



Natural Resources Conservation Service  
U.S. DEPARTMENT OF AGRICULTURE



NATURAL RESOURCES CONSERVATION SERVICE

# Fundamentals of Conservation & Sustainability in Agriculture

CERTIFICATION



CERTIFICATION BLUEPRINT

## CERTIFICATION EXAM OVERVIEW

The NRCS Fundamentals of Conservation & Sustainability in Agriculture Certification confirms that individuals possess the essential knowledge and skills to obtain careers in agriculture and natural resources. The certification exam, hosted on the iCEV Testing Platform, consists of 100 questions. It evaluates the understanding of soil, plants, water, air and animals. The exam must be proctored in a controlled environment. Proctoring guidelines can be found at [www.icevonline.com/proctoring-guidelines](http://www.icevonline.com/proctoring-guidelines).

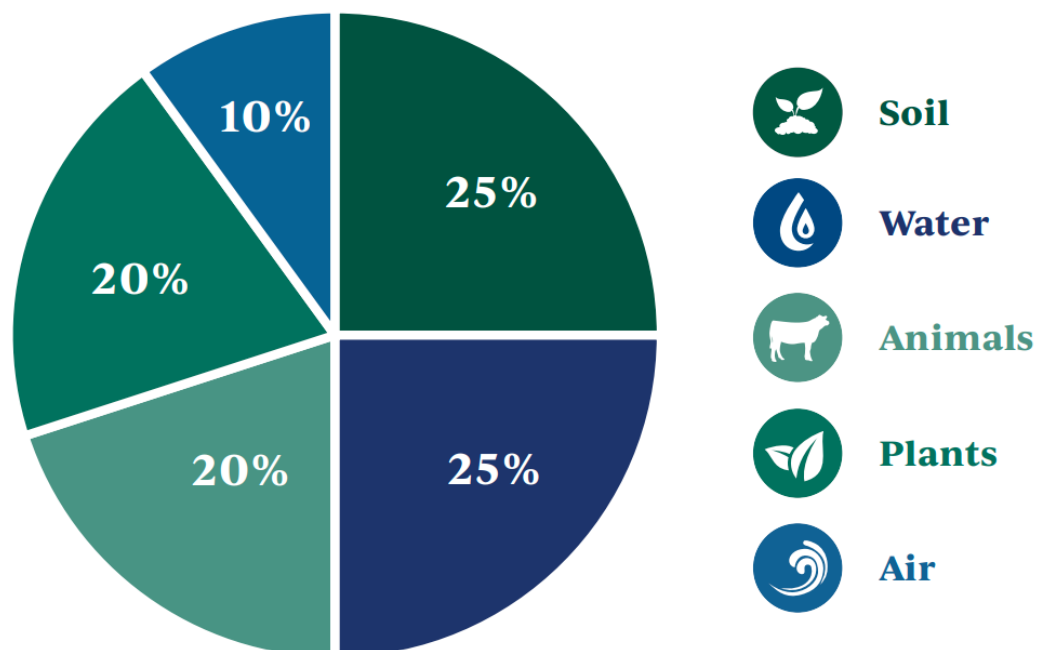
More information about the certification and testing platform can be found at: <https://www.icevonline.com/professional-communications>.

## ABOUT THE USDA NRCS & TCP

The NRCS has partnered with industry professionals for over 80 years to protect natural resources. It focuses on building a diverse workforce, supporting urban agriculture, addressing climate change, and promoting equal opportunities. The NRCS mission is to help agriculture producers conserve resources and feed a growing world.

The Texas Corn Producers (TCP) represents the interests of Texas corn farmers through two groups: the Texas Corn Producers Board (TCPB) and the Texas Corn Producers Association (TCPA). TCPB, funded by a voluntary checkoff program, supports research, education, and promotion to benefit farmers. TCPA advocates for farmers and strengthens the corn industry in Texas.

## INDUSTRY STANDARDS OVERVIEW



# LEARNING OBJECTIVES & INDUSTRY STANDARDS

## 1. Soil

### 1.1 Soil: Introduction

- 1.1.1 To define soil
- 1.1.2 To analyze the role soil has in the world
- 1.1.3 To discover the physical, chemical and biological properties of soil

### 1.2 Soil: Components & Composition

- 1.2.1 To define the textures of soil
- 1.2.2 To analyze soil formation
- 1.2.3 To identify the living organisms within the soil surface
- 1.2.4 To discover how soil is changed and translocated

### 1.3 Soil: Health & Quality

- 1.3.1 To define soil health
- 1.3.2 To analyze the chemical, physical and biological properties of soil
- 1.3.3 To identify the inherent and dynamic qualities of soil

### 1.4 Soil: Conservation & Management

- 1.4.1 To analyze the activities and events affecting soil health
- 1.4.2 To define the five principles of soil health and productivity
- 1.4.3 To identify soil management strategies

## 2. Water

### 2.1 Water: Introduction

- 2.1.1 To define water
- 2.1.2 To analyze the role water has in the world
- 2.1.3 To discover how much water is in Earth

### 2.2 Water: Components & Composition

- 2.2.1 To define freshwater and its sources
- 2.2.2 To analyze the water cycle
- 2.2.3 To identify the properties of water

### 2.3 Water: Health & Quality

- 2.3.1 To define water quality
- 2.3.2 To analyze the regulations and standards for water quality
- 2.3.3 To identify how to test water quality and how water is treated

### 2.4 Water: Conservation & Management

- 2.4.1 To analyze water conservation practices in agriculture, industrial and human activities
- 2.4.2 To identify areas of water quality concern
- 2.4.3 To evaluate water to improve water quality

## 3. Plants & Animals

### 3.1 Plants & Animals: Introduction

- 3.1.1 To define an ecosystem
- 3.1.2 To analyze plants' roles in ecosystems
- 3.1.3 To analyze animals' roles in ecosystems
- 3.1.4 To discover how plants and animals work together to achieve a healthy ecosystem

### 3.2 Plants & Animals: Components & Composition

- 3.2.1 To understand how energy flows through trophic levels
- 3.2.2 To classify plants and animals based on their characteristics
- 3.2.3. To understand the relationship between plants, animals and the environment

### 3.3 Plants & Animals: Health & Quality

- 3.3.1 To understand the pests and diseases which affect plants and animals daily
- 3.3.2 To discover the environmental causes which are harmful to plants and animals and how to lessen the severity of harmful effects
- 3.3.3 To understand how human activities affect plant and animal health

### 3.4 Plants & Animals: Conservation & Management

- 3.4.1 To identify plant and animal resource concerns
- 3.4.2 To determine methods which mitigate damage to plants and animals in nature and agriculture
- 3.4.3 To understand the conservation and management efforts

## 4. Air

### 4.1 Air: Introduction

- 4.1.1 To define air quality
- 4.1.2 To analyze the role air plays on Earth
- 4.1.3 To discover the components of air
- 4.1.4 To analyze the management strategies used to positively increase air quality

### 4.2 Air: Components & Composition

- 4.2.1 To analyze the components and composition of air
- 4.2.2 To understand the role air components play in air pollution
- 4.2.3 To discover the activities which lead to the decrease of air quality

### 4.3 Air: Health & Quality

- 4.3.1 To define air health and quality
- 4.3.2 To analyze how air quality is measured
- 4.3.3 To discover the activities which lead to unhealthy air

### 4.4 Air: Conservation & Management

- 4.4.1 To analyze different air management practices
- 4.4.2 To understand the management strategies in general land management systems
- 4.4.3 To discover the management strategies in farming and ranching operations