

COLLEGE/UNDERSERVED COMMUNITY PARTNERSHIP PROGRAM (CUPP)



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COLLEGE/UNDERSERVED COMMUNITY PARTNERSHIP PROGRAM (CUPP)

BACKGROUND

- Met In Hayneville, AL to discuss American Recovery and Reinvestment Act projects
- Mayor discussed limitations on small communities seeking funding due to lack of technical support to develop projects
- Detail created in August 2011 with EPA to explore extent of the issue, and possible solution
- Concept created to collaborate with colleges and communities to provide needed technical assistance.

HOW IT WORKS – COLLEGE/UNDERSERVED COMMUNITY PARTNERSHIP PROGRAM

- Communities are identified for support by federal agencies; colleges and universities; non profit organizations; or self identified, based on criteria poor and/or underserved).
- Issues are identified by the CUPP Program in partnership with the community.
- Local university is identified that can assist the community via CUPP.
- Universities agree to which issues they will provide voluntary assistance, and assign the students to assist in providing the technical assistance
- Each participating school arraigns for academic credits to be earned by these students for their efforts
- The federal government (project manager) will coordinate technical assistance to the schools to assist them in helping communities as needed.

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PROGRAM BENEFITS

- Creative, collaborative effort between poor and underserved communities, and local colleges and universities to provide consistent technical support at no cost to the communities; schools participate on a voluntary basis.
- Students gain valuable experiential learning opportunity that helps those who need help the most. In addition, it serves as a resume builder, and enhances obtaining job opportunities upon graduation.
- Underserved communities benefit from the investment of innovative technical assistance and gain a consistent source of technical assistance and planning.
- The presence of college students in poor communities serves as an inspirational model for children in those communities.
- Federal agencies gain the opportunity to expand the support provided to poor and underserved communities with no need for additional staff.

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PROGRAM PARTNERS

Academic Institutions

- Participation from sixty-five schools in seventeen states, and one international school (Grine American University, Greece)
- Working with tribal colleges; HBCUs; Hispanic schools; majority schools; large public schools; private schools; and community colleges

Currently partnering with the following Departments/Agencies/Organizations:

- Department of Agriculture (Nationwide)
- Department of Energy (Nationwide)
- Department of Interior (Nationwide)
- Department of Education (Nationwide)
- Center for Disease Control (HHS)
- EPA Regions 3, 5, 6, 2 and 1
- Office of Public Health, HHS, Region 4, 2 and 6
- National Interagency Working Group for Environmental Justice
- Union of Concerned Scientists
- American Geophysics Union's Thriving Earth Exchange
- Community Engineering Corps

COLLEGE/UNDERSERVED COMMUNITY PARTNERSHIP PROGRAM (CUPP) - BENEFITS

- 70 colleges onboard supporting 51 communities in 18 states; expect to add four West Coast and Mountain West states this year.
- Program has completed or is scheduled to complete over 150 projects impacting the lives of over **2,702,412 people**
- Value of work done in the communities from 2013 to 2018 is over **\$33,360,000** with; **Return On Investment (ROI) of over 10 to 1**
- Four federal agencies onboard to support program nationwide (EPA, DOI, USDA, and DOE (Energy)); working with Department of Education to consider similar agreement
- Two non-governmental partnerships that have supported the program projects at no cost; Community Engineering Corps, and the American Geophysics Union

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CUPP PROGRAM- PROJECTS

The following efforts has already been done:

- Development of natural resources projects and zoning plans the redevelopment of a Superfund site at Navassa, NC (completed)
- **Development of an alternate Transportation Plan for the Selma to Montgomery Trail that includes revitalizing five brownfield sites as bust stops; Tuskegee University trained to as in economic redevelopment of other sites along the Trail (completed)**
- Development of a pilot project to look at lead issues in drinking water in poor public schools in three states (in progress in South Carolina; completed in North Carolina and Georgia)
- Evaluation of factors contributing to high rates of asthma in poor section of the city of Macon, GA (completed)
- Feasibility study with options to address erosion along the Alabama River impacting the Edmund Pettis Bridge (completed) Analysis of county wide storm water management systems, and recommendations for improvement in Pleasant View, TN (completed)
- **Developing a project to eliminate health issues associated with poor sewage infrastructure in the Alabama Black Belt (completed).)**

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CUPP PROJECTS (cont.)

- Development of an area-wide redevelopment plan with the city of Gainesville, FL and community groups in Superfund site area (completed)
- Interns to assist in drinking water plant operations in East Point, GA. (completed)
- Development of redevelopment plan for the wood treater Superfund site in Pensacola, FL (completed)
- Reducing the cost of disposing of sewage sludge by using solar system to remove excess water in Darien, GA. (completed)
- **Designing a city hall in Midway, GA. to include the use of solar panels; green roofs; bio swales to handle storm water (completed)**
- A health survey to examine the high incident of cancer rates in Pineville, LA (completed)
- Development of a redevelopment plan for a Superfund site in Knoxville, TN (in progress)
- **Development of maker space at San Juan College for the city of Farmington, NM (San Juan, Drexel University) (completed)**

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CUPP PROJECTS (cont.)

Upcoming projects:

- Health education for minority youth in Navassa, NC (UNC W) (ongoing)
- **SWOT analysis for the city of Whitehall, AL**
- Conducting hydrological study and developing flooding mitigation strategies in Northern Louisiana (ongoing)
- Addressing community issues for twenty-one different communities in the Georgia in partnership with the Georgia Municipal Association
- **Helping to address PTSD issues in youth who have survived a natural disaster (ongoing) Supporting long term recovery efforts with FEMA. FEMA has requested assistance to support long term recovery efforts in Princeville, NC, Puerto Rico, and Northern Louisiana. Two schools have agreed to assist Princeville, and discussions are taking place with LSU in Baton Rouge and Grambling State University to support communities in Louisiana.**

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- **PENDING COLLABORATIONS:**
 - **Collaboration with the Department of Education to provide stipends for poor students to participate in the CUPP Program.** A pilot is being developed with Atlanta Metropolitan College to develop a pilot for the Department of Education's Student Assistance Program and CUPP to provide a way for poor students participate in the CUPP Program. (Pilot has been successfully executed; expanding this effort to four other schools).
 - **Collaboration with CDC.** CDC is looking to collaborate with the CUPP Program to address health issues
 - **Expanding collaboration on emergency management issues between minority communities and HBCUs.** Working with the White House Initiative on HBCUs to expand use of free emergency management training and increase academic inclusion of emergency management into HBCU curriculums
 - **Economic Development Plan for the 5th Ward in Houston.** Texas Southern University is planning to work with both the city and community to develop a plan to address the reuse of 535 vacant lots in the 5th Ward

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PENDING COLLABORATIONS (cont.)

- **Increasing participation of minority communities in National Parks and expanding environmental education in minority communities.** Florida International University has agreed to use their currently funded outdoors outreach program for poor school age children in the cities of Liberty City, Overtown and Little Haiti, FL to expose them to National Parks. The Southeast Region of the National Park Service has agreed that park rangers will provide environmental education of protecting waterways and fresh drinking water sources, as well as other children's health information to the children as a part of this quarterly outreach program. Draft of project, which includes environmental education, has been received and reviewed. Project has received some attention at DOI Headquarters, and DOI requested the inclusion of recreational opportunities, which has been added. Project is expected to begin in October 2018.
- **International project with Greece.** American University in Cyprus, Greece is developing a collaboration with Grambling University to design a land bridge to reconnect two cities in Northern Louisiana.
- **Addressing Water Infrastructure issues.** Western Kentucky University will be working with the city of Glasgow, KY to addressing issues with their drinking water infrastructure, in partnership with the Community Engineering Corps (CEC). This will be a pilot effort with the CEC

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Grade school children from Overton, Liberty City and Little Haiti in South Florida getting STEM education hands on at Biscayne National Park in a collaboration with the National Park Service. Students get classroom training once a month, and hands on learning once a quarter. This is a multi-year program being conducted by Florida International University.

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Students from Tuskegee University
working to get public input for bus
stops for the alternate transportation
project



Students from Florida International
University working on food garden in
Medley, FL

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Students from the University of Puerto Rico at their first meeting with residents of Old San Juan to discuss community resiliency planning. Students efforts includes children and adult education in addition to planning efforts. Students are being supported by stipends from the Department of Education Federal work Study Program.

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Students from Abraham Baldwin Agricultural College working to address bias issues in rural communities.



Wayne Johnson, Water and Sewage Manager for the City of Darien (*left*) and John Rayfield, student from Georgia Southern (*right*), holding one of a series of solar stills used to reduce water in the sewage sludge. Project used as a practicum project for John's M.S. in Sustainability.

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- Students working with the IT Director at East Point, GA on cybersecurity issues
- “GSU’s students have been instrumental in updating and rewriting the City’s IT policies and procedures to meet the changing landscape of cybersecurity,” said Farhad Islam, IT Director for the City of East Point. “They focused on people, processes, and technologies to address IT security issues relevant to protecting the City’s key infrastructures. They worked as a team to develop a security training framework and performed risk and SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis of existing systems and applications in order to identify vulnerabilities and make recommendations on fixes. They learned a great deal from this engagement and the City benefited immensely from their effort and service.”

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Georgia Tech students studying the Alabama River as part of a study on the erosion impact the river is having on the foundation of the Edmund Pettis Bridge.



Professor and student from Savannah State University working on design of multi-purpose municipal building for the city of Midway, GA. Building will house all city functions, and will include the use of solar panels and recycled materials to reduce cost to seventy percent of original cost.

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Pilot agricultural project being done by Tuskegee University in the city of Shorter, AL. Mayor Powell is driving the tractor, and the Dean of Tuskegee AG School is on her right. Pilot grew so many watermelons, once quota share was sold, city made thousands selling from roadside stands



UNC Wilmington teaching the citizens of Navassa, NC about how contamination affects the natural environment. School developed natural resource projects on behalf of the city to compete for 12 million dollars worth of potential funding via the Superfund settlement.



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- Students from Clemson University visiting the Alabama Black belt. They were part of a four school collaboration (University of South Alabama; Tuskegee University; and Drexel University) that developed new concepts and designs to address poor sewage issues in the Alabama Belt Black, an issue that has led to poor health issues for decades. The students best ideas will be used to develop a pilot project funded by USDA Rural Development. If the pilot works, the pilot will be used throughout the Black Belt of Alabama.

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PENSACOLA
THE UPSIDE OF FLORIDA

Sanders Beach Park



STOA
Architects

- Escambia County wanted to redevelop a remediated brownfield (former Escambia Wood Treating Company site) into a commerce park. As such the County require a plan to guide its redevelopment efforts. Under the auspices of the EPA College/Underserved Community Partnership Program (CUPP), County and EPA staff engaged students from the Department of Earth and Environmental Sciences at the University of West Florida (under the direction of their instructor) to assist with this redevelopment planning process. Students worked in teams, and engaged with (environmental) planning professionals, to provide input to this process. Above is a copy of the design students created. They also added detailed plans, based on a comparison of similar efforts around the country. The County has adopted the plan, and is moving forward the students design. STOA Architects is the name the student gave to their team.

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- On the left are students from the Nutrition program and Michigan State University education children on healthy eating (to include active participation). On the right is a student tutors are from Kettering University. On the right is a student from Kettering University providing after school STEM education. All activities are being done at the Broome Community Center in Flint, Michigan

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Any Questions?

**Let us know your
thoughts, comments
and or concerns**

Email: Burns.Michael@epa.gov

Or

Call: 404-562-8228