Correctional Conservation Collaborative: Achieving Pennsylvania's Watershed Forestry Goals Through Workforce Development

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RESEARCH BRIEF

How Effective Is Correctional Education?

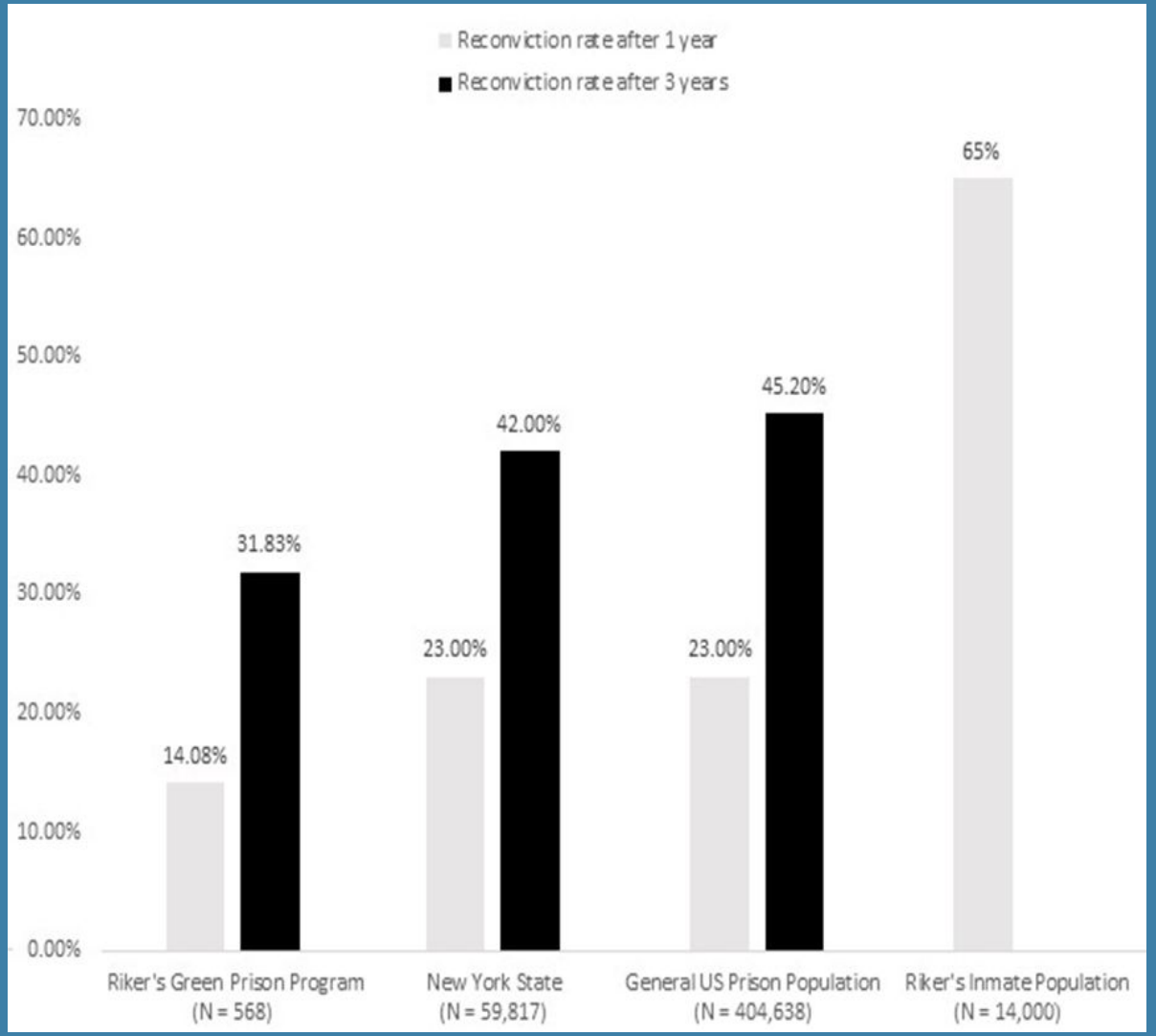
The Results of a Meta-Analysis

How Effective Is Correctional Education in Reducing Recidivism and Increasing Post-release Employment?

Research studies indicate that, on average, inmates who participated in correctional education programs had 43 percent lower odds of recidivating than inmates who did not.

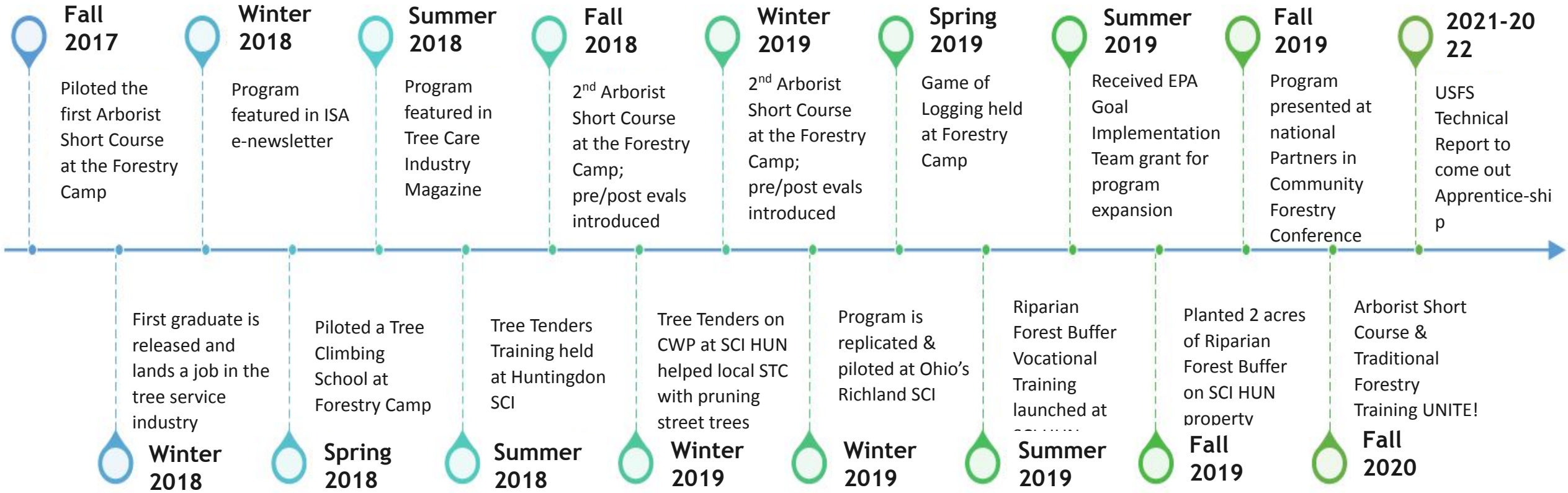
Individuals who participated in vocational training programs had odds of obtaining post-release employment that were 28 percent higher than individuals who had not participated

Green Prison Programs



Source: Sander van der Linden. 2015

The Past Five Years: CCC Milestones



Program Objectives

- Creates a **career pathway** for reentrants
- Provides employable **skills** and micro **credentials** to incarcerated individuals nearing release
- Creates a **workforce pipeline** of skilled workers for the natural resource and conservation industry
- **Empowers** people to enter into natural resource and conservation career pathways and entrepreneurial ventures
- **Reduces recidivism** by way of getting reentrants into jobs and careers that offer life-sustaining wages
- Helps **diversify** and elevate the natural resource and conservation profession in PA and beyond
- Can act as a **model** for other institutions and states
- Increased exposure to nature and natural elements provides **mental clarity** and **health benefits**
- Promotes interdepartmental and cross-sector **collaboration**

GIT Scope #10 Project Team (2020-21)

PA Dept of Conservation and Natural Resources (DCNR)

Chesapeake Conservation Landscaping Council (CCLC) and Hirschman Water & Environment

Alliance for the Chesapeake Bay

PA Dept of Corrections (DOC)

Chesapeake Bay Trust

Learnings from Our Chesapeake Bay Landscape Professional (CBLP) Experience

- Skilled professionals are in demand to help local and state governments meet their water quality and habitat restoration goals
  - Green infrastructure (incl. urban forestry)
  - Conservation-based practices like RFBs, living shorelines, tree planting
- Practitioners are hungry for specialized training to help them stake a claim in the marketplace – more than 1200 have attended our training since 2016
  - CBLP-Buffers - comprehensive certificate course on riparian buffer planning, implementation, and management
- Landscape and tree care contractors are eager to connect with new employees

CCC GIT Scope #10 - Project Goals

Analyze, assess and refine the PA Correctional Conservation Collaborative (CCC) program, to allow for expansion across Pennsylvania and the Bay watershed

Research and gather information about other corrections-based and work force development efforts in the Bay region and across the country

Use research to inform and develop a series of reports, contact lists, checklists, assessments, a training manual and curriculum, and other supporting materials to facilitate expansion of the CCC

Executive Summary – Key Questions

Are there relevant models and lessons learned for the CCC as it continues to grow?

Is there an adequate population within SCIs for the CCC to expand?

Are there adequate field sites on SCI property or in surrounding communities where CCC participants can get hands-on experience with riparian forest buffers?

Does the CCC have structure and flexibility for different types of SCIs?

Would the CCC credential provide a realistic path to employment for participants?

What is needed for continued success of the CCC program?

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The Interviews

Number of Bay region interviews	15
Bay states represented	3 + DC
Other US interviews	3
Programs that provide professional credentials	5

Pearls from the Interviews

- Almost every program noted the importance of support and training on **job readiness/soft skills** (resume writing, interviewing, getting to work on time, etc.)
- **Career fairs and mock interviews** near the end of a program are effective for connecting returning citizens with potential employers.
- While each program had a green industry focus (e.g., GI, urban forestry), most offered **training for related skills** (e.g., flagger training to prepare for a DOT job).
- Some programs utilize **existing curricula or credentials**, and some have customized certificates of completion.
- For returning citizens and workforce programs, **transportation** seems to be a very big challenge for participants.

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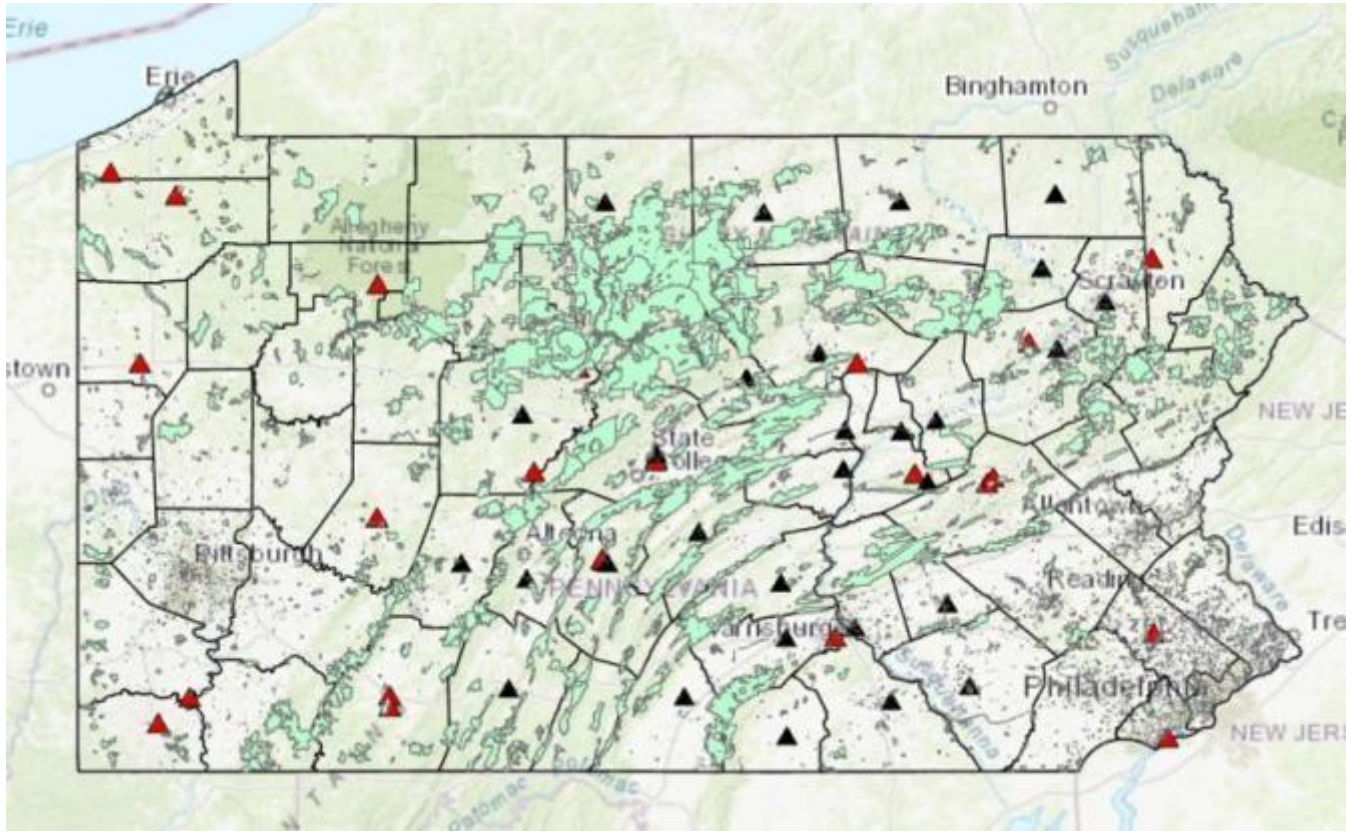
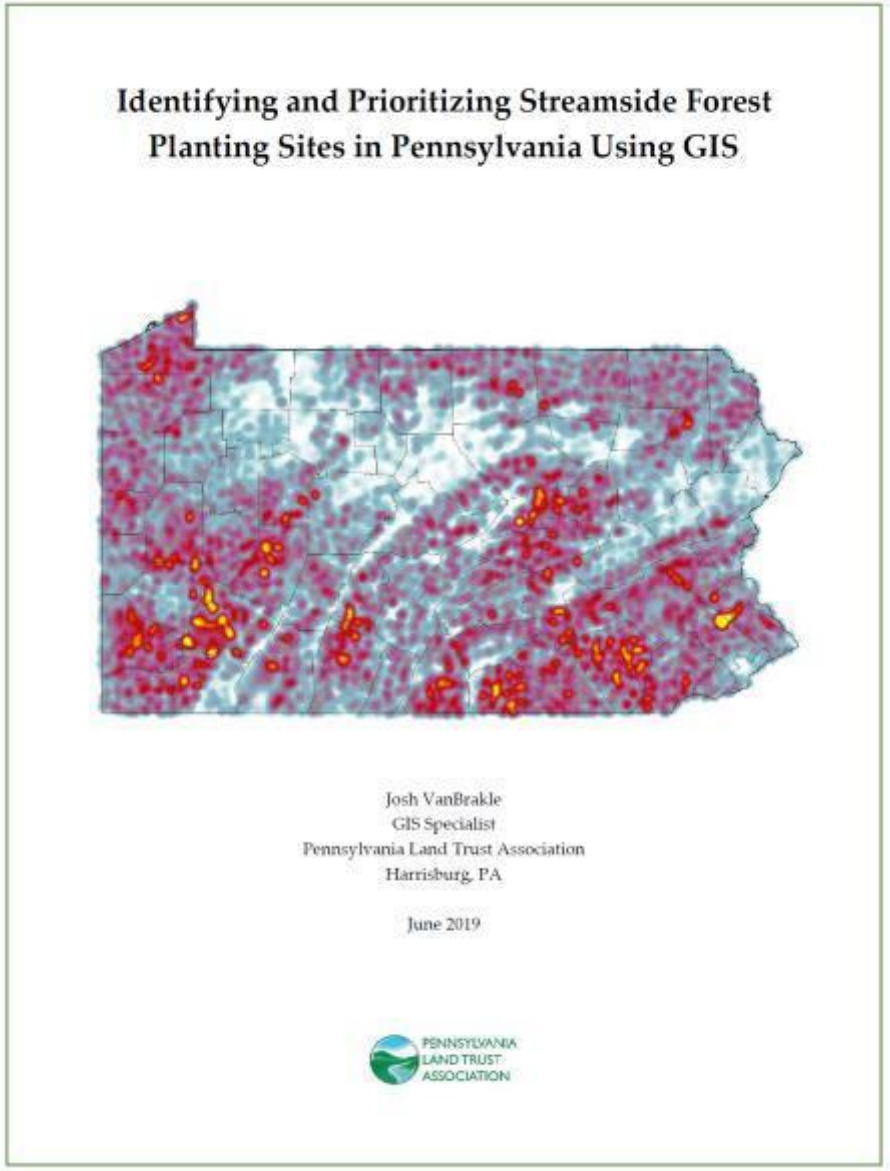
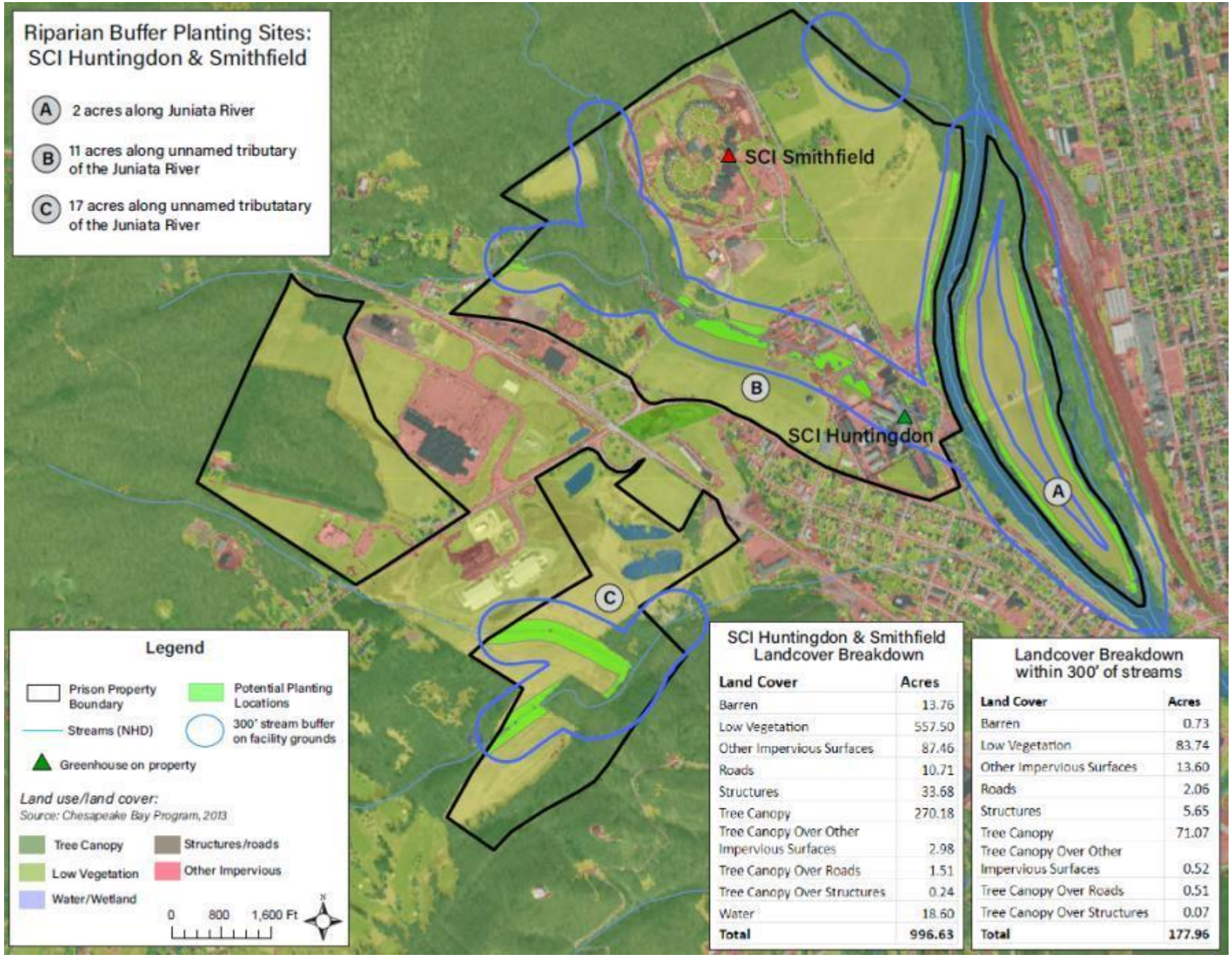
Mapping Project: Unbuffered Local & State Public Land Identified





Site: SCI Huntingdon



SCI Huntingdon & Smithfield Landcover Breakdown

Land Cover	Acres
Barren	13.76
Low Vegetation	557.50
Other Impervious Surfaces	87.46
Roads	10.71
Structures	33.68
Tree Canopy	270.18
Tree Canopy Over Other Impervious Surfaces	2.98
Tree Canopy Over Roads	1.51
Tree Canopy Over Structures	0.24
Water	18.60
Total	**996.63**

Landcover Breakdown within 300' of streams

Land Cover	Acres
Barren	0.73
Low Vegetation	83.74
Other Impervious Surfaces	13.60
Roads	2.06
Structures	5.65
Tree Canopy	71.07
Tree Canopy Over Other Impervious Surfaces	0.52
Tree Canopy Over Roads	0.51
Tree Canopy Over Structures	0.07
Total	**177.96**

30-mile Radius: SCI Quehanna Boot Camp

Quehanna Boot Camp: Potential Planting Sites
within a 30-mile radius

only sites with Score >=15 OR Buffer Planting Acres >=15 are shown

Site ID	Site Name	Stream	Acres	Score
3	Marion Brooks Natural Area	Maple Run,Middle Bennett Branch Sinnemahoning Creek,Mix Run,Lower Bennett Branch Sinnemahoning Creek	30.99	22
4	Moshannon State Forest	Sterrle Run,Middle Moshannon Creek,Cold Stream	29.11	20
5	Moshannon State Forest	Laurel Run	19.33	12
6	Moshannon State Forest	Maple Run	20.47	13
7	Moshannon State Forest	Trout Run	16.24	11
11	Quehanna Wild Area	Gifford Run-Mosquito Creek	19.35	13
12	Quehanna Wild Area	Headwaters Mosquito Creek,Gifford Run-Mosquito Creek	18.91	11
13	Sproul State Forest	Sandy Run-Beech Creek,North Fork Beech Creek	33.48	23
24	Bucktail State Park	Grove Run-Sinnemahoning Creek	15.52	6
51	Elk State Forest	Hunts Run	72.46	54
55	Moshannon State Forest	Maple Run	19.16	13
56	Quehanna Wild Area	Wykoff Run,Grove Run-Sinnemahoning Creek	17.18	10
65	Kettle Creek State Park	Lower Kettle Creek	13.54	27
73	Sinnemahoning State Park	Middle First Fork Sinnemahoning Creek,Lower First Fork Sinnemahoning Creek	8.91	15
84	State Game Land 100	Sterling Run,Lower Three Runs-West Branch Susquehanna River	20.56	13
103	Moshannon State Forest	Laurel Run	17.46	12
105	Sproul State Forest	Sandy Run-Beech Creek,Big Run	22.18	18
107	Black Moshannon State Park	Sterrle Run,Middle Moshannon Creek,Black Moshannon Creek,Lower Moshannon Creek	33.23	24
124	Kettle Creek Lake	Lower Kettle Creek	20.31	26
133	Elk State Forest	Spring Run,Trout Run,Dents Run,East Branch Hicks Run,Hicks Run,Lower Bennett Branch Sinnemahoning Creek	38.16	25
135	Marion Brooks Natural Area	Headwaters Mosquito Creek	64.40	51
138	Sproul State Forest	Sandy Run-Beech Creek,Beech Creek,Marsh Creek	15.65	11

Public Lands:
- State Park
- State Forest
- State Game Lands
- Fish & Boat Commission
- Local Park

▲ State Correctional Facility
▲ County Correctional Facility

Sites by Score:*
see table for actual score of each site

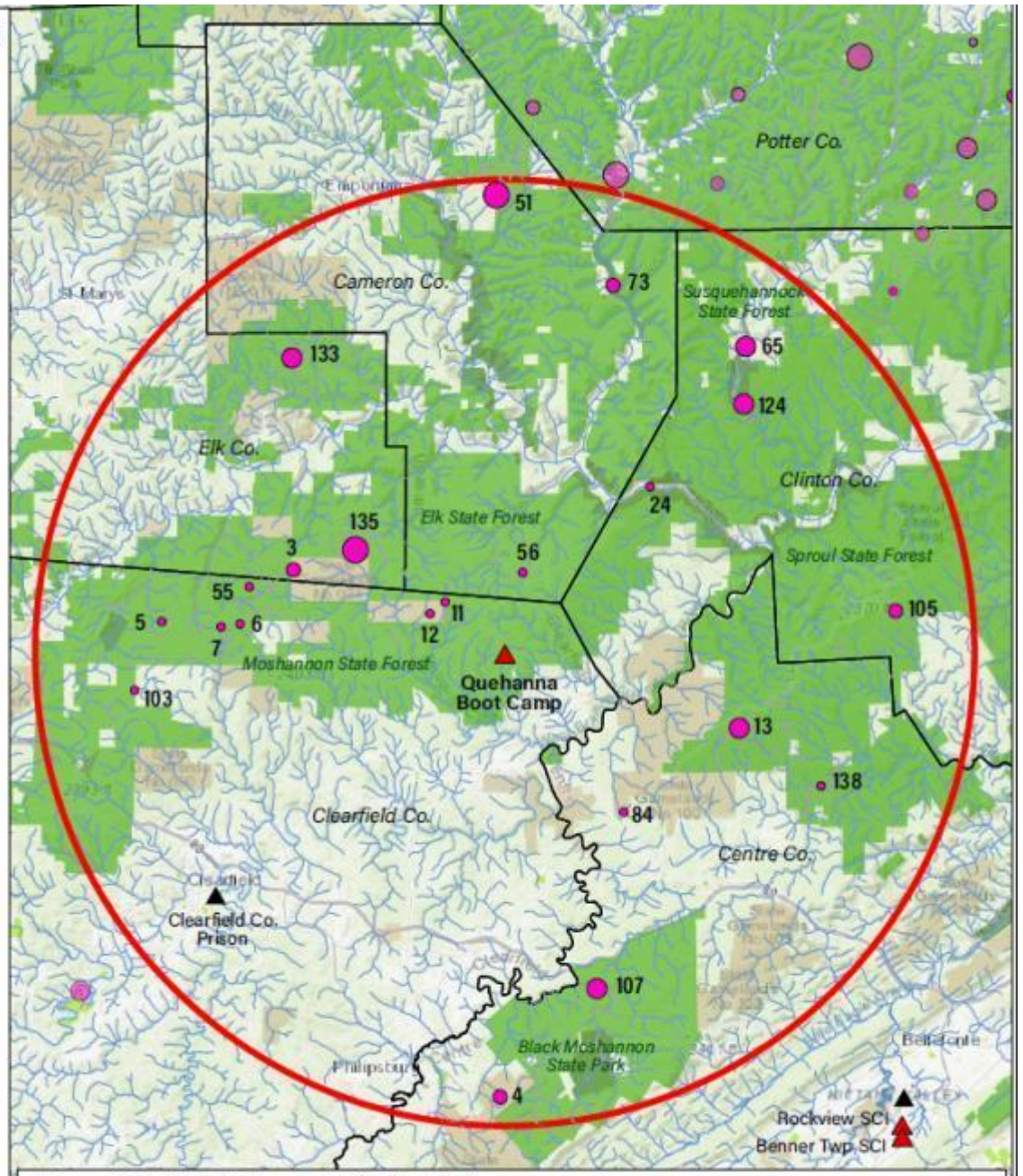
Lower — Higher

103 Site ID

30 mile radius

Streams (NHD)

0 5 10 Mi



*Score = PALTA Priority Score** x Buffer Planting Acreage*

***PALTA Priority Scores were calculated by the Pennsylvania Land Trust Association in a 2019 study of potential riparian buffer planting areas in PA, and take into account Topographic Wetness Index, Upslope Land Cover and Sediment Trapping Efficiency.*

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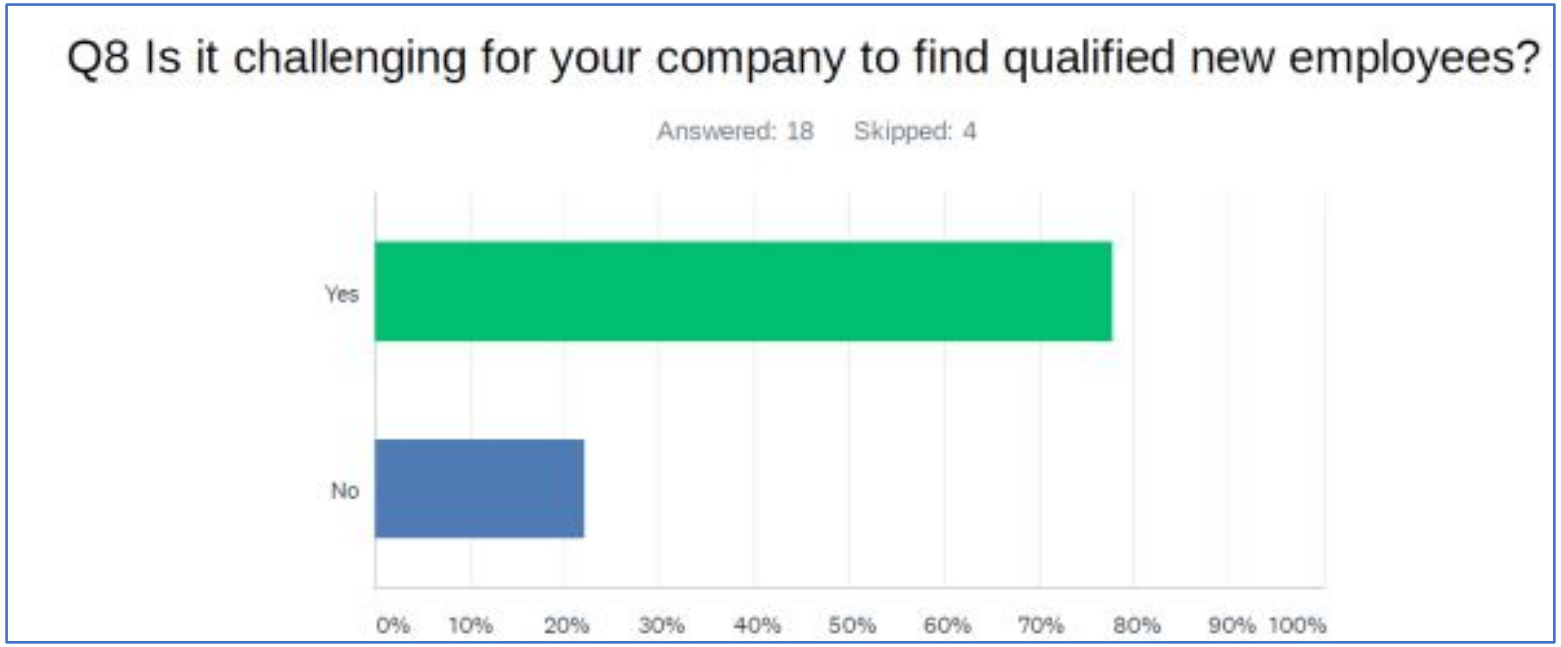
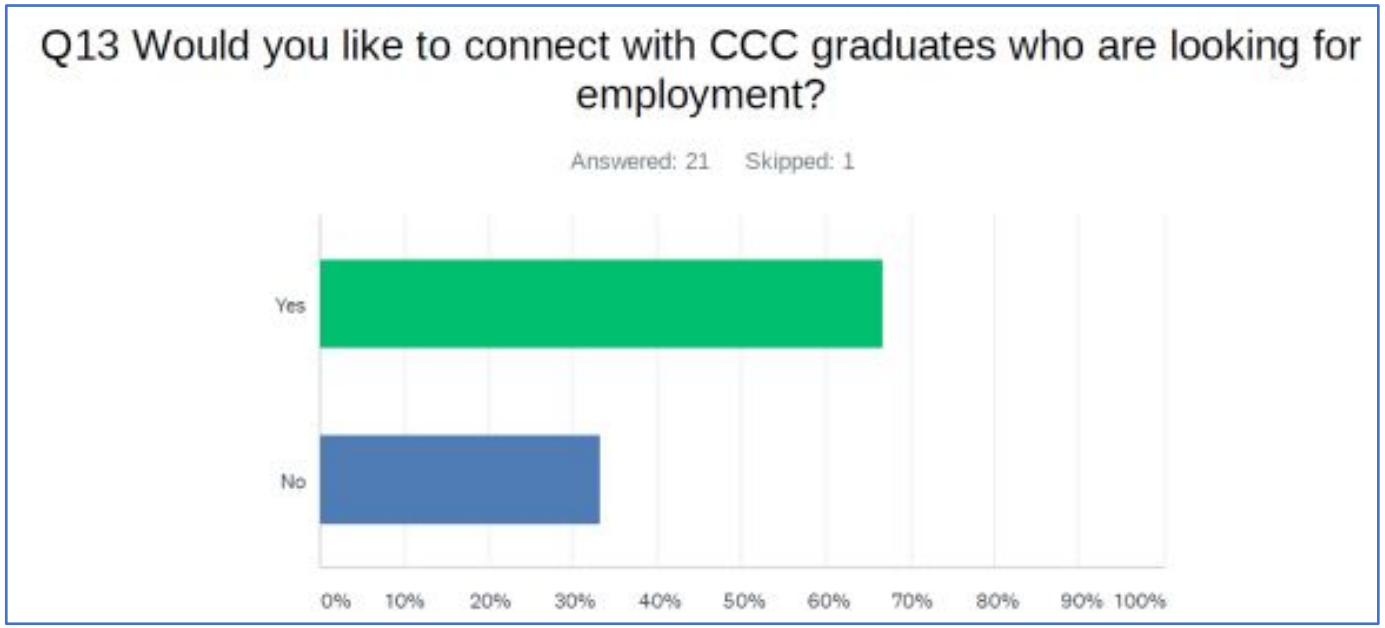
Survey of Practicing Pros





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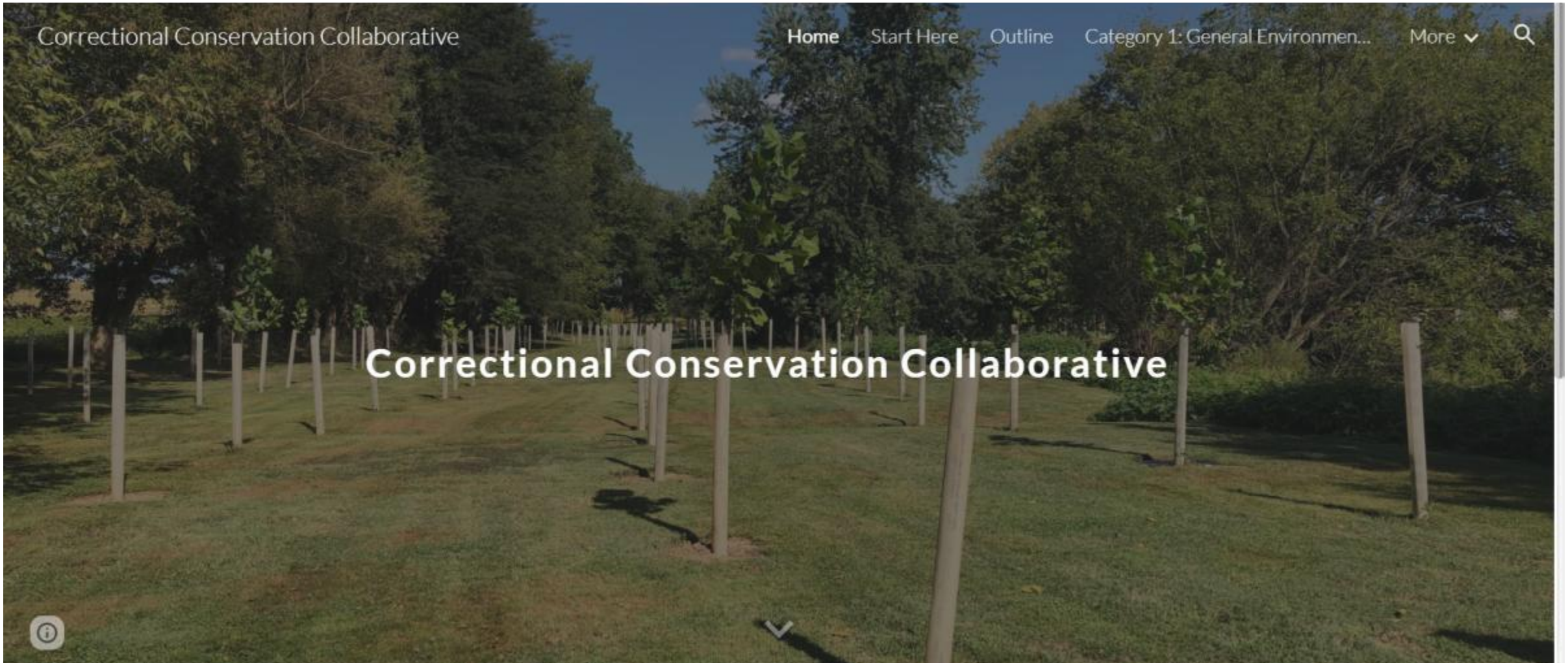
Program Manual: Google Drive + Website



Sample Course Planning & Implementation Docs

Correctional Conservation Collaborative (CCC)

Organizer & Instructor Site Evaluation Checklist

This checklist can be used by CCC organizers and instructors to engage with SCI/DOC personnel on the particular conditions that will influence the structure and delivery of the CCC curriculum.

Pre-Planning Checklist

- ☐ 1. What support is available from the SCI or facility? Will personnel (e.g., administrators, guards) be available to assist? How much lead time is needed to make sure all personnel are available?

- ☐ 2. What security procedures must be followed for CCC instructors to enter/leave the facility?

CHESAPEAKE BAY Landscape Professional

Field Skills Assessment

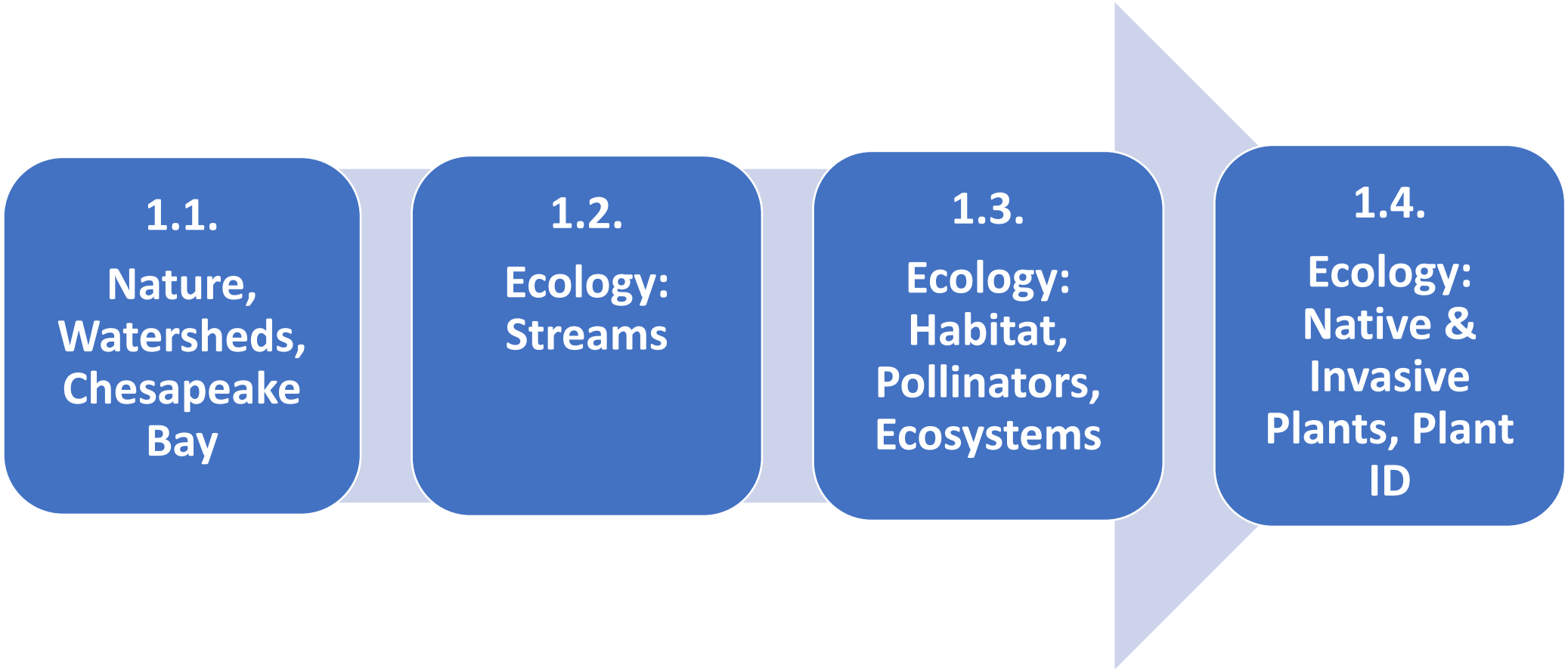
CCC Candidate Name:			
ASSESSOR:		**DATE:**	

This skills rubric is designed to be used to assess and evaluate the work of CCC program participants in the field. This is an optional tool which may be adapted and revised as needed.

EXAMPLES OF TECHNICAL PROFICIENCY

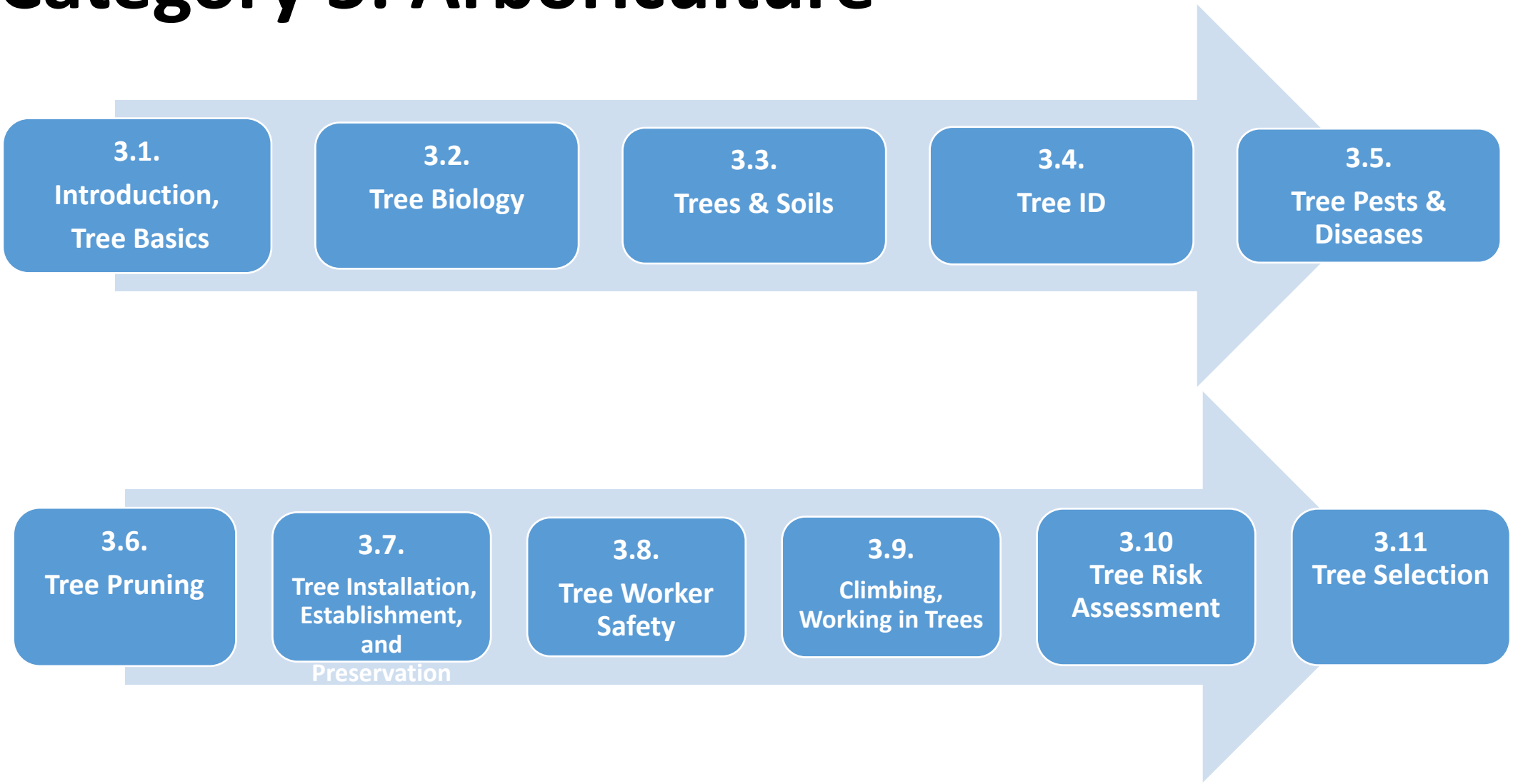
POSITIVE INDICATORS	NEGATIVE INDICATORS
• Demonstrates a positive approach towards the problem • Considers the wider need of the situation • Recognizes his/her own limitations • Is able to compromise • Is willing to seek help when necessary • Uses effective strategies to deal with pressure/stress	• Perceives challenges as problems • Attempts unsuccessfully to deal with the situation alone • Used inappropriate strategies to deal with pressure/stress

Correctional Conservation Collaborative: Category 1: General Environmental

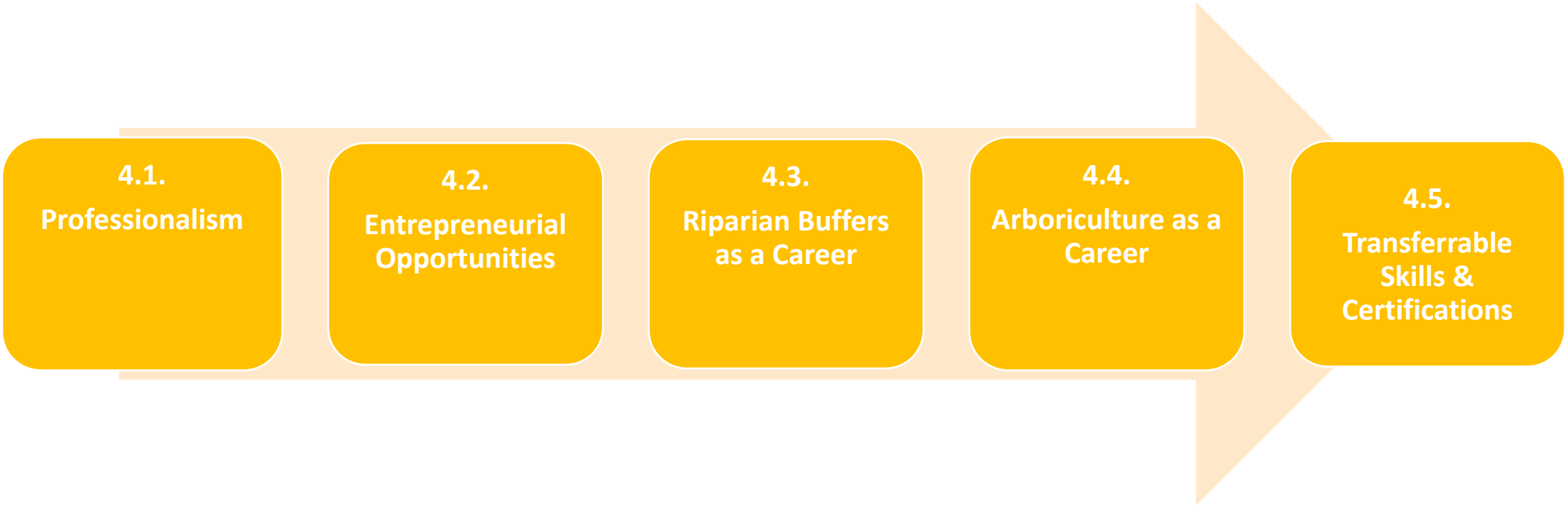


Correctional Conservation Collaborative: Category 2: Riparian Forest Buffer (RFB)

Correctional Conservation Collaborative: Category 3: Arboriculture



Correctional Conservation Collaborative: Category 4: Vocational



Buffer Training Manual in Practice in Virginia

Beginning in 2021, CCC buffer module used for training, in collaboration with Virginia Dept of Corrections (State Farm facility), Virginia Cooperative Extension, and the James River Association

Approx 18 incarcerated women participated in training and 10 received CBLP-Buffers certificate. One has connected with conservation landscaping employment

Led by Nicole Shuman (Virginia Cooperative Extension) and Dave Hirschman (Hirschman Water/CCLC Team)

This effort provided an opportunity to test and trial the training manual developed for the GIT project

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Next Steps

- Share results of research and CCC program materials
- Continue teaching at existing PA SCI sites (Rockview and Huntingdon) using refined and new materials
- Recruit new CCC prison sites in PA
- Secure funding for dedicated staff person to oversee this effort and expand the CCC program in PA
- Continue collaboration with Virginia Cooperative Extension, James River Association, and Virginia Dept of Corrections to expand buffer training in VA SCIs

Thank You!

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