



## MAKING THE VIRTUAL WORLD WORK FOR YOUR NEEDS

*Charles (Chuck) Jarman, P.E.*

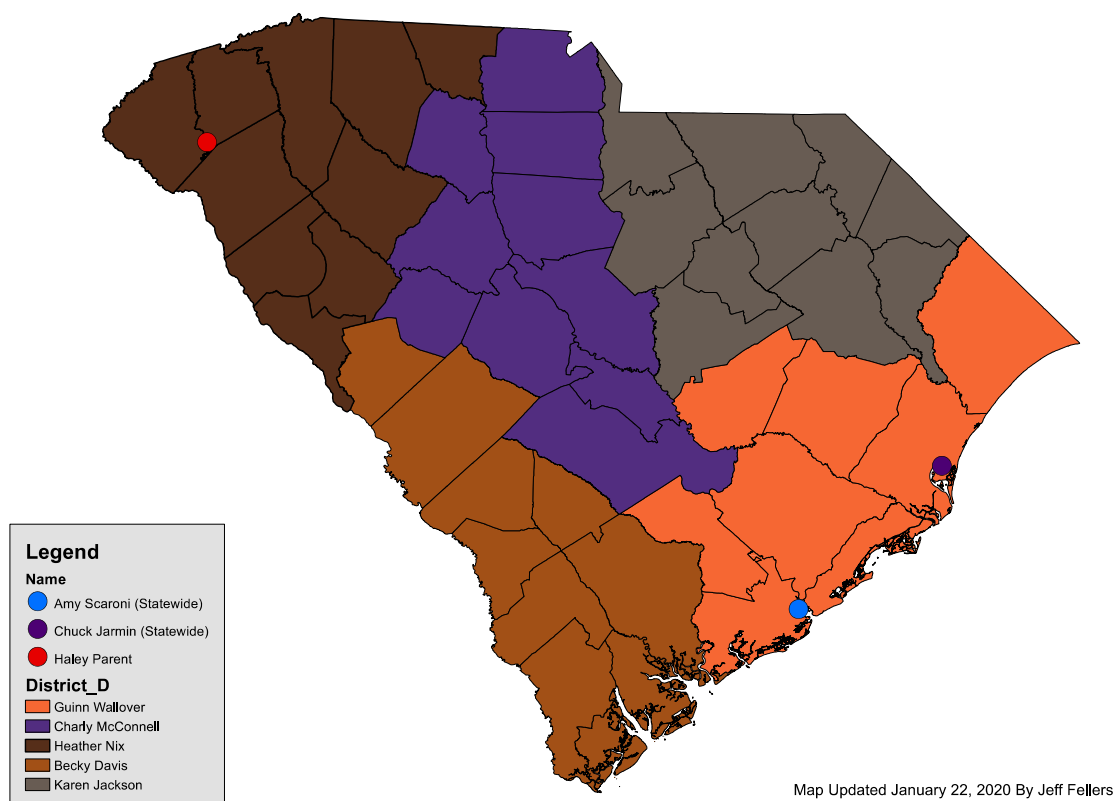
*Water Resources Engineer*

## *Clemson Cooperative Extension Water Resources Team Mission*

Provides research-based information in the form of community outreach and education, public involvement opportunities and in-depth trainings and workshops

The common goal is to foster stewardship and sustainable management of water resources for current and future generations

2020 District Water Resource Agent Coverage Across South Carolina



## Clemson Cooperative Extension Water Resources Team

*The team consists of Extension Specialists, Associates and Agents from around the state working together to address water quantity and water quality issues in South Carolina and beyond.*

## The Clean Water Act in South Carolina

South Carolina is a NPDES delegated state.

NPDES regulations are administered by South Carolina Department of Health and Environmental Control (DHEC)



## NPDES Permit in South Carolina

Regulates local governments in the context of a Municipal Separate Storm Sewer Systems (MS4s)

Permits requires MS4s to have programs that provides public education, outreach, and public involvement regarding stormwater impacts

## Clemson Extension's Part (water resources)

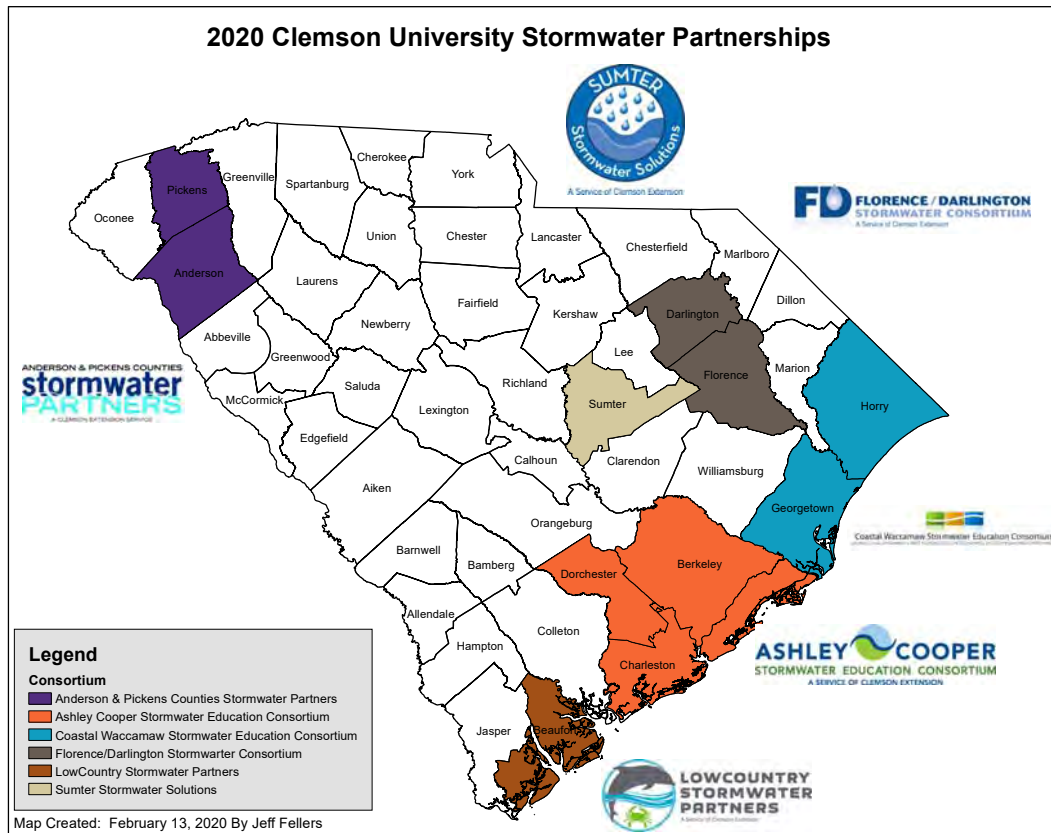
Works with Federal, State, and Local Agencies

Provides certification courses

Develop and coordinate educational programs

Produce workshops and demonstration projects

Research on various aspects of  
water management



Established agreements with various local governments

Created educational consortium

Partner with various agencies

Federal

State

Local governments

Universities and colleges

Private sector organizations

## Programs and Workshops (water resources)

Stormwater Pond Conference  
Shoreline Stabilization  
Rain Garden for Professionals  
Rain Gardens for Residential  
Audiences  
Carolina Yards

Silt Fence and Beyond  
Sediment Basin Design  
LID Practices  
Rain Barrels  
State Dam & Reservoir  
Safety Program



## Certification Programs

Certified Erosion Prevention and  
Sediment Control Inspector (CEPSCI)



Certified Stormwater Plan Review  
(CSPR)



Post-Construction BMP Inspector  
Certification Course



Master Pond Manager  
Master Rain Gardener



## HYBRID TRAINING





*Certified Erosion Prevention and Sediment Inspector*



*Certified Stormwater Plan Reviewer*



## COVID-19 Pandemic

The COVID-19 pandemic resulted in the cancellation of all in-person training courses

These courses include certification and re-certifications as well as numerous educational programs throughout the state



## COVID-19 Pandemic

Clemson Extensions goal had been to continue to  
provide our educational programs

Continue to delivering critical programs

Quality programs are essential

Timely offering is critical

We constantly evaluate, access, and adjust our  
programs to ensure we are meeting our goals



## Think outside the box



## Program Assessment

Identify program goals  
Identifying our audiences  
Identifying resources  
Evaluate potential delivery  
options and issues





## Audiences

Public agencies

State agencies (SC DHEC, SC DOT, etc.)

Local governments (Cities & Counties)

Organizations

HOA's

Professional groups

Business owners

Contractors

Consultants

Material suppliers

Equipment suppliers

Internal staff

Citizens of all ages





## Assessment of Delivery Means



Instructors at different locations  
Hardware and operating systems  
(Mac, Windows - including editions)  
Desktops, laptops, tablets, phones  
Internet connectivity (speed and  
band width)  
IT restrictions within organizations  
Backup planning (lose of connection)

## Your Program Needs

Registration

Logins

Pre-recorded or live

Self paced or time specific

Attendance confirmation

Exams

Trial runs / rehearsals

The screenshot shows the 'Meeting Registration' page for the Clemson Cooperative Extension. At the top is the Clemson Cooperative Extension logo. Below it are social media icons for Facebook, Twitter, LinkedIn, and Email. The main content area lists the following details:

Topic	APCSP Fall 2020 Quarterly Consortium Meeting
Description	Anderson & Pickens Counties Stormwater Partners virtual consortium meeting
Time	Sep 16, 2020 10:00 AM in Eastern Time (US and Canada)

On the right side of the page is the 'Anderson County Stormwater Partners' logo, which includes the text 'A PUBLIC SERVICE OF CLEMSON UNIVERSITY'.

At the bottom, there are two input fields for registration:

- First Name\***: A text box containing the word 'Test'.
- Last Name\***: A text box containing the word 'Registration'.

## Potential Program Delivery Platforms

There are numerous  
delivery means



Canvas

YouTube

Zoom

Remote Proctor Now



## Canvas

Used for the hybrid, certification and re-certification courses

University students use it for classes assignments and contacting staff

The platform has a lot of options

Building requires a higher level of knowledge related to the software (IT assistance has been critical)

The screenshot displays the Canvas LMS interface for the 'Master Rain Gardener - Spring 2020' course. On the left is a purple sidebar with navigation links: Home, Account, Dashboard, Courses, Calendar, Inbox, Commons, and Help. The main content area shows the course title 'Master Rain Gardener - Spring 2020' with an 'Edit' button. Below the title is a banner image of a garden. The course description states: 'Welcome to Master Rain Gardener, a self-paced online course developed by Clemson Extension. We are excited to have you participate in this course! In this course, there are four (4) modules, each of which is comprised of a series of pages. A page may be a presentation, a video, a reading, or an activity. You must progress through each module in order, but you can do so at your own pace. To navigate through the course, use the buttons below. You will also find helpful links on the navigation bar on the left side. When you return to continue the course, click on [Modules](#) to locate the spot where you left off on your previous visit. We hope you enjoy the course! Kim Counts Morganello, Clemson University Extension Agent'. Below the text are four colored buttons: 'Begin the Course' (green), 'Discussions' (orange), 'Technical Assistance' (red), and 'Modules' (blue). On the right side, there is a 'To Do' list with tasks like 'Grade Module 4: Discussion for Certification Track' and 'Grade Module 3: Discussion for Certification Track'. At the bottom right, there is a 'Coming Up' section with a 'View Calendar' button.

## Online CEPSCI Recertification Course



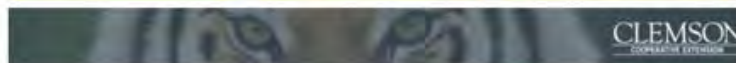
Welcome to **Online CEPSCI Recertification**, a self-paced online course developed by Clemson Extension, in cooperation with the SC Department of Health and Environmental Control. We are excited to have you participate!

In this course, there are four (4) modules, each of which is comprised of a series of pages. A page may be a presentation, a quiz, or an activity. You must progress through each module in order, but you can do so at your own pace, as long as you complete the material during the designated course timeframe.

To navigate through the course, use the buttons below. You will also find helpful links on the navigation bar on the left side. When you return to continue the course, click on [Modules](#) to locate the spot where you left off on your previous visit. We hope you enjoy the course!

Jeremy Pike  
CEPSCI Program Coordinator

Calvin B. Sawyer, Ph.D.  
CEPSCI Program Co-Coordinator



## Canvas

*Assignments*

*Module*

*Discussions*

*Grades*

*Quizzes*

*Monitor attendance,  
progress, and time*

*Can be very interactive*

*Self paced*

*Insert videos*

*Lots of versatility*



## YouTube

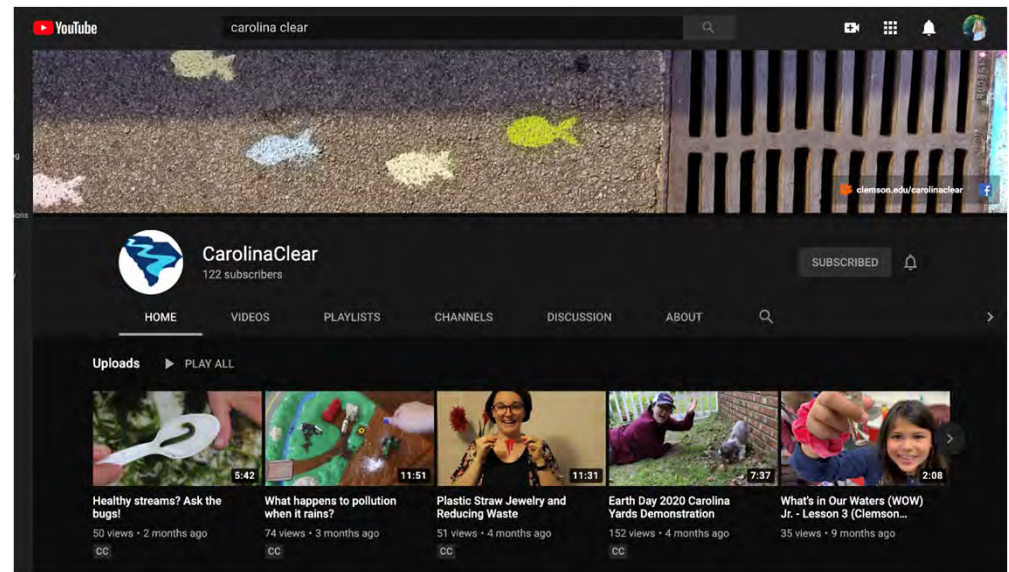
Short pre-recorded sessions

Easy to create

Open to whom ever

Options limited

Some entities block employees



## Zoom

Being widely used for meeting,  
training, and webinars

Simple to use

Can have connectivity issues

Band widths can be an issue

Requires pre-setup

### Let's Get Started



- **Zoom overview**

- Mic and camera

- Asking questions

- We want you to ask questions when you have them!
    - Use Chat icon and type in Question?
    - Facilitators will notify instructor, then you'll be prompted to unmute your mic and ask the question



- Participant button

- Check display name and change if you like

## Zoom Features



Chat room

Break-out rooms

Host and co-host

Share screen

Can poll and ask questions

Questions used to confirm attendance

Have monitors during presentations



## Remote Proctor Now

Testing platform being utilized by the University for students  
Software has some specific requirements

Monitored live during testing  
Recorded for additional evaluation  
Has automatic movements flags  
Need to have rehearsals



# Remote Proctor

## System Requirements-Remote Proctor Now

Posted by Andrew Haste, Last modified by Steven Mark Carabuena on 20 January 2020 12:39 PM

**NOTE: Tablets, Hybrid Devices, and Mobile Devices are not supported.**

Remote Proctor Now System Requirements:

### RPNOW v4.x

Operating System	Required Plug-ins	Connection Speed	Date and Time	Other
Windows 8, 8.1, 10	Flash is NOT required	Minimum 300kb/s upload speed^  Satellite and Dial up connections are not supported	Accurate for your local time zone	.Net Framework is NOT required
MAC 10.12, 10.13, 10.14, 10.15	Flash is NOT required	Minimum 300kb/s upload speed^  Satellite and Dial up connections are not supported	Accurate for your local time zone	Windows OS not supported on MAC

Hardware requirements

Microphone

Camera

Must scan your surrounding

## Summary

Virtual delivery can be achieved

Evaluate your audience  
Select your platform  
Preparation is essential  
Expect issues

Extension water team successes  
(March through August 2020)

19 webinars reaching 1,038 individuals  
Numerous meeting (including entire consortiums)  
Certification and re-certification programs  
    5 distinct courses (some multiple times)  
    Over 750 participants

## Contact Information

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## Questions???

