Department of Agriculture (USDA). USDA invests approximately $6 billion annually in agriculture conservation efforts, including staffing over 2,500 conservation offices and employing 10,000 individuals in conservation and compliance. In addition, President Biden signed into law the Inflation Reduction Act (IRA), which provides an additional $19.5 billion to NRCS to work with farmers to address climate change. Specifically, the law funds efforts to directly improve soil carbon, reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane or nitrous oxide emissions associated with agricultural production.

For fiscal year 2023, NRCS released data showing its investment of over $2.8 billion in financial assistance for conservation that supported more than 45,000 contracts, more than any year in the agency's 89-year history.

NATIONAL AGRICULTURAL STATISTICS SERVICE

https://www.nass.usda.gov/

The National Agricultural Statistics Service (NASS) provides timely, accurate and useful statistics in service to U.S. agriculture. The USDA's NASS conducts hundreds of surveys every year and prepares reports covering virtually every aspect of U.S. agriculture. Production and supplies of food and fiber, prices paid and received by farmers, farm labor and wages, farm finances, chemical use and changes in the demographics of U.S. producers are only a few examples. On February 13, 2024, the Agency released the 2022 Census of Agriculture, which provides the most up-to-date information on U.S. agriculture.[134]

SUSTAINABILITY GOALS

FOR CONTINUOUS IMPROVEMENT OF
THE U.S. SOYBEAN INDUSTRY

The United States soybean producer organizations, including the United Soybean Board (USB), American Soybean Association (ASA) and the U.S. Soybean Export Council (USSEC), concurred upon a national strategy for further enhancing U.S. soybean sustainability through the improvement of Key Performance Indicators (KPIs) in environmental, economic and social sectors.

BY 2025, U.S. SOYBEAN FARMERS AIM TO:

- Reduce land use impact by 10% (measured as acres per bushel)
- Reduce soil erosion by 25% (measured as tons per bushel)
- Increase energy use efficiency by 10% (measured as BTUs per bushel)
- Reduce total greenhouse gas emissions by 10% (measured as pounds of CO2-equivalent gasses emitted per year)

U.S. Soy commits to focusing resources on research, outreach and measurements to make certain we are achieving these targeted goals. National benchmarks for resource use/impact per unit of production on land use, soil erosion, energy use and greenhouse gas emissions for U.S. soybeans are measured by Field to Market,[135] based upon 2000 national-level data of the U.S. Department of Agriculture and other public sources. This Field to Market process will improve efficiency and reduce impacts across soybean-producing regions.

U.S. Soy's commitment to sustainability is a long-term promise rooted in conservation programs created by the U.S. Department of Agriculture over 75 years ago. U.S. Soy recognizes that sustainability is defined by continuous improvement.

FOOTNOTES

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EXCEPTIONAL COMPOSITION

U.S. soybeans have an excellent meal nutritional bundle (protein, amino acids and energy) and superior oil functionality and performance. These attributes give U.S. Soy an edge over the competition with continuous (or ongoing) innovation in the pipeline to ensure the U.S. remains the leader in the soy industry.

CONSISTENT SUPPLY

The U.S. has an abundant supply of soy that can be reliably moved from the field to domestic end users or to the coasts for export using the best transportation infrastructure in the world.

SUSTAINABLE FARMING PRACTICES

U.S. soybean farmers are the most sustainable in the world. Through their commitment to continuous improvement, U.S. soybean farmers are committed to taking care of the environment, being good citizens and producing their crop as efficiently as possible to deliver the most sustainably grown soy in the world.

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The soybean industry is constantly innovating, whether in seed development, production practices or marketing opportunities. The U.S. Soy industry vows to meet the needs of a growing world while protecting our natural resources.

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