

Environmental Services

Regulatory Permitting, Environmental Studies,
Impact Analysis, and Mitigation





Schneider Engineering & Consulting

Schneider Engineering & Consulting (SEC), a wholly owned subsidiary of the Orion Marine Group, is headquartered in Tampa, Florida. As part of the Orion Marine Group network of companies, SEC engineers and consultants are able to support our clients from strategic locations across North America, including Houston, Texas; Seattle, Washington; Anchorage, Alaska, and Norfolk, Virginia. In addition to the professional resources available in our Tampa and Houston offices, SEC is able to draw on a range of heavy civil marine construction and specialty services within our marine group.

Environmental Services

Schneider Engineering & Consulting has the expertise to create wide-ranging and sustainable solutions to environmental challenges. Our experienced maritime environmental staff provides a full range of required waterfront-related environmental studies and permitting in a cost-effective and responsive manner, both in the U.S. and abroad. Specific services include natural resource assessment, regulatory permitting, environmental impact analysis, and mitigation.

Company History

Schneider Engineering & Consulting was established to provide personalized professional services to clients, with the goal of designing projects and structures that are highly functional, easily constructed, and cost effective. The efficiency of our corporate structure allows our principal engineers and scientists to remain involved in every design decision and phase, while adding not only value to our clients' projects, but also providing the assurance that each project achieves a successful outcome.



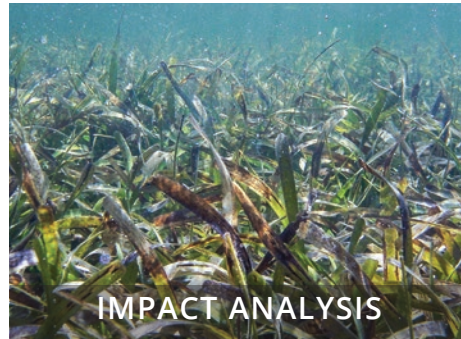
Permitting is essential to site development and maintenance projects. Services typically include the development and submittal of permit application packages, requisite permit drawings, and detailed negotiations with regulatory personnel. SEC focuses on impact avoidance and minimization and is a recognized leader in securing complex permits for waterfront developments expeditiously, with reasonable mitigation requirements and efficient cost-to-improvements ratios.

- **Permitting Strategy Development**
- **Data Collection**
- **Pre-application Agency Meetings**
- **Application Preparation and Submittal**
- **Agency Coordination**
- **Permit Document Review**
- **Construction Compliance Review**



Environmental studies are performed for each project based on project complexity and need. Agency requirements also dictate the collection of specific data for dredging and filling within jurisdiction wetlands and surface waters. Studies are commonly designed to collect existing physical and chemical attributes of the environment to be impacted and to predict potential changes as a result of the proposed project.

- Sediment Quality Studies
- Water Quality Analysis
- Benthic Surveys
- Dredge Disposal Sites Analysis
- Environmental Monitoring
- Beneficial Reuse of Dredge Material
- Hydrodynamic Modeling
- Underwater Archaeological/Cultural Surveys



The project-specific assessment of impacts to a habitat or species is key to the determination of a successful permitting result. Quantification of impacts is also necessary to develop an acceptable mitigation plan to compensate for unavoidable impacts. The experienced collection of habitat and aquatic species data is important to minimizing impacts and protecting SEC's client's best interests during the permitting process.

- Habitat Mapping
- Habitat Function/Quality Assessment
- Essential Fish Habitat Analysis
- Listed Species Surveys
- Compensatory Assessment (e.g., UMAM, eWrap)
- Alternative Sites Analysis



Mitigation for development impacts to wetlands and other habitat types is a common element of many waterfront expansion projects. Development of a cost-effective and proven design is paramount to the successful permitting of any project.

- Mitigation Options Review
- Assessment of Mitigation Banks
- Preliminary Mitigation Design Plans
- Analysis of Values Lost vs. Net Gain
- Final Mitigation Plans Development
- Mitigation Construction Services
- Post Construction Monitoring