### STATE GUIDELINES FOR THE SOIL HEALTH IMPLEMENTATION PROGRAM (SHIP)

Allocation Period Begins: January 1– March 1, 2024

Oklahoma Conservation Commission in cooperation with Oklahoma's 84 Conservation Districts

Approved by the Conservation Commission on 12/04/2023

# I. PURPOSE

Soil health focused conservation in rural as well as urban settings is the use of best management practices that restore and maintain a soil's capacity to function as a biological system, increase its organic matter, and improve its structure, and increases water and nutrient holding capacity. A large and active community of soil micro and other organisms is the foundation of soil structure, function, and ecosystem health at all trophic levels and is therefore one of the primary goals. This often results in increased resilience in both land and operation as natural system dynamics are restored, input costs are reduced, and product quality often improves.

The Conservation Commission (Commission) hereby establishes the Soil Health Implementation Program (SHIP). The Soil Health Implementation Program will offer an integrated multi-practice approach to conservation through direct conservation planning and close mentorship from the Commission Soil Health Team. Through this program, the Commission will accomplish the following objectives:

- 1. Work with agricultural producers in cropping, livestock, and urban operations to provide technical assistance and planning to implement or complete a system of soil health focused conservation designed to improve land and operational resilience,
- 2. Make funds available to qualifying landowners and/or operators that will assist them in implementing the planned conservation practices that will improve soil health,
- 3. Collect soil health data necessary to monitor changes on participating farms and continue building the state's soil health database, and
- 4. Build producer mentor networks and enable greater education and outreach in promotion of soil health focused conservation.

While the SHIP will touch most common resource concerns in some way, the primary focus will be on soil and water. Inferior and even poor land management practices can contribute to degradation in natural resources in multiple ways. The more prominent concerns that will be addressed by this program include:

- soil erosion caused by wind and water,
- unprotected soil, decreased infiltration, compaction, and other degraded physical properties,
- soil health degradation caused by a loss of organic matter and function as a biological system,
- water quality degradation due to excess runoff of nutrients, sediments, and other pollutants, and
- plant and forage health and quality.

The Commission herein establishes the list and description of SHIP policies. Any exceptions from these established guidelines shall be approved by the Commission.

### **ALLOCATION OF FUNDS**

The Commission allocates \$1,000,000 in cost share funds to the SHIP. Each approved applicant may be eligible for up to \$40,000 over a three-year program engagement for implementing soil health conservation practices in accordance with an approved SHIP conservation plan. All practices must be completed, and cost share payments disbursed within three-years of their signed SHIP conservation plan.

## II. POLICIES

## Program Period

The SHIP will begin on January 1, 2024 and continue until funding is exhausted. Current plans are to request funding annually for SHIP as an integral component of the base Soil Health Program budget. The SHIP, therefore, will maintain indefinite program activity depending upon recurring funding.

### **Allocation Period**

The allocation period is defined as the period the Commission Soil Health Team will obligate program funding. The initial allocation period will be January 1 – March 1, 2024. Depending upon program engagement from this point, subsequent allocation periods will be opened until remaining funds are obligated.

### **Eligibility Requirements**

The SHIP is for individuals interested in the adoption of best management practices identified through planning that complete a system of conservation focused on soil health principles. All landowners/operators selected for participation are required to commit to a three-year engagement for technical and financial assistance to accomplish their SHIP conservation plan goals.

Applicants must be a district cooperator with an approved cooperator agreement.

Fields or property designated for implementation cannot be enrolled in other programs (e.g., EQIP) accomplishing the same practice implementation.

Applicants must agree to maintain the conservation practice(s) for the expected life specified by the practice standard and/or the recommendation of the Commission Soil Health Team consultant.

Applicants that lease the land must submit a landowner consent form with their application. For highest consideration of viability for SHIP, it is preferred that lease terms cover the length of the program period enrolled. For those with annual leases, applicants who document multi-year engagement of the property will strengthen consideration for selection.

Applicants must agree to soil health testing/monitoring conducted by the Commission Soil Health Team over the course of their program involvement.

SHIP participants must agree to contribute to the mentorship of other producers in soil health focused conservation. This may include hosting field days (no more than one per year), participating in economic studies, or participating in education and outreach activities.

Conservation Commissioners, Conservation Commission staff, Conservation District employees or the spouses of any of these people shall not be eligible to participate in the SHIP.

Conservation district directors are eligible to participate in the SHIP under the following conditions:

- 1. Only two conservation district board members can apply and participate.
- 2. Individual conservation district board members applying cannot discuss any element of the SHIP including but not limited to practices, rates, average costs, selection criteria, application approval/disapprovals, cost-share payments, and extensions.
- 3. Individual conservation district board members applying for the SHIP must abstain from voting/approving any elements of the program.
- 4. Individual conservation district board members cannot use their position as a board member to improve or elevate their individual chances of becoming a successful applicant.

### Technical Representative(s)

The Commission Soil Health Team will serve as the SHIP technical representatives. Their responsibilities include:

- conducting the application review and selection process,
- conducting field visits as necessary to determine landowner/operator needs,
- developing conservation plans with design and schedule of practice installations,
- determining compliance with SHIP practices standards and specifications,
- certifying practice implementation in accordance with the SHIP conservation plan,
- preparing necessary payment documentation for conservation districts to process a claim for reimbursement , and
- confirming landowner/operator receives payment(s).

### **Eligible Soil Health Implementation Program Conservation Practices**

All conservation practices listed below are eligible to applicants based on needs outlined in the SHIP conservation plan developed with and approved by a Commission Soil Health Team member. Conservation practices reflect those as referenced from NRCS national conservation practice standards and shall be implemented according to these standards and specifications unless otherwise authorized by a Commission Soil Health Team member. If it becomes necessary to add practices, the Commission will reference the same NRCS national standards and specs document and include and implement them accordingly.

### **Priority Practices:**

### <u>325 - High Tunnel System</u>

- Definition: An enclosed polyethylene, polycarbonate, plastic, or fabric covered structure that is used to cover and protect crops from sun, wind, excessive rainfall, or cold, to extend the growing season in an environmentally safe manner.
- Purpose: Improve plant health and vigor.

### 327- Conservation Cover

Definition: Establishing and maintaining permanent vegetative cover.

- Purpose:
- Reduce sheet, rill, and wind erosion and sedimentation
  - Reduce ground and surface water quality degradation by nutrients and surface water quality degradation by sediment
  - Reduce emissions of particulate matter (PM), PM precursors, and greenhouse gases.
  - Enhance wildlife, pollinator, and beneficial organism habitat.
  - Improve soil health.

### 328- Conservation Crop Rotation

- Definition: A planned sequence of crops grown on the same ground over a period of time (i.e., the rotation cycle)
- Purpose:

#### • Reduce sheet, rill, and wind erosion.

- Maintain or increase soil health and organic matter content.
- Reduce water quality degradation due to excess nutrients.
- Improve soil moisture efficiency.
- Reduce the concentration of salts and other chemicals from saline seeps.
- Reduce plant pest pressures.
- Provide feed and forage for domestic livestock.
- Provide food and cover habitat for wildlife, including pollinator forage, and nesting.

#### <u>329 – Residue and Tillage Management, No Till</u>

- Definition: Limiting soil disturbance to manage the amount, orientation and distribution of crop and plant residue on the soil surface year around.
- Purpose: Reduce sheet, rill and wind erosion and excessive sediment in surface waters.
  - Reduce tillage-induced particulate emissions.
  - Maintain or increase soil health and organic matter content.
  - Increase plant-available moisture.
  - Reduce energy use.
  - Provide food and escape cover for wildlife.

#### 336- Soil Carbon Amendment

Definition: Application of carbon-based amendments derived from plant materials or treated animal byproducts.

Purpose: • Improve or maintain soil organic matter.

- Sequester carbon and enhance soil carbon (C) stocks.
- Improve soil aggregate stability.
- Improve habitat for soil organisms.

#### <u>338 – Prescribed Burning</u>

Definition: Planned fire applied to a predetermined area.

Purpose: • Manage undesirable vegetation to improve plant community structure and composition

- Manage pests, pathogens, and diseases to reduce plant pressure
- Reduce wildfire hazards from biomass accumulation
- Improve terrestrial habitat for wildlife and invertebrates
- Improve plant and seed production, quantity and/or quality.
- Facilitate distribution of grazing and browsing animals to improve forageanimal balance.
- Improve and maintain habitat for soil organisms and enhance soil health

#### <u> 340 – Cover Crop</u>

Definition: Grasses, legumes, and forbs planted for seasonal vegetative cover.

#### Purpose:

- Reduce erosion from wind and water.
  - Maintain or increase soil health and organic matter content.
- Reduce water quality degradation by utilizing excessive soil nutrients.
- Suppress excessive weed pressures and break pest cycles.
- Improve soil moisture use efficiency.
- Minimize soil compaction.

#### <u>382- Fence</u>

people.
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Purpose: • Provide a means to control the movement of animals, people, and vehicles to accomplish specific conservation objectives.

#### 386- Field Border

- Definition: A strip of permanent vegetation established at the edge or around the perimeter of a field.
- Purpose: Reduce erosion from wind and water and reduce excessive sediment to surface waters (soil erosion).
  - Reduce sedimentation offsite and protect water quality and nutrients in

surface and ground waters (water quality degradation).

• Provide food and cover for wildlife and pollinators or other beneficial organisms (inadequate habitat for fish and wildlife).

- Reduce greenhouse gases and increase carbon storage (air quality impact).
- Reduce emissions of particulate matter (air quality impact).

### <u> 393 – Filter Strip</u>

- Definition: A strip or area of herbaceous vegetation that removes contaminants from overland flow.
- Purpose: Reduce suspended solids and associated contaminants in runoff and excessive sediment in surface waters.
  - Reduce dissolved contaminant loadings in runoff.
  - Provide suspended solids and associated contaminants in irrigation tailwater and excessive sediment in surface waters.

### 484 - Mulching

Definition: Applying plant residues or other suitable materials to the land surface.

#### Purpose:

- Improve the efficiency of moisture management
- Reduce irrigation energy used in farming/ranching practices and field operations
- Improve the efficient use of irrigation water
- Prevent excessive bank erosion from water conveyance channels
- Reduce concentrated flow erosion
- Reduce sheet, rill, & wind erosion
- Improve plant productivity and health
- Maintain or increase organic matter content
- Reduce emissions of particulate matter

### 512 – Pasture and Hay Planting

- Definition: Establishing adapted and compatible species, varieties, or cultivars of perennial herbaceous plants suitable for pasture or hay production.
- Purpose: Provide or increase forage supply during periods of low forage production
  - Reduce soil erosion
  - Improve water quality
  - Improve air quality
  - Improve soil health

#### <u>516 – Livestock Pipeline</u>

- Definition: A pipeline and appurtenances installed to convey water for livestock or wildlife.
- Purpose: Convey water to points of use for livestock or wildlife
  - Reduce energy use

#### 528 – Prescribed Grazing

- Definition: Managing the harvest of vegetation with grazing and/or browsing animals with the intent to achieve specific ecological, economic, and management objectives.
- Purpose: Improve or maintain desired species composition, structure and/or vigor of plant communities.

• Improve or maintain quantity and/or quality of forage for grazing and browsing animals' health and productivity.

- Improve or maintain surface and/or subsurface water quality and/or quantity.
- Improve or maintain riparian and/or watershed function.
- Reduce soil erosion and maintain or improve soil health.
- Improve or maintain the quantity, quality, or connectivity of food and/or cover available for wildlife.
- Manage fine fuel loads to achieve desired conditions.

#### <u>533 – Pumping Plant</u>

Definition: A facility that delivers water or wastewater at a designed pressure and flow rate.

Purpose: • Remove excessive subsurface or surface water

- Provide efficient use of water on irrigated land
- Transfer of livestock waste or liquid byproducts as part of a wastewater transfer system
- Reduce energy use

#### 550 - Range Planting

- Definition: The seeding and establishment of herbaceous and woody species for the improvement of vegetation composition and productivity of the plant community to meet management goals.
- Purpose: Provide or improve forages for livestock
  - Provide or improve forage, browse, or cover for wildlife
  - Reduce erosion by wind and water
  - Improve water quality and quantity
  - Restore hydrologic function
  - Increase and/or stabilize carbon balance and sequestration

#### 570 – Stormwater Runoff Control

- Definition: Measures or systems to control the quantity and quality of stormwater runoff.
- Purpose: Minimize erosion and sedimentation during and following construction activities

- Reduce the quantity of stormwater leaving developing or developed sites
- Improve the quality of stormwater leaving developing or developed sites

### 614 – Watering Facility

Definition: A watering facility stores or provides drinking water to livestock or wildlife.

- Purpose: Supply
  - Supply daily water requirements.
    - Improve animal distribution.
    - Provide a water source that is an alternative to a sensitive resource.

### 642 – Water Well

Definition: A hole drilled, dug, driven, bored, jetted, or otherwise constructed into an aquifer for agricultural water supply.

## Purpose: • Address the need for adequate livestock water quality and quantity

- Provide water for terrestrial wildlife
- Provide irrigation water

## Ancillary practices (used only to facilitate priority practices above):

### <u> 314 – Brush Management</u>

Definition: The management or removal of woody (nonherbaceous or succulent) plants including those that are invasive and noxious.

- Purpose: Create the desired plant community consistent with the ecological site or a desired state within the site description.
  - Restore or release desired vegetative cover to protect soils, control erosion, reduce sediment, improve water quality, or enhance hydrology.
  - Maintain, modify, or enhance fish and wildlife habitat.
  - Improve forage accessibility, quality, and quantity for livestock and wildlife.
  - Manage fuel loads to achieve desired conditions.

• Pervasive plant species are controlled to a desired level of treatment that will ultimately contribute to creation or maintenance of an ecological site description "steady state" addressing the need for forage, wildlife habitat, and/or water quality.

### 342- Critical Area Planting

- Definition: Establishing permanent vegetation on sites that have, or are expected to have, high erosion rates, and on sites that have physical, chemical, or biological conditions that prevent the establishment of vegetation with normal seeding/planting methods.
- Purpose: Stabilize areas with existing or expected high rates of soil erosion by wind or water.

• Stabilize stream and channel banks, pond and other shorelines, earthen features of structural conservation practices.

• Stabilize areas such as sand dunes and riparian areas.

#### 355- Groundwater testing

Definition:	Testing the physical, biological, and chemical quality of groundwater from a
	water well or spring.

Purpose: • To determine the suitability of a groundwater supply source for livestock watering, irrigation, wildlife, or other agricultural uses.

561 – Heavy Use Protection

Definition: Stabilization or protection of an intensively used area.

- Purpose: Reduce soil erosion
  - Provide a stable, noneroding surface for areas frequently used by animals, people, or vehicles
    - Protect or improve water quality

#### **Average Cost**

The SHIP will use a standard average cost (unit cost) for conservation practices based on Oklahoma NRCS EQIP payment rates. These average costs will be reviewed and updated by the Commission Soil Health Team as necessary based on NRCS cost updates and/or best professional judgement to maintain or improve incentive for adoption.

#### Maximum Program Payment

The Commission sets the maximum program payment over a three-year period at \$40,000 per participant.

#### **Application Process**

The Commission and conservation districts will advertise SHIP and accept applications throughout the open allocation period. Interested individuals should apply at their local conservation district. Applicants that lease the land must submit a landowner consent form with their application. Each applicant is limited to one application and must be a district cooperator. Conservation districts must submit all applications received in their offices, whether the district is participating in the program not, to the Commission Soil Health Team for review and approval.

#### **Review and Approval Process**

The Commission Soil Health Team will review and rank applications using a preset ranking tool. Applicants with top scores will be chosen for participation. Approved applicants and their conservation district will be notified no later than 45 days from the close of the allocation period. Commission Soil Health Team members will schedule an initial consultation with each approved participant to develop their SHIP conservation plan.

The Commission Soil Health Team will work to balance program participation across the state by selecting highest scoring participants from all five conservation district areas. Fulfillment of this objective depends upon extent of representation by districts submitting

applications. The goal for this program funding is to engage five producers from each area (25 total) with at least two of the total comprising urban producers.

## **SHIP Conservation Plan**

Successful applicants must complete a SHIP conservation plan to be eligible for program participation. The SHIP conservation plan comprises a three-year engagement to accomplish implementation of a conservation system focused on improving soil health. Participants will agree to continued consultation, allow necessary soil health monitoring, and be open to planned field days (no more than one per year) throughout their program engagement.

All SHIP conservation plans must be signed and dated by the participant and an OCC Soil Health Team representative before any program related work begins. An agreement becomes effective on the last date of signature.

### **Completion Dates**

Approved applicants will be required to complete all conservation practice implementation by the date specified within their SHIP conservation plan. Participants and their assigned Commission Soil Health Team member will mutually decide on a schedule of practice implementation over the three-year period of engagement.

### Payment Process

Districts of program participants will be asked to prepare an OSF3 for reimbursement once a Commission Soil Health Team member has verified the practice(s) was(were) implemented in accordance with the participant's SHIP conservation plan through onsite visit(s). A signed Certification of Completion and Acceptance documenting such will be submitted to the district to initiate the claim assembly.

SHIP reimbursements will be made to the conservation district by EFT. The conservation district will issue a district check to the applicant for the approved payment amount.

Conservation districts must provide an IRS Form 1099-MISC to any applicant receiving \$600 or more in payment(s) from the district during a calendar year. In accordance with IRS and Oklahoma Tax Commission regulations, conservation districts must file an IRS 1099-MISC form with the Internal Revenue Service and Oklahoma Tax Commission. Neither the conservation district nor the Commission provides tax advice; the applicant may wish to consult with an independent tax advisor regarding any potential tax consequences.

Participants are only eligible for reimbursement for practices implemented according to their SHIP conservation plans as verified and signed off on by an OCC Soil Health Team member. The SHIP conservation plan comprises a three-year engagement to accomplish a conservation system focused on improving soil health. Those participants who fail to complete the practices as planned or cancel their conservation plan before the three year timeline will forfeit remaining potential for reimbursement but will not have to pay back

monies received for practices already implemented and for which reimbursement has been received.

# III. ADMINISTRATIVE GUIDELINES

District Reporting and Accounting

- 1. Conservation Districts will work cooperatively with the Commission Soil Health Team to prepare SHIP claims including back-up documentation.
- 2. Conservation districts will be responsible for submitting the claim to the Commission for payment.
- 3. Conservation districts will be responsible for making payments to participants and issuing 1099s.

## **Commission Reporting and Accounting**

The Commission Soil Health Team shall conduct the following reporting and accounting procedures:

- 1. Receive and review SHIP claims for payment.
- 2. Maintain a SHIP allocation and expenditures tracking system. The system should allow for reporting by:
  - a. Conservation district
  - b. participant
  - c. conservation practice
  - d. agreement number
  - e. agreement date
  - f. payment date
  - g. amount paid
  - h. amount allocated