AWWA Webinar: Community Engineering Corps

November 18, 2020



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Ask the Experts



Steve Barr Program Engineer AWWA



Natalie Celmo, PE Engineers Without Borders - USA AWWA

Enter your **question** into the **question pane** on the right-hand side of the screen.

Please specify to whom you are addressing the question.

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- 1. Program and Staff Introductions
- 2. Project Highlights
- 3. Project Manual Overview & Updates
- 4. Open Discussion and Q&A

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CECorps Program

An alliance of more than 200,000 technical professionals and student volunteers







Mission

Bring underserved communities and volunteer engineers together to advance local infrastructure solutions

New Strategic Plan for 2021 Coming Soon

After 5 years, CECorps Staff are focusing on re-aligning our strategic plan to be released in Jan 2021. New *Values* statements and Programmatic Goals currently in design.

CECorps Staff



Clare Haas Claveau Chief Consulting Programs Officer (EWB)



Stephen Barr Program Engineer (AWWA)



Natalie Celmo Program Engineer (EWB)



Melissa Prelewicz Program Engineer (ASCE)



Ellie Carley Program Coordinator (EWB)

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What can I do?

- Communities encourage to apply for assistance through the web; CECorps staff facilitates the stakeholder engagement, scoping, and development of a manageable project
- Volunteers Find an open project opportunity; apply to find out more about a project.
- Sections and Chapters and Association Staff Marketing, Outreach, Advertising Open Projects, Encourage Folks to Participate! Join in the quarterly CECorps Roundtable (volunteer opportunity page).
- Water Equation Fundraising with AWWA volunteers and other donors

https://www.communityengineeringcorps.org/





Some AWWA Participating Projects

State	Project	Start Year	Scope/Status	
Illinois	Hopkins Park Sanitation	2019	EWB Chapter at University of Illinois at Urbana-Champaign with AWWA Professionals developing a PER for engineering modifications to a lagoon waste treatment system. Finalizing designs now.	
North Carolina	Love Valley Sanitation	2020	AWWA NC and some EWB seeking to design alternatives for an aging septic system for the town of 100 people. Currently examining land application alternatives and collection system designs.	
New Hampshire	Base Hill Water	2020	AWWA New England and EWB TN Pros are re-designing the distribution system for a 70-unit mobile home park in NH and are currently in development of their Work Plan. Conducted a remote "walk around" with VR headset in initial site assessment.	
Pennsylvania	St. Clairsville Water	2020	Students with Penn University (Water Center) and AWWA Pros are assessing a system for ~400 people using a historic surface water source, and addressing compliance violations and assessing alternatives new water sources.	
Colorado	La Jara Water	2019	Rocky Mountain Professionals are working to assess and provide design recommendations on a newly-installed water distribution system experiencing pressure problems. Currently assessing design recommendations.	

	State	Project	Start Year	Scope/Status		
	California	Anza Water	2019	EWB, ASCE, and AWWA Professionals have an approved Work Plan and are moving forward to assess costs associated with a water supply pipeline expansion from a new tribal utility to non-tribal members of the community (approximately 300-400 individuals).		
	Tennessee	Hidden Valley Water	2019	EWB Team with AWWA Pros are providing design alternatives for an informal camp community of 300 individuals in trailers to abandon aging individual wells and move towards a centralized drinking water system.		
	Texas	Mullin Water	2020	TX AWWA Pros and YPs are assessing drinking water alternatives and potential treatment system designs for the K-12 school in the Town of Mullin (100 residents, maybe about 100 students in the school).		
	Ohio	Cherry Ridge Water	2018	EWB Students and AWWA Pros; assessing consolidation options for a noncompliant water system. Now working with regulators to dissolve the water system serving 30 homes and provide financing alternatives for private well development.		
	Montana	Stevensville Water	2017	AWWA Pros have created an asset database for the town's current distribution system, have selected an asset management software solution, and will finalize this project by creating a live software solution.		
	Indiana	Troy Township	2019	AWWA Pros with some EWB assistance are evaluating the consolidation of a small township (500 people).		

Recruiting for a NH Project too!

a small township (500 people).

Recent Project Success

- Nathan Hale Urban Garden Members of the Seattle Professional Chapter of EWB designed a rainwater collection system for a greenhouse at the Jane Addams Middle School in Seattle's Meadowbrook neighborhood. The greenhouse has been used for the last ten years by the Nathan Hale High School Horticulture and Urban Farm group, led by faculty members from the high school and volunteers within the community who enjoy gardening. The need arose due to a high water demand for irrigation purposes at the greenhouse and the feasibility of collecting and storing rainwater from the roof.
- Arizona's Taylor Rodeo Grounds Stormwater CECorps performed an analysis of the existing drainage conditions of the arena to determine the issues that were likely causing excessive flooding. The team used a twodimensional rainfall model to observe and evaluate a range of storm impacts to the arena, identifying the source of offsite flows. Ultimately, the team designed a drainage system that could be easily maintained to ensure proper drainage without investing in additional maintenance tools and equipment.







Why a Project Manual?

- Centralized place for all CECorps resources, policies, procedures and guidelines
- Step-by-step project process
- Holds answers to common questions
- Having a comprehensive guide leads to successful execution and completion of projects



What's in the Project Manual?

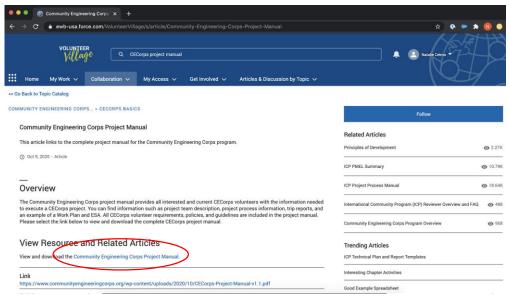
- Project Phase Prerequisites
- Internal links to all Appendices
- External links to Volunteer Village tutorials
- Volunteer Village and Admin Requirements
- Graphic with project process overview
- Tips for success!



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Where can you find the Project Manual?



Policies & Guidelines

- Branding and Marking Guidelines
- Construction Policy
- Health & Safety Guidelines NEW!
- Insurance Summary & FAQ NEW!
- Project Funding & Fundraising Guidelines NEW!
- Project Travel Guidelines NEW!
- Tracking Volunteer Hours
- Review Committees
- Volunteer Waiver AUTOMATED!
- Planning, Monitoring, Evaluation & Learning (PMEL)



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Project Development Guidelines

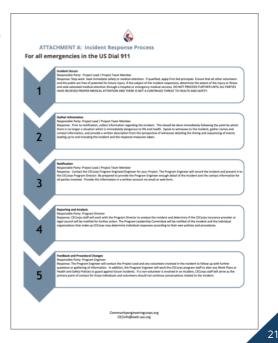
- It's an iterative and non-linear process
- Projects "develop" in different ways at different paces. Some work out, some don't. Relationship building is a long process; don't be in a rush.
- The important part is identifying a client that serves a community in need of engineering services. Know what your "pitch" is:
 - We are a volunteer network of 3 associations that provides engineering consulting services to communities and organizations without the financial ability to pay for that service.
- Let a potential client tell you what they need, rather than you telling them what you want to work on.
- Involve a CECorps staff member sooner rather than later for tips on developing project activities.

NEW!

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Health & Safety Guidelines

- Outlines responsibilities, potential hazards, and suggested steps in emergency reporting and notification.
- Meant as a general guide, but is not site specific. Guides the team in considering H&S in the Work Plan.
- No insurance coverage, but we need to know if our volunteers are at risk from project activities.



NEW!

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Insurance & ESA FAQs

- What does CECorps' Professional Liability Insurance (PLI) cover?
- Does the PLI coverage apply to the REIC, or the entire project team?
- Does CECorps provide General Liability Insurance (GLI) to its volunteers?
- What does GLI cover?
- Does CECorps provide coverage to volunteers during the construction or implementation of a **CECorps Project?**
- Why is the REIC the only CECorps volunteer to sign the ESA?
- ...& More!









Funding & Fundraising Guidelines

- CECorps strives to fund project teams
- Examples of project costs
- Non-Travel expense request examples and procedures
- Travel expense reimbursement examples and procedures
- How to process reimbursements through Volunteer Village
- Guidelines for project fundraising

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Travel Guidelines

- All Volunteers must be registered in Volunteer Village
- Have completed their Emergency Contact Information under their profile
- Signed their CECorps Volunteer Waiver
- Have read and acknowledged the CECorps Health & Safety Guidelines
- Are listed under the Project Contacts
- Step by step instructions on how to submit a trip report in Volunteer Village



NEW!



Questions? Concerns? Comments?

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Presenter Biography Information

Steve Barr joined AWWA in September of 2018 with 10 years of experience in environmental engineering and international development consulting. As AWWA's representative to and program manager for CECorps, Steve works with AWWA Sections and members to provide volunteer opportunities for short-term engineering and technical services to underserved communities across the US. Steve holds a bachelor's degree in Environmental Engineering from Cal Poly San Luis Obispo, and a master's degree in Science, Technology, and International Development from the University of Edinburgh.

Natalie Celmo, PE, is a Program Engineer at Engineers Without Borders USA. Natalie oversees projects through the Community Engineering Corps program, which provides pro-bono engineering and consulting services to underserved communities throughout the US and its territories. Natalie has 7 years of experience in the construction industry and holds a BS in Civil and Environmental Engineering from the University of Pittsburgh.

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