

Creating business value through ecological stormwater management





The business case

Being highly exposed to flooding on its Houston site, CCP has chosen to restore its surrounding ecosystem rather than building another stormwater management infrastructure. This operation, while enhancing the region's biodiversity, will ultimately help the company save money, as well as benefit the whole local community.

The issue

Cook Composites and Polymers Co. (CCP) is an industrial company producing and distributing products such as gel coats, composite resins, or coatings resins. It owns a site in Houston US that is highly dependent on the natural flood regulation services from the local bayou ecosystem to prevent stormwater from accumulating across its facilities and creating a nuisance. However, the development of impervious surfaces throughout Houston has disrupted this ecosystem service.

Ecosystem regulation services, an alternative solution to fight floods

The CCP Houston site is currently equipped with a stormwater management infrastructure that is ageing and not able to cope with the frequent storms and flooding that occur in the region. Therefore, CCP is planning to construct a wetland ecosystem to replace this infrastructure. Through this project, CCP aims to restore the local ecosystem by reestablishing the natural hydrological cycle for its facility's location, as well as provide water purification services through the ecological stormwater management solution.

CCP believes this progressive solution to a unique problem for an active industrial facility will require support and approval from multiple regulatory agencies.

The response

A multi-stakeholder project

CCP is working together with the U.S. Business Council for Sustainable Development (US BCSD), The Center for Resilience at the Ohio State University and other partners to analyze, design and construct a wetland to replace the existing stormwater management infrastructure. CCP believes this unique partnership will:

- support message point development for demonstrating project value to regulatory stakeholders (e.g., City of Houston Public Works, City of Houston Fire, TCEQ Houston, TCEQ Austin) and company shareholders; and
- enable CCP to obtain approval from not just one but multiple state and local regulatory agencies.

The results

Results for business, results for the community, results for biodiversity

This ecological solution to the current ageing stormwater management system will eliminate site flooding, allowing the company to save money on the reduction or elimination of storm water discharge, on nuisance costs associated with flooding, and also on the capital required to maintain the existing system. Additionally, the project will reduce the burden on the public water treatment system, whilst providing a natural amenity. These positive impacts, as well as the partnerships built during the project, will also enable CCP to strengthen its social license to operate in the region.

Finally, the wetland enhancement will also benefit the local ecosystems as plant biodiversity is expected to increase by approximately 30 species.

