Project Clean Rivers: A Partnership for a Better Columbus, Ohio

The Columbus, Ohio municipal wastewater utility serves a total regional population of just over 900,000. As with many older urban areas, Columbus historically experienced wet weather overflows in the sewer system, which led Mayor Michael B. Coleman and his Public Utilities Department to develop a comprehensive wet weather management plan, Project Clean Rivers. The plan included an aggressive schedule of improvements to its wastewater treatment plants as a critical step to reduce overflows and comply with State and Federal environmental regulations.

The large capital program ($2+billion when completed) is by itself a noteworthy public works program to improve the environment and protect public health. Beyond that, Mayor Coleman and Malcolm Pirnie, the City’s Professional Program Manager, have used Project Clean Rivers as an engine to drive economic, workforce, education and minority and women business benefits that greatly multiply the value of the construction program to the community.

Significant Environmental Benefits

By July 2010, projects completed to increase treatment plant capacity will reduce sewer overflows to Columbus rivers by 40%, eliminating the equivalent of 540 million gallons of untreated sewage. By 2014, additional plant treatment and sewer conveyance projects will go on line that will eliminate 90% of the sewer overflows, the equivalent of 1200 million gallons of sewage that will not be discharged untreated to Columbus rivers. Providing these water quality and health benefits on such an aggressive compliance schedule required a Professional Program Manager, a role that Malcolm Pirnie played, leading a team of 10 consultants in planning, design, and construction. Special budget and schedule tracking tools were developed by Malcolm Pirnie to assure the program stayed on track to meet compliance deadlines.

The environmental benefits of the Project Clean Rivers program also support other public/water initiatives such as the River South, Scioto Mile and the Grange Audubon Center. All of these projects will contribute to sustainable development of downtown Columbus.

A Vision for a Better Columbus

Since the start of the project, approximately 40 jobs have been added each year to the MBE/WBE consulting firms involved. And the construction has led to approximately 450 jobs added each year for contractors. The growth of that business community will be sustained beyond the life of Project Clean Rivers through education and opportunities for future engineers.

A unique aspect of Project Clean Rivers is how it is being used to strengthen the economic base of the community. This environmental program is fueling the Diversity Empowerment and Enhancement Program (DEEP) that is providing a robust opportunity to facilitate the growth of MBE/WBE business enterprises and create an economic stimulus for Columbus’ people and businesses.
Malcolm Pirnie worked with Columbus to develop DEEP, and administers the Program with the City and its subconsultants to achieve its four core objectives:

1. Enable qualifying businesses to be involved from start to finish with the project.
2. Grow the capacities of the businesses by bolstering their staff and experience with training and the help of Malcolm Pirnie’s Human Resources Department in cases where a specific skill set is needed.
3. Build resumes to the point where DEEP businesses can carry the primary contract.
4. Create opportunities for minority or female engineers though formal education, internships, and jobs with a focus on a future working within the City of Columbus.

Strengthening the capacity of Columbus’ minority and female-owned businesses is contributing to the boost that the local economy receives from the Project—$2 is returned to the community for every $1 spent on construction. The economic benefit of Project Clean Rivers is almost $500M to date in engineering and construction services. The Project Status Brief in the appendix shows some of the projects helping reduce pollution while creating jobs for a sustainable future.

**Attracting the Next Generation of Engineers**

To reach deeper into the community and into the future, in June 2008, DEEP opened a community outreach office with a key mission to attract technically talented students to “Stay, Live, Work and Play in Columbus.” The office offers both education and employment opportunities to local high school and college students. The community outreach office developed the ALPHA Engineering Lecture series, comprised of two 10-week semesters, that attracted 18 minority high school students interested in the engineering profession this past year. Students that participate in the lecture series are introduced to engineering concepts, the wide range of engineering career options and encouraged to apply for college scholarships in engineering studies.

Through DEEP, 22 minority students have worked as interns in local engineering firms.

The culmination of the lecture series and internship is the annual John E. Foster Scholarship. This scholarship, named after a leading African-American civil engineer and Columbus entrepreneur, awards two students full-ride scholarships to study engineering at Ohio universities.

What started out as a project to address environmental challenges and improve water quality has and will continue to have a much greater impact on Columbus. The successful collaboration between Malcolm Pirnie and the City of Columbus, OH will improve water quality, the environment and public health, and it will have an even greater impact on the quality of life for City residents and establish Columbus as a leading community to live, work, and raise a family.