

## Sustainable Design and Beneficial Reuse

EA has been employing sustainability principles—developing and implementing sustainability strategies and green remediation for our clients—since our founding in 1973. We work every day to improve and maintain environmental quality and to help clients design, implement, and sustain leading programs and projects. EA has integrated sustainability and innovative green remediation technologies into our project delivery systems through formal systems, enhanced communication, and expanded staff training. We utilize quantitative analysis tools such as SiteWise™ and Envision™ to proactively evaluate project life-cycle impacts and improve environmental designs to focus on efficiency and sustainability.

### Industry Involvement

Through our role in professional and trade organizations such as the Sustainable Remediation Forum (SURF), ASTM International, and the Institute for Sustainable Infrastructure (ISI), EA has been instrumental in encouraging development, adoption, and documentation of quantitative green and sustainable remediation metrics and qualitative evaluation.

Our commitment to green remediation and sustainable restoration also includes participating in the development of industry standards with personnel active in organizations such as the Interstate Technology & Regulatory Council (ITRC), which help establish new cleanup guidelines and evaluate industry Best Management Practices.

### Examples of Sustainable Restoration Design and Beneficial Reuse

- Designed and implemented bio-barrier sediment cover around a 2.5-acre pond and surrounding wetland area resulting in 50% reduction in greenhouse gas emissions and \$40M in savings compared to other alternatives.
- Prevented 7,300 metric tons of emissions lowering greenhouse gas emissions by 95% through the use of onsite contaminant disposal cells (versus offsite transport and hazardous waste disposal).
- Conserved 2,462 kilowatt hours through optimization of an existing pump and treat system and implementation of remedial design/removal action that reduced investigation-derived waste and resource consumption associated with onsite wells.
- Developed an onsite dredge, place, and containment remedy to dredge 21 miles of tidal channels and that supported restoration of 8,000 acres of tidal marsh damaged by hurricanes.
- As part of a \$50M construction project, recycled rebar and utilized concrete rubble from warehouse demolition for beneficial reuse as non-structural fill across the project site. As part of the same project, stormwater systems were improved to include oil/water separators on outfalls as well as low impact development including wet pond storage and bioswale treatment of all new impervious surfaces constructed.



### For More Information

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