Conservation Planning - Urban & Small-Scale

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MARION COUNTY SOIL AND WATER CONSERVATION DISTRICT

URBAN SOIL HEALTH

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

This work is supported by the U.S. Department of Agriculture – Natural Resources Conservation Service. The USDA-NRCS is an equal opportunity provider, employer, and lender.

Choose Your Adventure!

A) “Yah.. that’s not going to work. It’s too small.”

B) "Do you sell over $1,000 a year?”

C) “You have reached the voicemail of…”

D) “Thanks for reaching out, We can help with practices to improve soil and natural resources! Soil health is important on all scales!”

FARM NUMBER & ELIGIBILTY

1) Direct to Farm Service Agency to obtain Farm Number and complete eligibility documents.

2) "I'm a non-for-profit? Can I get a Farm Number?" Direct to FSA.

3) Schedule a site visit to assess resource concerns and discuss goals and practices.

4) Then direct to apply, if interested, by sending CPA1200 to USDA-NRCS District Conservationist with Farm Number.
"I can send this to you and/or help you fill it out during our site visit."

4) If you have any questions on the application, please ask.
It is brief and I can walk you through filling it out.

SITE PREPARATION & MAPPING

1) Soil Map

2) Topo Map

3) IDEM What's in My Neighborhood?

4) Aerial History

5) Higher quality third party map for planning such as Google Earth

SITE PREPARATION & MAPPING

Soils Map

Sources:

- **Web Soil Survey**
- **Conservation Desktop**

Map Unit Legend

Jefferson County, Indiana (IN077)

Jefferson County, Indiana (IN077)

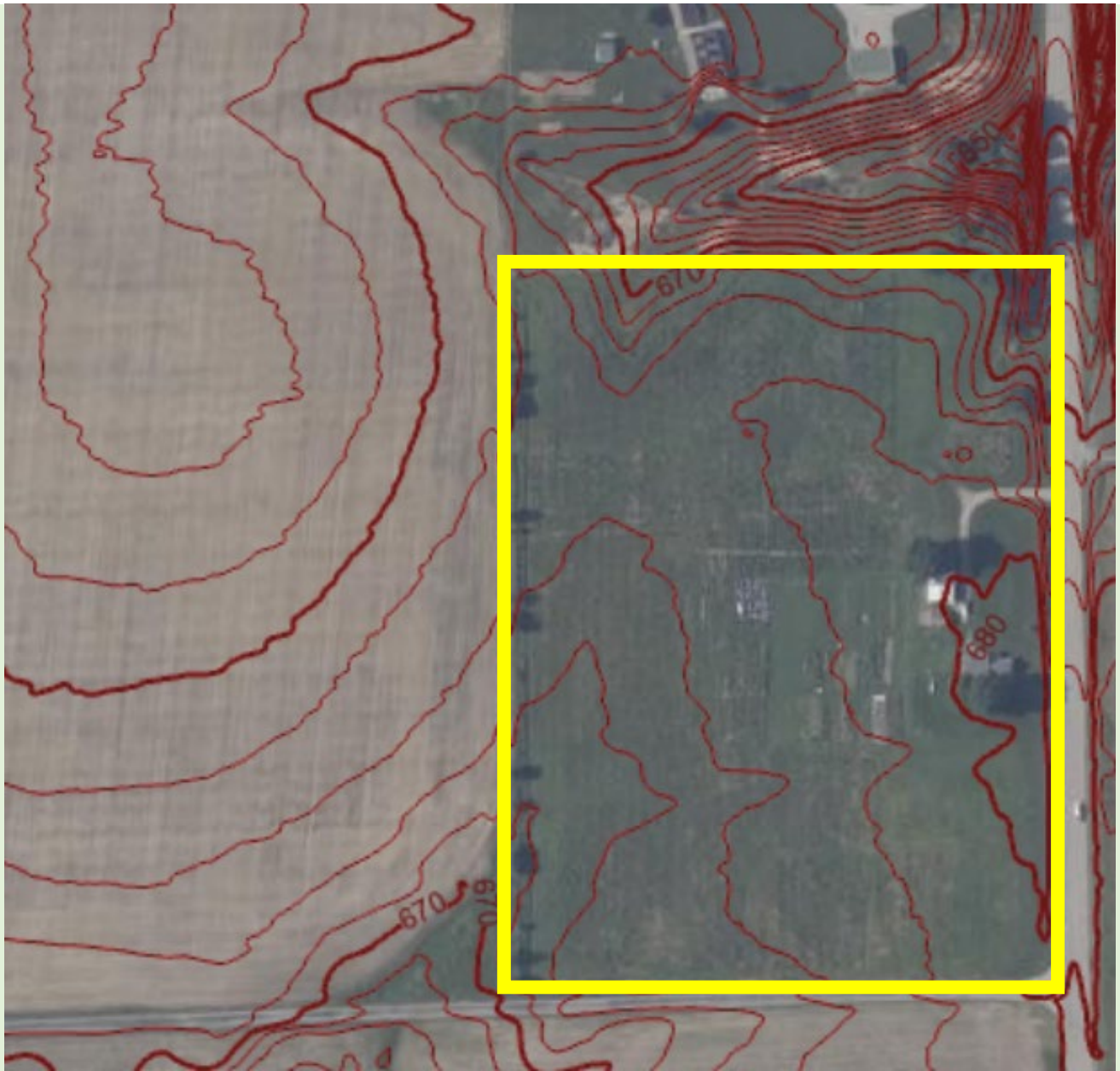
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CnB2	Cincinnati silt loam, 2 to 6 percent slopes, eroded	1.8	15.8%
DeC2	Deputy silt loam, 6 to 12 percent slopes, eroded	0.4	3.4%
DeC3	Deputy silt loam, 6 to 12 percent slopes, severely eroded	0.0	0.0%
RoA	Rossmoyne silt loam, 0 to 2 percent slopes	9.3	80.7%
Totals for Area of Interest		**11.6**	**100.0%**

SITE PREPARATION & MAPPING

Topo Map

Source:

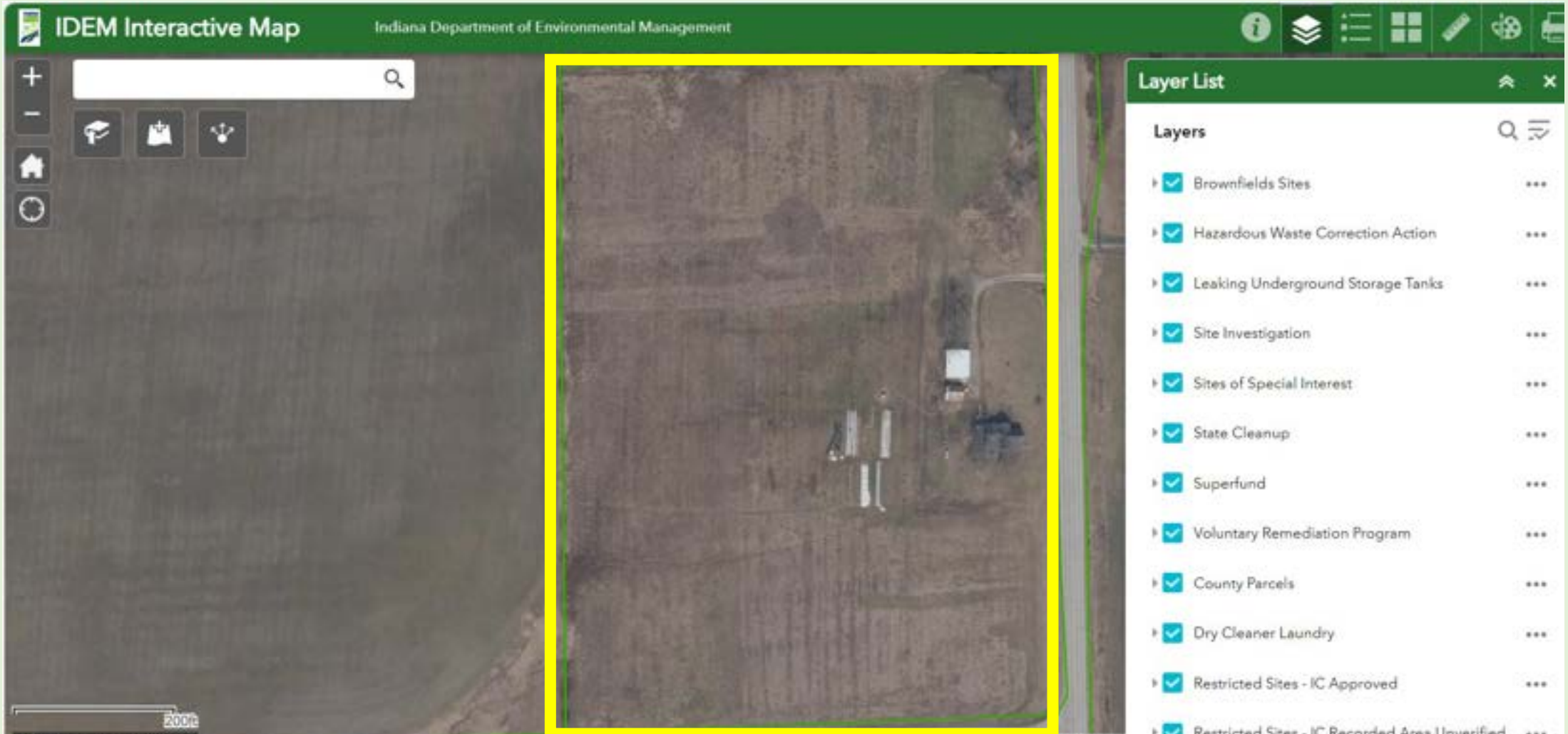
- **Conservation Desktop**
  - **2’ Contour layer**



SITE PREPARATION & MAPPING

Potential Contamination

- Source: IDEM What's in My Neighborhood?



SITE PREPARATION & MAPPING

Aerial History

- Conservation Desktop
- Web Soil Survey

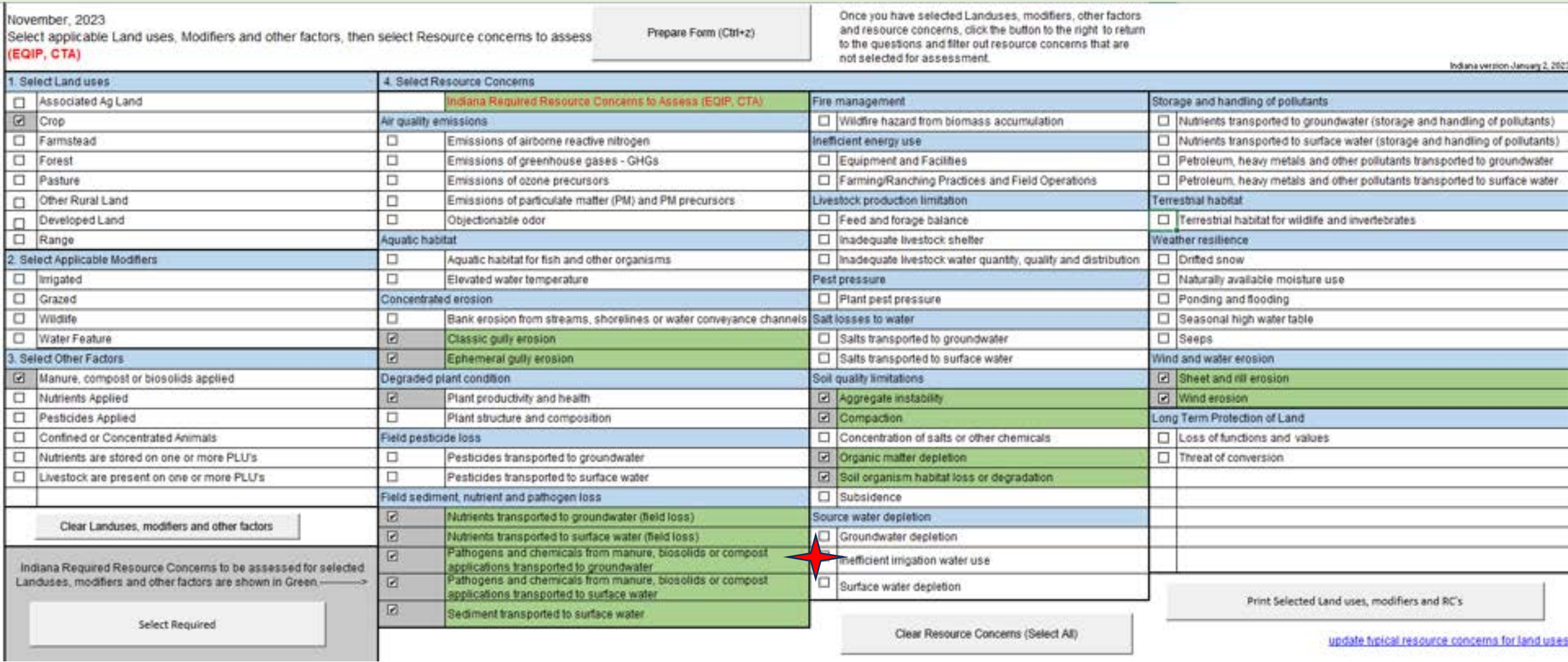
SITE PREPARATION & MAPPING

Aerial History

- Google Earth or Maps

Cropland Resource Concerns

Conservation Planning Tool - CART



November, 2023
Select applicable Land uses, Modifiers and other factors, then select Resource concerns to assess (EQIP, CTA)

Prepare Form (Ctrl+z)

Once you have selected Landuses, modifiers, other factors and resource concerns, click the button to the right to return to the questions and filter out resource concerns that are not selected for assessment.

Indiana version January 2, 2023

1. Select Land uses

- ☐ Associated Ag Land
- ☑ Crop
- ☐ Farmstead
- ☐ Forest
- ☐ Pasture
- ☐ Other Rural Land
- ☐ Developed Land
- ☐ Range

2. Select Applicable Modifiers

- ☐ Irrigated
- ☐ Grazed
- ☐ Wildlife
- ☐ Water Feature

3. Select Other Factors

- ☑ Manure, compost or biosolids applied
- ☐ Nutrients Applied
- ☐ Pesticides Applied
- ☐ Confined or Concentrated Animals
- ☐ Nutrients are stored on one or more PLU's
- ☐ Livestock are present on one or more PLU's

Clear Landuses, modifiers and other factors

Indiana Required Resource Concerns to be assessed for selected Landuses, modifiers and other factors are shown in Green ——>

Select Required

4. Select Resource Concerns

Indiana Required Resource Concerns to Assess (EQIP, CTA)

Air quality emissions
- ☐ Emissions of airborne reactive nitrogen
- ☐ Emissions of greenhouse gases - GHGs
- ☐ Emissions of ozone precursors
- ☐ Emissions of particulate matter (PM) and PM precursors
- ☐ Objectionable odor

Aquatic habitat
- ☐ Aquatic habitat for fish and other organisms
- ☐ Elevated water temperature

Concentrated erosion
- ☐ Bank erosion from streams, shorelines or water conveyance channels
- ☑ Classic gully erosion
- ☑ Ephemeral gully erosion

Degraded plant condition
- ☑ Plant productivity and health
- ☐ Plant structure and composition

Field pesticide loss
- ☐ Pesticides transported to groundwater
- ☐ Pesticides transported to surface water

Field sediment, nutrient and pathogen loss
- ☑ Nutrients transported to groundwater (field loss)
- ☑ Nutrients transported to surface water (field loss)
- ☑ Pathogens and chemicals from manure, biosolids or compost applications transported to groundwater
- ☑ Pathogens and chemicals from manure, biosolids or compost applications transported to surface water
- ☑ Sediment transported to surface water

Fire management
- ☐ Wildfire hazard from biomass accumulation

Inefficient energy use
- ☐ Equipment and Facilities
- ☐ Farming/Ranching Practices and Field Operations

Livestock production limitation
- ☐ Feed and forage balance
- ☐ Inadequate livestock shelter
- ☐ Inadequate livestock water quantity, quality and distribution

Pest pressure
- ☐ Plant pest pressure

Salt losses to water
- ☐ Salts transported to groundwater
- ☐ Salts transported to surface water

Soil quality limitations
- ☑ Aggregate instability
- ☑ Compaction
- ☐ Concentration of salts or other chemicals
- ☑ Organic matter depletion
- ☑ Soil organism habitat loss or degradation
- ☐ Subsidence

Source water depletion
- ☐ Groundwater depletion
- ☐ Inefficient irrigation water use
- ☐ Surface water depletion

Storage and handling of pollutants
- ☐ Nutrients transported to groundwater (storage and handling of pollutants)
- ☐ Nutrients transported to surface water (storage and handling of pollutants)
- ☐ Petroleum, heavy metals and other pollutants transported to groundwater
- ☐ Petroleum, heavy metals and other pollutants transported to surface water

Terrestrial habitat
- ☐ Terrestrial habitat for wildlife and invertebrates

Weather resilience
- ☐ Drifted snow
- ☐ Naturally available moisture use
- ☐ Ponding and flooding
- ☐ Seasonal high water table
- ☐ Seeps

Wind and water erosion
- ☑ Sheet and rill erosion
- ☑ Wind erosion

Long Term Protection of Land
- ☐ Loss of functions and values
- ☐ Threat of conversion

Clear Resource Concerns (Select All)

Print Selected Land uses, modifiers and RC's

update typical resource concerns for land uses

Site visit observations & questions

1. Are any gullies visible?

2. “How do you prepare your beds? How do you weed? What tools do you use”
    a. Any full width tillage

3. “Do you use cover crops?”

4. “Are you producing crops every week/month of the year that you want?”

5. Are there any sensitive areas or wells on the farm or adjacent?

6. “Do you soil test?”

7. “Do you apply nutrients (including compost)? How do you determine how much to apply?”
8. “Do you water your crops? How? For how many years?”

Maps and Notes

Feel free to follow along and make notes and draw practices on your map!

Planning! High Tunnel System

High Tunnel 30’ x 48’

Planning! Microirrigation

Drip microirrigation 150’ x 160’

Planning! Cover Crops

All current beds plus 50’ x 120’

Planning! Mulching

Mulching:
Compost on 120 growing beds: 2.5’ x 50’
Woodchips on 126 walkways: 1.8’ x 50’

Planning! Low Tunnels

Low Tunnels on 40 2.5’ x 50’ beds

Planning! Hedgerow

Hedgerow

Planning! Wildlife Planting

Pollinator Planting - plugs
Pollinator Planting - seed

High Tunnel System

PROVIDE:

1) **High Tunnel IR**

RESOURCE CONCERNS:

Plant productivity and health

SUPPORT:

1) **Purdue High Tunnel Handbook**
2) **Marionswcd.org High Tunnel Suppliers List**

Natural Resources Conservation Service

High Tunnel System
Practice Code 325

High Tunnel System Implementation Requirements

Description

A High Tunnel System (HTS) is an enclosed plastic, polyethylene, fabric, or polycarbonate (end walls only) covered structure that protects crops from sun, wind, excessive rainfall, and/or cold.

Improved Plant Productivity and Health

High tunnel systems extend the growing season by increasing soil and air temperatures, protecting crops against freezes and promoting vegetative growth. A HTS can extend the growing season to year-round production by modifying the growing environment. The grower can control temperature, moisture, and wind/sun exposure in high tunnel systems to minimize plant stress and maximize plant productivity.

Requirements

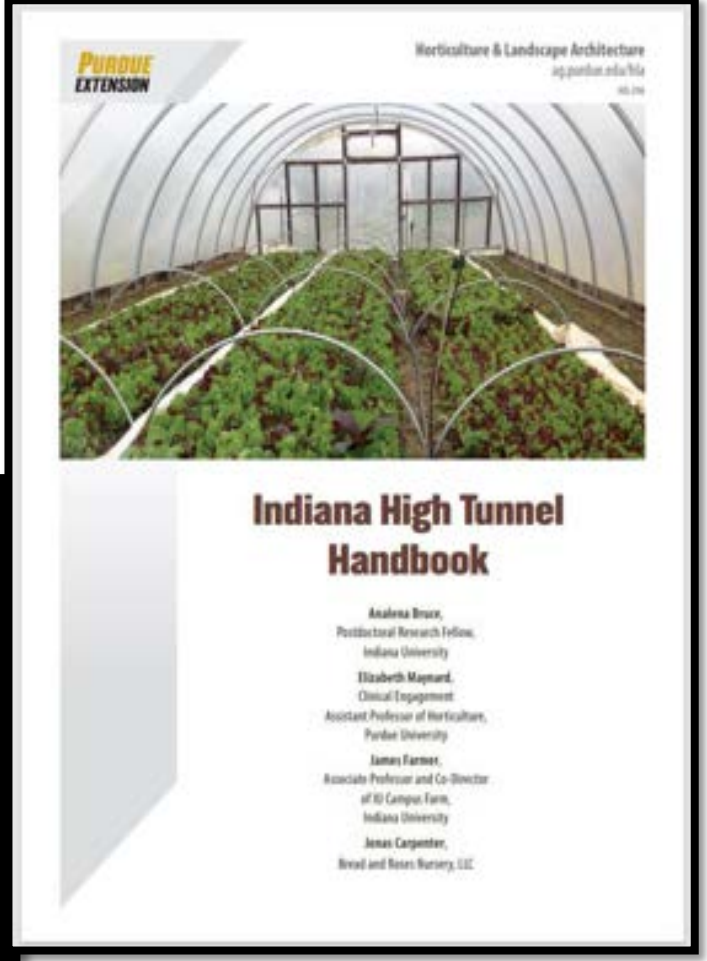
- Crops must be grown in the natural soil profile, or in raised beds up to 12 inches in height.
- This practice does not apply to crops grown outside of the natural soil profile (on tables/benches, portable pots, hydroponics, etc.).
- Install high tunnels according to manufacturers' instructions.
- End walls must be constructed. Local building materials or a manufactured kit may be used.
- The HTS frame must be at least 6 feet in height at the peak of the structure. It should be tall enough to accommodate typical operations.
- The covering must have a min. 4-year lifespan. Use a minimum of 6 millimeter greenhouse grade, UV-resistant material for polyethylene covers.
- Seed all disturbed areas to control erosion.
- HTS are not greenhouses or low tunnel systems.
- HTS cannot be used to provide shelter/housing for livestock or to store supplies or equipment.

Improved plant productivity and health in a high tunnel system.

- If the site is potentially impacted by zoning regulations or construction permitting, work with the regulatory authority early in planning and prior to contracting and construction.
- Before you dig and at least 2 working days prior to excavation, contact Indiana 811 by calling 811 or at indiana811.org for location of underground utilities. Beware of overhead utilities.

Site Selection:

- Lay out the structure location according to the site plan. The orientation of the tunnel is dependent on location, season and crops that will be grown. East-west orientation will optimize sun exposure and is beneficial in areas north of 40O latitude. In locations south of 40O latitude, consider north-south orientation for maximum ventilation during the summer.
- The natural slope should be less than 5%.
- Locate the structure near a viable water source for irrigation.
- High tunnels can create drainage and ponding issues under certain soil and/or landscape conditions. When needed, direct runoff away from the HTS by installing water management structures such as gutters, rock trenches, underground outlets or diversions.



PURDUE EXTENSION

Horticulture & Landscape Architecture

Indiana High Tunnel Handbook

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Associate Professor and Co-Director
of IU Campus Farm,
Indiana University

Jonas Carpenter,
Bread and Roses Nursery, LLC

Low Tunnel System

USDA Natural Resources Conservation Service

Low Tunnel System
Practice Code 821

Low Tunnel System Overview

Description
A Low Tunnel System (LTS) is an enclosed plastic, polyethylene, fabric, or polycarbonate covered structure that protects crops from sun, wind, excessive rainfall, or cold, extends the growing season and/or reduces pest pressure.

Low tunnels are small, portable structures that are no more than 4 feet in height. They are inexpensive, easy to construct and, if cared for, will last multiple growing seasons. They provide benefits in high tunnel systems and field conditions.

- Improved plant productivity and health
- Reduced plant pest pressure

Plant Productivity and Health
Low tunnels extend the growing season by increasing soil and air temperatures, protecting crops against mild freezes and promoting vegetative growth.

Depending on the covering used and crops grown, low tunnels can extend the growing season by at least two weeks in the spring and fall and up to year round production.

Low tunnels reduce plant stress by modifying the microenvironment within the tunnel. In addition to increasing temperatures, low tunnels reduce light intensity and block wind. These environmental modifications reduce evapotranspiration rates and decrease water stress in plants, resulting in healthier and more productive plants.

In areas where winter weather is significant, low tunnels can provide a physical barrier to ice and snow, enabling crops to successfully overwinter.

Reduced Pests
Low tunnel system use can significantly reduce pest damage and the viral diseases pests may transfer. Low tunnels exclude pest access to the crop. When

covers are applied immediately after planting, they decrease populations of cabbage worms, loopers, onion maggots, Colorado potato beetles, aphids, cutworms and flea beetles. Low tunnels are also used to exclude birds from ripening fruit.

A decrease in pesticide use, labor and crop loss can occur when low tunnels are used as a pest management strategy.

For crops that depend on insect pollination, it may be necessary to remove the row cover during the flowering stage to allow for pollination.

Materials and Construction
A low tunnel system is comprised of three components: the structure, covering and anchors.

Structure
A low tunnel structure is typically constructed of hoops placed every 4-5 ft down the row or bed. The

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PROVIDE:

1) **Low Tunnel Practice Overview**

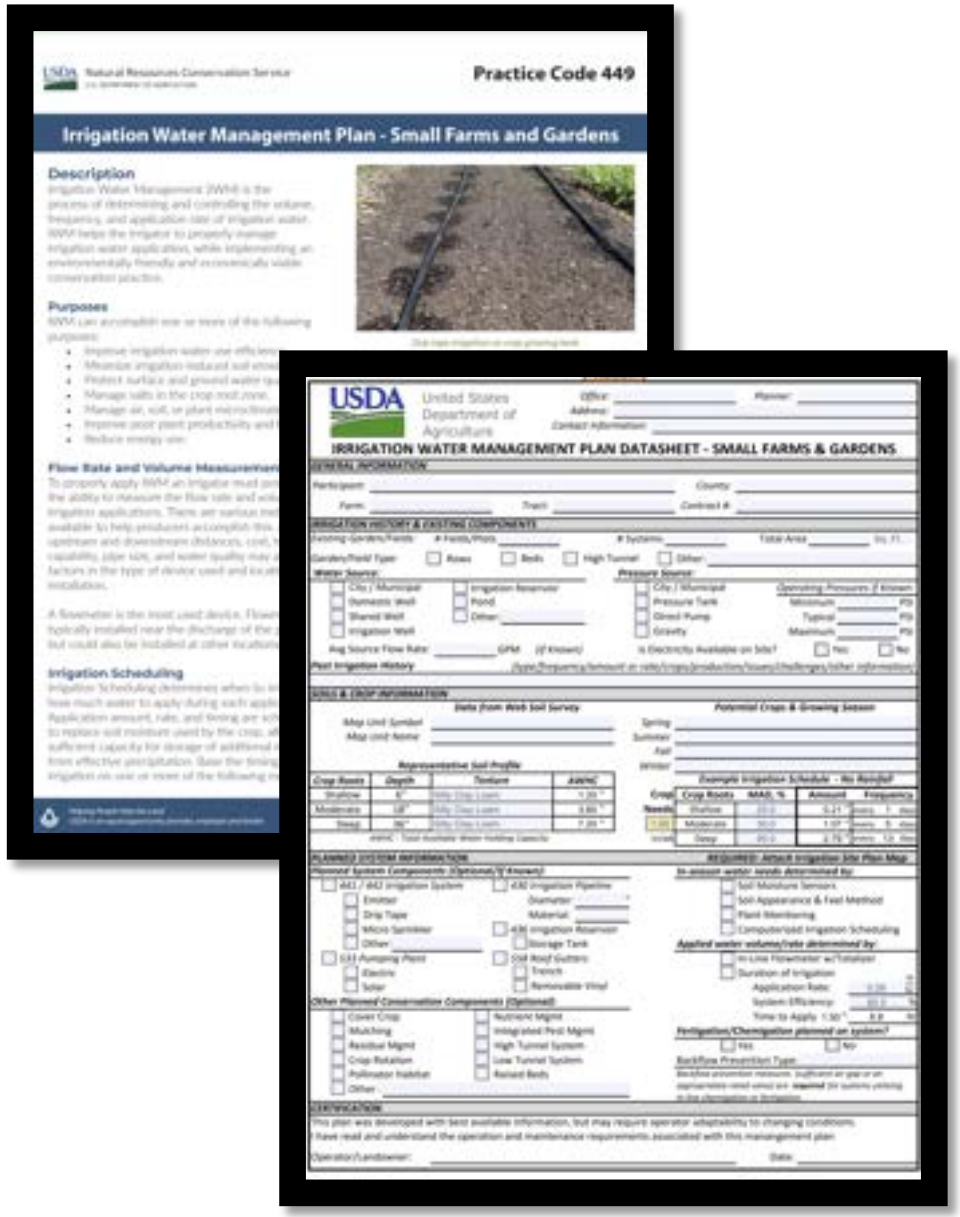
RESOURCE CONCERNS:

Plant productivity and health
Plant pest pressure

SUPPORT:

1) **Low Tunnel: INNRCS Training – Youtube**
2) **Marionswcd.org High Tunnel Suppliers List**

Irrigation Practices



PROVIDE:

1) **Irrigation Water Management Plan**
   - **Planner and producer fill out as much as possible**
   - **Planner provides IWM to NRCS TECH TEAM with engineering request**
2) **Engineering Designs (most likely after application preapproval)**

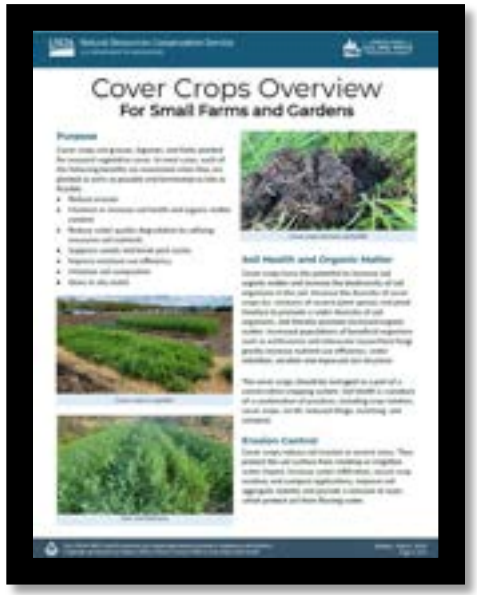
RESOURCE CONCERNS:

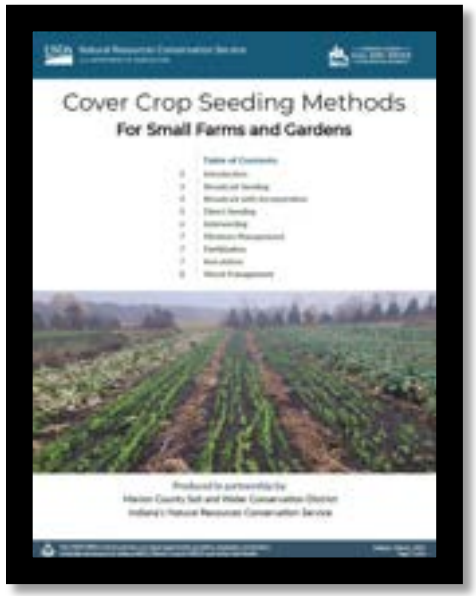
Inefficient water use

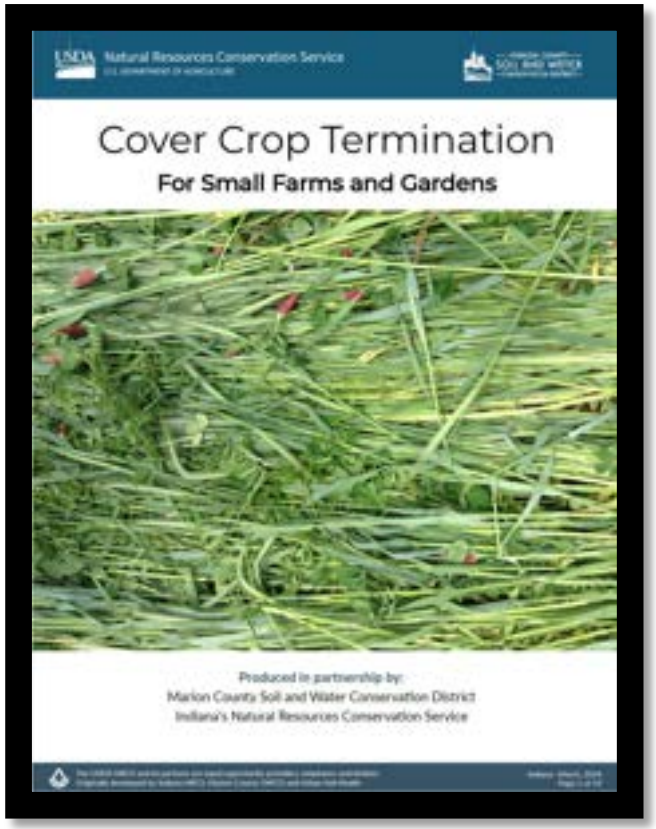
SUPPORT

1) **urbansoilhealth.org**
2) **Manufacturer's websites and contact**

Cover Crops







PROVIDE:

1) Cover Crop Overview
2) Cover Crop Seeding Methods
3) Cover Crop Termination
4) Indiana Cover Crop Tool

RESOURCE CONCERNS:

Erosion, low organic matter, pest pressure, moisture, habitat, excess soil nutrients, any resource concern listed in the conservation practice standard

SUPPORT

1) marionswcd.org/soilhealth
2) MCSWCD Favorite Mixes
3) Expert farmer books & online
4) Urban Soil Health, SWCDs

Cover Crops Implementation Requirement
Indiana Cover Crop Tool for Small Farms and Gardens

Indiana Cover Crop Create a Mix		Notes	USDA Natural Resources Conservation Service U.S. DEPARTMENT OF AGRICULTURE				
Name	Megan Ayers						
Location	Earth						
Year	2025						
Total Area of All Mixes (sqft)	5000						
Total Area (acres, rounded up)	0.2						
Guidance located at the bottom of this sheet.							
MIX 1		Notes					
Area of Bed (sqft)	250						
# of Beds	20						
Total Area (sqft)	5000						
Cover Crop Species	Type	Rate L - N - H	Divisor	Rate PLS Oz/100sqft	PLS %	Amount per Bed	Amount per Total Area
Oats	Grass	High		4.7	80	0 lb 14.7 oz	18 lb 5.8 oz
Pea, Field	Legume	Low		1.1	100	0 lb 2.8 oz	3 lb 7.1 oz
					100		
					100		
					100		
					100		
					100		
			Totals	5.8	-	1 lb 1.5 oz	21 lb 12.8 oz
Planting Method	Termination Method	Planned Next Crops				Cost Estimate	
Broadcast + Incorporation	Winterkill	Early spring vegetables				$0.00	$0.00

5000 sqft / 43,560 = 0.11 acres
Round up to 0.2 for programs

Online training video at marionswcd.org/soilhealth under cover crops

Mulching

Natural Resources Conservation Service

Mulching
Practice Code 484

Mulches for Small Farms and Gardens Overview

Purpose

Mulches are plant residues or other suitable materials that are applied to the soil surface. Mulches can be used to:

- Improve the efficiency of moisture management
- Improve irrigation water and energy efficiency
- Reduce erosion
- Improve plant productivity and health
- Maintain or increase soil organic matter
- Reduce emissions of particulate matter
- Suppress weeds

Mulches protect soil in and around crop beds.

Mulches Applied to Small Farms

Many urban and small farms use multiple types of mulch. This may be a combination of natural and/or synthetic mulches. Mulching can increase soil health over time by protecting the soil and increasing soil organic matter. Mulches are effective alone, but when used with other practices such as cover cropping and reduced tillage, overall soil health will improve more rapidly. Mulches applied to the soil surface will help retain soil moisture and improve irrigation water use efficiency. Mulches are effective at weed suppression and can improve overall plant productivity and health.

Types of Mulch: Natural vs. Synthetic

Natural

Natural mulches commonly include straw, hay, compost, composted leaves, woodchips, and cover crop residue. Other biodegradable natural materials such as grass clippings, wool, sawdust, paper, newsprint, and cardboard may also be used as mulches. A range of natural mulches have diverse uses in production and non-production areas on any size farm and are widely applicable.

Synthetic

The two most common synthetic materials used in farm settings are plastic mulch and landscaping fabric. Plastic mulch is a thin, non-permeable material that only lasts one season. Landscaping fabric is a permeable, durable, woven material that is reusable for up to 5 years (See Table 3).

Natural mulches (clockwise top left to bottom right): alfalfa hay, cereal rye cover crop residue, woodchips, composted leaf mulch

Location

Mulch materials are widely applied throughout farms and gardens on growing beds, pathways, and non-production areas. Consider C:N ratio, residue management, and mulch duration when choosing mulch materials for various areas.

C:N Ratios

The carbon to nitrogen ratio compares the mass of carbon to the mass of nitrogen in a particular material (See Table 1). The C:N ratio of mulches affects the decomposition rate and crop nutrient cycling. The

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INDIANA NRCS - March 2024

PROVIDE:

1) **Mulches for Small Farms and Gardens Overview**
2) **Indiana Mulching Tool**

RESOURCE CONCERNS:

Organic Matter Depletion is IN priority

SUPPORT

Urban Soil Health, SWCDs, etc.

Mulching Implementation Requirement
Indiana Mulching Tool

Year	Total Area sqft	Planning Amount # of 1000sqft	Applied?
2025	2500	3	
2026	2500	3	
2027			

Indiana Mulching Tool

NRCS 484 Implementation Requirement (IR)

Name	Megan Ayers	*Disclaimer: For the tool to function correctly, enter the area and desired mulch depth. Select the Material type, Estimated Amount Needed unit, and load information according to guidance below this table.*	***Load information (Optional)*** *Enter volume of mulch per wheelbarrow, bag, etc. to estimate # of loads needed.*		
Location	Earth				
Years	2025, 2026, 2027		3.0	cubic feet	*per load*
Notes					

	Contract Item	Year	Area ID / Decription	Area sqft	Material	Final Depth Inches	Estimated Amount Needed		Estimated Material Cost
1	Yes	2025	GARDEN A Beds	2,000	Compost	2	12.4	cubic yards	$620.00
2	Yes	2025	GARDEN A Walkways	500	Woodchips	3	4.7	cubic yards	
3	Yes	2026	GARDEN A Beds	2,000	Compost	2	12.4	cubic yards	$620.00
4	Yes	2026	GARDEN A Walkways	500	Woodchips	2	3.1	cubic yards	
5		2026	GARDEN A Beds	2,000	Straw	2	33.3	bales	$266.67
6									
7									
8									
9									
10									

Online training video at marionswcd.org/soilhealth under mulching

Hedgerow

USDA
United States Department of Agriculture

Tree/Shrub Planting Implementation Requirement

Natural Resources Conservation Service - Indiana – September 2022 (ver. 1.0)

612 Tree/Shrub Planting Plan

Landowner:				County:
Farm:	Tract:	Field(s):	Acres:	Date:
Purpose:				
Soil Type(s):				Soil Drainage Class:
Plant Spacing:				Plants/Acre:

Species	Number	Substitute Species	Number
Total (rounded to the next highest 100)		Total (rounded to the next highest 100)	

Before Planting	
☐ Tillage (in the year prior to planting):	Dates:
☐ Herbicide1 (applied per label):	Dates:
☐ Herbicide2 (applied per label):	Dates:
☐ Other:	Dates:
Planting Method	
☐ Tree Planting Method:	Dates:
☐ Herbicide (applied per label):	Dates:
☐ Tree Protection or Fencing: ☐ Yes ☐ No (If yes provide details in the Additional Information Section below.)	Dates:
Post Planting Maintenance and Weed Control	
☐ Maintain a 3-ft. weed & grass-free radius for up to ___ years around each tree for optimal growth	
☐ Herbicide (applied per label):	Dates:
☐ Replace dead trees to ensure 70% stocking rate:	
☐ Other:	Dates:

Additional Information

Map of Tree Planting Area (attach or insert map showing tree planting area, access to tree planting area, preferred row direction, any hazards or tree planting concerns):

PROVIDE:

1) **Environmental Plantings and Windbreaks from Web Soil Survey**
2) **Tree / Shrub Planting Plan (most likely after application preapproval)**
   - **NRCS Area Forester can assist**

RESOURCE CONCERNS:

Wildlife habitat or any purpose in the conservation practice standard

SUPPORT

1) **Pollinator Partnership, Xerces,**
2) **Pheasants Forever, Quail Forever**
3) **Forestry Tech Note #2**

Hedgerows

Forestry Tech Note #2

USDA
United States Department of Agriculture
Natural Resources Conservation Service - Indiana - October 2016

Forestry Technical Note #2

Tree and Shrub Establishment

INTRODUCTION

This technical note provides information on tree and shrub establishment using tree seedlings, container stock, or direct seeding methods.

I. PLANTING DESIGN

A. Planting Rates

A good tree planting design will usually include multiple species and objectives. Species may be mixed together within rows, separated by

Table 2. Planting Stock Specifications

Tree Seedlings (Bare root stock)		
Type	Height	Caliper*
Conifer	9-18"	1/8-3/8"
Hardwood	18-36"	1/4-3/4"

Container Stock			
	Container Size	Height	Caliper*
Conifer or Hardwood	1 gallon	2' – 4'	3/8 – 5/8"
	3 gallon	2' – 6'	3/8 – 5/8"

*Caliper is the stem diameter at ground level measured at the root collar.

Technical Note 2 Forestry Tree Planting.pdf (usda.gov)

Table 7. Species Information

Common Name	Scientific Name	CTSG Area (map page 8)	Soil Drainage[1]	[2]Flooding Tolerance	Soil pH Range
Tree Species					
Bald Cypress	*Taxodium distichum*	Central, South	VPD-WD	Tolerant	4.5-7
Black Cherry	*Prunus serotina*	All	MWD-WD	Intolerant	4.5-7.5
Black Walnut	*Juglans nigra*	All	MWD-WD	Intolerant	6.6-7.8
Cedar, Northern White	*Thuja occidentalis*	North	PD-WD	Somewhat	5.5-7.5
Hickory, Shagbark	*Carya ovata*	All	MWD-WD	Intolerant	4.5-7.5
Hickory, Shellbark	*Carya laciniosa*	All	VPD-WD	Somewhat	6.1-7.4
Kentucky Coffeetree	*Gymnocladus dioicus*	All	SPD-WD	Somewhat	5.5-6.5
Maple, Red	*Acer rubrum*	All	VPD-WD	Somewhat	4.5-6.5
Maple, Silver	*Acer saccharinum*	All	VPD-WD	Tolerant	4.5-7.0
Norway Spruce	*Picea abies*	All	VPD-WD	Somewhat	5.0-7.5
Oak, Black	*Quercus velutina*	All	MWD-ED	Intolerant	4.5-6.5
Oak, Bur	*Quercus macrocarpa*	All	PD-ED	Somewhat	4.5-7.5
Oak, Chinkapin	*Quercus muhlenbergii*	All	MWD-ED	Intolerant	5.0-8.0
Oak, Cherrybark	*Quercus pagoda*	South	SPD-WD	Intolerant	4.5-6.5
Oak, Overcup	*Quercus lyrata*	South	VPD-WD	Tolerant	4.5-7.0
Oak, Pin	*Quercus palustris*	All	VPD-WD	Somewhat	4.5-6.1
Oak, Scarlet	*Quercus coccinea*	All	MWD-ED	Intolerant	4.5-6.5
Oak, Shingle	*Quercus imbricaria*	All	SPD-WD	Intolerant	4.5-6.5
Oak, Shumard	*Quercus shumardii*	All	SPD-WD	Somewhat	6.1-7.4
Oak, Swamp Chestnut	*Quercus michauxii*	South	SPD-WD	Somewhat	4.5-6.5
Oak, Swamp White	*Quercus bicolor*	All	VPD-WD	Somewhat	4.5-6.1
Oak, White	*Quercus alba*	All	MWD-WD	Intolerant	4.5-6.5
Pecan	*Carya illinoensis*	Central, South	SPD-WD	Tolerant	6.1-7.8
Pine, White	*Pinus strobus*	All	MWD-WD	Intolerant	6.1-7.5
Persimmon	*Diospyros virginiana*	All	MWD-WD	Somewhat	4.5-6.5
River Birch	*Betula nigra*	All	VPD-WD	Somewhat	4.5-6.5
Sweetgum	*Liquidambar styraciflua*		PD-WD	Tolerant	5.5-6.5
Tuliptree	*Liriodendron tulipifera*	All	MWD-WD	Intolerant	5.0-7.0
Shrub Species					

Wildlife Planting

PROVIDE:

1) **Small Plug Planting for Pollinators, Monarchs, and Beneficial Insects**
2) **Wildlife Plug Planting Calculator**

RESOURCE CONCERNS:

Wildlife habitat

SUPPORT

1) **Pollinator Partnership, Xerces,**
2) **Pheasants Forever, Quail Forever**
3) **Marionswcd.org/soilhealth**
   - **a) Wildflowers for Beneficial Insects**
   - **b) Beneficial Insets for Fruit and Vegetable Growers**
   - **c) Native Plantings for Beneficial Insects and Pollinators**

Payment Estimate (possibly from previous year)

Indiana EQIP Contract Payment Estimator FY24

Reset Form

Service Center	
Application Number	
Applicant Name and Date	Megan
Participant Type	NOT Historically Underserved
District Conservationist	Cara
State	Indiana
Program	EQIP Estimate
Associated Ranking Pools	High Tunnel

Estimated Contract Payment

$ 21,550.14

Save and Open PDF

NOTE: This worksheet is the **NON-HU version**. Use the "HU Version" for HU Participants.

If selecting a High Priority or Source Water Practice (**HPP**), select the scenario beginning with "**Pr-**" or "**Wp**"

Reset Estimate Section

Line	Start typing in any row to search for a practice, practice code, or scenario name, then click the drop down button	Unit	Unit Cost	Planned Quantity	Number of Years Planned	Max Payment Cap	Estimated Item Total
1	484 - Mulching; Natural Material, Small Area	No	$ 147.07	6	1	$ 6,500.00	$ 882.42
2	340 - Cover Crop; Cover Crop - 1 acre or less	Ac	$ 406.68	0.2	3	$ -	$ 244.01
3	821 - Low Tunnel Systems; Low tunnel 1000-5000 square feet, Year 1	SqFt	$ 1.24	5000	1	$ 16,150.00	$ 6,200.00
4	325 - High Tunnel System; High Tunnel System	SqFt	$ 5.77	1440	1	$ 16,650.00	$ 8,308.80
5	441 - Irrigation System, Microirrigation; High Tunnel Surface Microirrigation, per square feet	SqFt	$ 0.61	10000	1	$ 3,050.00	$ 3,050.00
6	420 - Wildlife Habitat Planting; Interplanting with potted plants or shrubs	SqFt	$ 1.52	700	1	$ 4,600.00	$ 1,064.00
7	420 - Wildlife Habitat Planting; Small Planting - Pollinator Mix	kSqFt	$ 241.82	0.5	1	$ 1,000.00	$ 120.91
8	422 - Hedgerow Planting; 1 row hedgerow, bareroot shrub seedling planting stock	Ft	$ 0.56	3000	1	$ -	$ 1,680.00
					0	$ -	$ -

Partnerships!

Natural Resources Conservation Service
Farm Service Agency
Urban Soil Health
Soil and Water Conservation Districts
Indiana Department of Natural Resources
Indiana State Department of Agriculture
Pollinator Partnership
Savannah Institute
Purdue Extension
Pheasants Forever / Quail Forever
State of Indiana Cooperative Invasives Management
Indiana Department of Environmental Management / Health Departments

Thank YOU! Questions, comments, suggestions…

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MARION COUNTY SOIL AND WATER CONSERVATION DISTRICT

URBAN SOIL HEALTH

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

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