

# **ECT** Environmental Consulting & Technology, Inc.



## *Corporate Capabilities 2016*

Complex Challenges ... **PRACTICAL SOLUTIONS**



## Our Values

**Safety:** Conducting work in a safe manner – protective of our employees, our clients, and the communities in which we work – is central to the conduct of our business.

**Client focus:** We build long-lasting client relationships and trust by listening carefully, responding effectively, and meeting commitments.

**Accountability:** As employee owners, we hold each other personally responsible and jointly accountable for the success of ECT and the work we deliver to clients.

**Integrity:** Honesty and trust are the cornerstones for our actions and guide our decisions as we work with our clients and each other.

**Empowerment:** We cultivate a multidisciplinary team that fosters the growth of intelligent, creative, and industrious employee owners.

**Collaboration:** We rely on a team concept focusing on organizational growth while recognizing and rewarding performance.

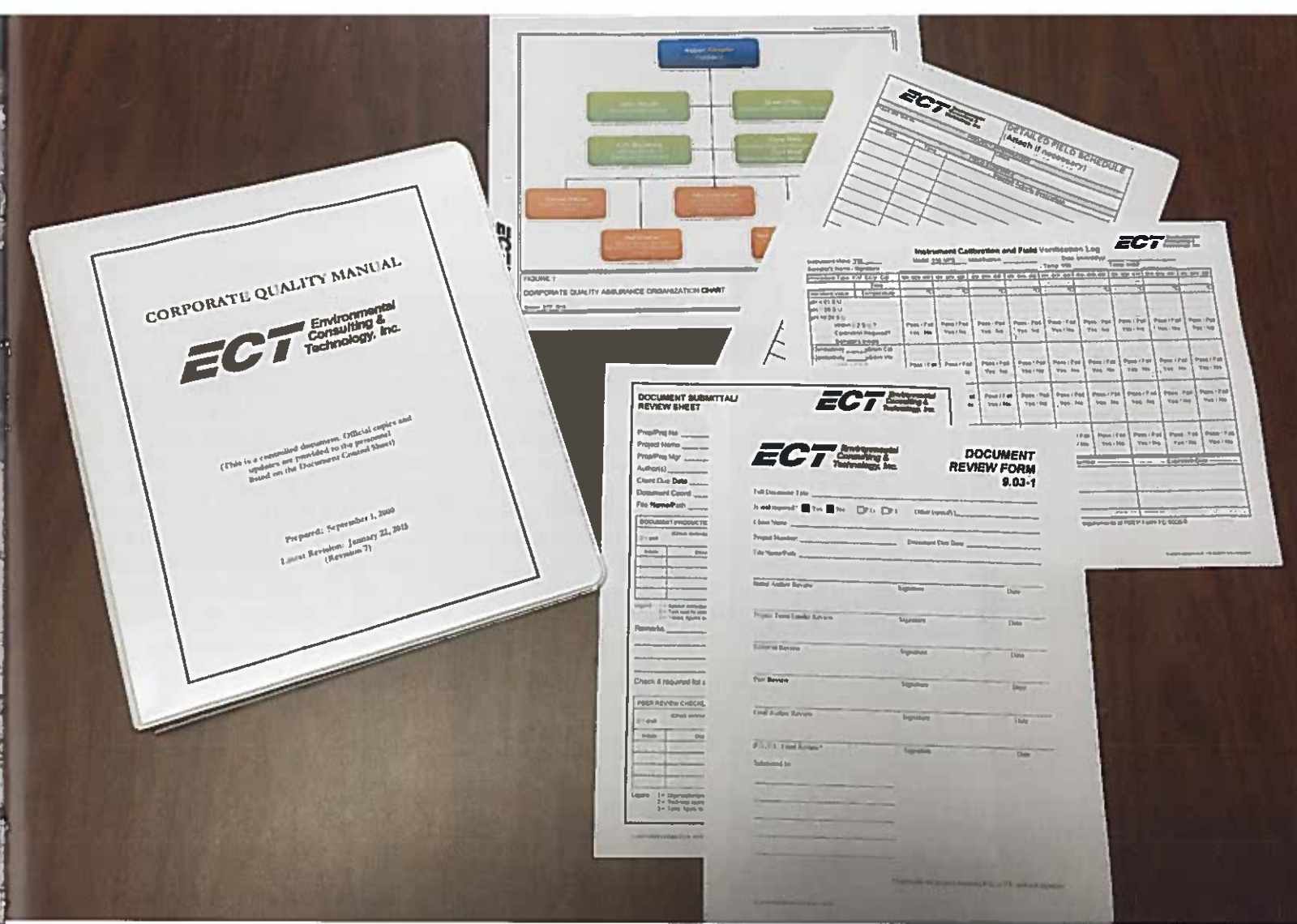
**Respect:** We respect each and every individual and encourage mutual support.

**Environmental Consulting & Technology, Inc. (ECT)**, and its affiliates, are a professional consulting, engineering, and scientific services organization with clients that include private-sector businesses, other engineering firms and contractors, and all levels of government. Founded in 1988 and routinely ranked by *Engineering News Record* among the top 200 environmental engineering firms in the country, ECT provides environmental consulting and engineering design services on projects ranging in size from small, specialty tasks to large, multidisciplinary efforts and agency response allocations totaling hundreds of millions of dollars. We enjoy a well-deserved reputation as trusted strategic advisors to a host of market-leading clients in pivotal components of the economy.

ECT's efforts are led by multidisciplinary project teams focused on the development of practical and cost-effective

solutions to complex environmental challenges. With technical expertise and professional experience across numerous industries and all levels of government, the members of these teams offer a demonstrated commitment and ability to provide exceptional client service on projects that are complex, large in scope, and affect a variety of stakeholders.

ECT delivers service in five key practice areas, supported by a wide range of scientific, engineering, and management disciplines. These practice areas include: air quality; natural resource management and permitting; performance assurance and compliance; site assessment and remediation, and water resources. Services within these areas span a variety of client sectors ranging from power, agriculture, and mining to land development, manufacturing, and government.



## Health & Safety

ECT is committed to safety and is a proud member of ISNetwork, the global resource for connecting corporations with safe, reliable contractors. Ongoing occupational safety training is a requirement of all project staff, and compliance with ECT's Corporate Health and Safety Program is a safety performance metric against which staff members are evaluated annually.

**Site-Specific Health & Safety Plans (HASPs) -** ECT designs individual HASPs to meet the requirements of the Occupational Safety and Health Administration's (OSHA) Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) and establish the additional requirements necessary to protect the health and safety of all personnel working at a particular site.

Key plan elements include:

- Blood-borne pathogen exposure control
- Subcontractor management
- Hazard communication

- Hearing conservation
- Personal protective equipment
- Welding, cutting, and hot work
- Respiratory protection

**Medical Monitoring -** All ECT field personnel on sites where hazardous substances are known or presumed to exist are enrolled in a medical monitoring program, which includes a baseline physical examination and surveillance examinations as recommended by qualified and licensed occupational health physicians.

**Employee Training -** All ECT personnel who work at sites where hazardous conditions exist are certified through OSHA-approved HAZWOPER training. Additionally, all such employees attend annual OSHA-approved 8-hour refresher courses, and are required to maintain an up-to-date Red Cross certification for CPR and first aid.

## Quality

ECT recognizes quality assurance/quality control (QA/QC) is an essential aspect of each project and is dedicated to maintaining a comprehensive corporate quality program (CQP), responsive to the specific requirements of its clients and government oversight agencies. This firmwide plan defines policies and procedures for controlling the quality of all facets of ECT's technical work, including field data collection, field survey methods, data analyses, and project deliverables, as well as efforts performed by subcontractors.

The requirements embodied in ECT's CQP are outlined in a number of QA/QC documents, including a comprehensive quality assurance (QA) plan, project-specific quality assurance project plans (QAPPs), standard operating procedures, and numerous other manuals (e.g., the ECT Document Production Manual, equipment manuals, etc.).

**Project Planning & Document Flow -** QAPPs are prepared using U.S. Environmental Protection Agency (EPA) guidance QA/G-5. Our QAPPs document the project-specific policies, organization, data quality objectives, functional

activities, and specific QA/QC procedures and activities designed to achieve specified quality goals.

**Field Activities, Site Sampling & Data Recording -** ECT personnel undergo extensive QA/QC training with regard to the operation, use, and validation of a variety of sampling and analytical testing equipment and record-keeping procedures applicable to the specific agency and/or jurisdiction for which work is being performed.

**Data Review -** ECT's analysis and interpretation skills combine to give an overall level of precision and confidence that the data collected are scientifically valid, defensible, and of known precision and accuracy, in order that conclusions drawn from them may be considered reliable.

**Design & Report Preparation -** Our peer-based QA/QC review process during all design and report preparation to ensure work products meet accepted professional standards of reasonableness, readability, structural correctness, and accuracy.

# Client Sectors



## Power

ECT's extensive experience in feasibility studies, siting, and licensing has made it a worldwide resource in the delivery of more than 55,000 megawatt of new power generation facilities over the past 10 years. ECT's partnering solutions provide a cost-effective alternative for clients looking to acquire additional on and offsite expertise, without committing long-term resources.

As a leader in the siting, licensing, and permitting of facilities in the United States and abroad, ECT is familiar with some of the most rigorous approval processes in the nation, and we offer extensive experience in the development and implementation of public outreach programs specifically tailored to issues involving electrical transmission lines, natural gas pipelines, water supply pipelines, and transportation corridors.



## Government & Regulatory

ECT has established strong working relationships with various federal, state, and local agency personnel and thoroughly understands the expectations and project requirements necessary to meet the quality assurance, technical, community involvement, and reporting objectives considered key to publicly funded projects ranging in value from a few thousand dollars to agency response allocations of more than \$300 million.

In addition to our work with state and local agencies, ECT's record also includes multiple contract vehicles and extensive experience working within the federal sector for a variety of other governmental agencies, which attest to our ability and qualification with respect to projects that are complex, large in scale, and affect a variety of stakeholders.



## Mining

ECT offers tailored solutions for mining and infrastructure projects and represents a clientele that includes some of the world's leading producers of crop nutrients and aggregate. ECT's integrated project management systems and experienced personnel combine to deliver cost-effective permitting of new, upgraded, or expanded mine facility and infrastructure projects throughout the United States.

Led by staff with backgrounds in the mining industry, ECT assists clients in the development and implementation of cost-effective practices that reduce the environmental impact of mining operations, including measures to reduce water and energy consumption, minimize land disturbance and waste production, prevent pollution, and successfully close and reclaim depleted sites.

# Client Sectors

## Financial & Professional Services

ECT delivers practical solutions to clients looking to mitigate environmental risk stemming from the release of hazardous substances. Recognizing that Comprehensive Environmental Response, Compensation, and Liability Act's (CERCLA's) "safe harbor" provision may not always shield a financial institution from liability resulting from bankruptcies, workouts for divestment of assets, ECT provides advice and solutions to both mitigate risk and realize improved financial outcomes by reducing risk.

Included among ECT's staff are licensed attorneys and personnel offering extensive experience in expert technical review and witness testimony in deposition and trial settings. Our technical training and legal research skills position us well for responsible party evaluations, Resource Conservation and Recovery Act (RCRA) and CERCLA closures, and evidence and document management.

## Land Development

Whether the project involves a master-planned community; mixed-use development; or commercial, retail, or residential endeavor, ECT fully understands the environmental complexities associated with land development and the conversion of land uses. ECT has extensive experience and expertise in environmental, regulatory, and due diligence services associated with private and public land development.

Frequently partnering with civil engineering and planning firms, ECT's multidisciplinary teams of environmental professionals and resource engineers combine to offer cost- and time-efficient solutions across a gamut of complex issues, ranging from wetland and listed species permitting, mitigation, and greenway design to water quality and stormwater rehabilitation, remediation, and sustainability.

## Oil & Gas

With more than 20 years of environmental and engineering experience, and having managed oil and gas projects throughout the United States, ECT has supported producers of all sizes from the world's largest multinational corporations to small regional independents. ECT understands the operating practices, regulatory requirements, and environmental needs of the oil and gas industry.

In every case, ECT provides responsive, realistic, and cost-effective services tailored to ensure our clients' goals for safety and regulatory compliance, with services ranging from hydrogeological investigations, disposal/injection well permitting, and Superfund Amendments and Reauthorization Act (SARA) Tier II reporting, to spill response, contaminant investigation and remediation, EPA greenhouse gas reporting, and spill prevention, control, and countermeasures (SPCC) planning.



# Client Sectors



## Agriculture

Whether assisting in the permitting of new or modified farming operations, or designing and permitting irrigation sources, stormwater drainage, and water quality facilities, ECT works as a trusted advisor to help shape federal, state, and local policy and ensure its clients are informed and able to maintain compliance with changing regulations.

ECT assists land owners and other members of the agriculture industry with a wide range of environmental and regulatory matters, from issues as diverse as water quality and supply, listed species, floodplains, and open space preservation, to the use of agrichemicals, and provides the scientific, engineering, and other technical expertise necessary for agriculturists to effectively engage in these discussions.



## Nongovernment/Nonprofit Organizations

ECT's resource assessment, planning, and policy analysis services are commissioned by foundations, professional associations, and advisory councils seeking effective solutions to issues ranging from funding and private-sector financing to matters of climate change. Many of the firm's reports have attracted national and regional attention and have substantially affected public policies and attitudes.

ECT's scientific research, analytical, and advisory capacities are used to develop and implement policies; define stakeholder priorities; and identify political, regulatory, and economic factors influencing corporate and agency decisions. ECT's innovative program management support services are used to evaluate the engineering, economic, social, environmental, and cultural impacts of proposed projects in terms of economic viability and environmental sustainability.



## Schools

ECT has been providing environmental and engineering services for schools, school boards, colleges, and universities since 1990. We offer a wealth of experience to clients looking to remove chemical toxicants and biological agents from classrooms, playgrounds, science labs, and other facilities that can lead to health risks and adverse learning conditions. In addition to matters involving lead, asbestos, and radon, ECT's services extend to other contaminants affecting children's health, attendance, and performance, including mold, mercury, polychlorinated biphenyls (PCBs), pesticides, and diesel exhaust.

ECT offers guidance and tools to identify, manage, and mitigate environmental risks in schools, enhance indoor environmental quality, and help ensure healthy learning environments during both large- and small-scale renovation.

# Client Sectors

## Manufacturing & Industry

While the manufacturing and industry sector faces numerous water- and air-related challenges, from compliance management and discharge concerns to contingent liabilities stemming from legacy contamination issues, ECT's solutions help clients cost-effectively address the environmental issues of yesterday, navigate the risks of today, and gain a sustainable advantage for tomorrow.

ECT offers a proven reputation for extensive compliance support and strategy development among a client base ranging from some of the nation's largest manufacturers and electrical utilities to small, local interests. Whether helping clients comply with the Clean Water Act, CERCLA, Title V, SARA Title III, National Environmental Policy Act (NEPA), or other environmental regulations, services are designed to ensure compliance, promote efficient use of energy, and expand efforts to reduce, reuse, and recycle waste.



## Utilities - non-power

ECT's ability to address old and new challenges – to manage risk – is at the heart of our efforts to help utilities achieve their operational goals in response to growing sustainability-related expectations. In changing times, the utility sector must simultaneously contend with not only emerging operational challenges, including those stemming from concerns over climate change and the reduction of carbon emissions, but also the legacy issues associated with ensuring the integrity of surface impoundments and large networks of distribution pipelines.

ECT's consulting services help utilities successfully address a variety of complex challenges ranging from planning, licensing, and discharge permitting to environmental impact assessment, ecological risk assessment and habitat relocation, carbon management, regulatory compliance, and facility decommissioning.





## Air Quality

Considered among the industry's most knowledgeable experts, ECT staff advise clients on a multitude of unique issues, including regional haze impacts, the speciation and distribution of particulate matter emissions, and the preparation of area receptor grids. ECT offers a full range of air quality engineering, permitting, and support services among a client base ranging from the nation's largest manufacturers and electrical utilities to small, local interests.

Whether an application for new emission sources or a modification to an existing source, ECT offers expertise in air quality analysis, regulatory review, and planning and utilizes hands-on knowledge of industrial processes to identify potential critical/fatal flaws in new or existing permitting strategies. We offer solutions that are innovative, cost-efficient, and provide maximum operational flexibility.

ECT also provides consultation services for the procurement, certification, and operation of emission monitoring equipment.

## Natural Resource Management & Permitting

ECT offers innovative natural resource management, siting, licensing, and permitting solutions to clients ranging from large, Fortune 500 companies and federal agencies to state and local governments, power companies, small businesses, and nonprofit groups of all sizes.

Our knowledge of social, regulatory, and stakeholder issues enables clients to restore or preserve lands and waterways, as well as manage natural resource assets, in a responsible manner. ECT maintains working relationships with federal, state, county, and municipal agencies to facilitate timely permitting and approvals for projects of all sizes.

ECT successfully carries out complex, multidisciplinary site selection evaluations of environmental, social, economic, and land use issues. For decades, ECT has been licensing and permitting power plants; corridors or electrical transmission lines, fuel pipelines, utilities, and transportation systems; mine sites; water/wastewater systems; and other industrial, commercial, and municipal facilities.



### Air Quality

- Title V permit preparations
- State construction permitting
- Minor source permitting
- New source review permitting
- Control technology evaluation
- Dispersion modeling
- Greenhouse gases - emission calculations & inventories
- Emissions inventories & database services
- Emission offsets/emission reduction credits
- Maximum Achievable Control Technology evaluation, permitting & compliance strategies
- Reasonably Available Control Technology/Best Available Control Technology/Lowest Achievable Emission Rate analysis
- NEPA reviews/air quality analyses for environmental assessments & environmental impact statements
- SARA Title III reporting
- 112(r) risk management planning
- Owner/operator liaison for agency negotiations
- Long-term permit maintenance
- Strategic data management
- Audit program development & comprehensive onsite audits
- Federal Energy Regulatory Commission resource report development

### Natural Resource Management

- Wetland jurisdictional determinations & environmental resources permitting
- Threatened & endangered plant & animal species surveys/management plans
- Vegetation mapping, sampling & monitoring
- Wildlife surveys & management/monitoring plans
- Environmental education & community outreach
- Landscape ecology
- Section 404 (dredge-and-fill) & Section 10 wetland/waterway permitting
- Wetland mitigation plans/implementation

### Siting, Licensing & Permitting

- Site selection studies
- Environmental assessments & impact statements
- Power plant/cogeneration siting, licensing & permitting
- Electrical transmission/pipeline siting & licensing
- Mine permitting
- Comprehensive permitting under the Clean Air Act & Clean Water Act
- Permitting feasibility/fatal flaw studies
- Land use compatibility & economic impact analyses
- Public participation/information programs



## Performance Assurance & Compliance

ECT offers extensive compliance support and strategy development to a client base that ranges from the nation's largest manufacturers and electrical utilities to small, local interests. With respect to air, waste, water, and other areas of environmental compliance, these include reporting, auditing, plan development, training, and regulatory negotiations.

ECT provides robust, all-inclusive environmental management system services based on the ISO14001 standard. Services are designed to 1) ensure compliance, 2) promote efficient use of energy, and 3) expand efforts to reduce, reuse, and recycle waste. ECT's compliance specialists offer experience in setting goals for environmental improvement, developing policies and procedures to meet those goals, evaluating performance, developing corrective actions, and performing management reviews.

ECT staff provide complete solutions to assist clients in complying with complex health and safety regulations.

### Reporting

- State air emission reporting systems (e.g. MAERS)
- Greenhouse gas reporting
- Hazardous waste biennial reporting
- SARA Title III reporting
- NPDES discharge monitoring reporting

### Permitting

- Air quality permitting
- NPDES permitting
- Local sewer use permitting
- Local soil erosion & sedimentation control permitting

### Plan Development

- Comprehensive environmental management systems
- Emission inventories

- Emission tracking database
- Hazardous chemical inventories
- Integrated contingency plans
- SWPPP & PIPP
- RCRA contingency plans & emergency procedures
- Community emergency response plans
- SPCC & oil spill contingency plans
- Aboveground storage tank integrity testing
- Underground storage tank monitoring & testing
- NPDES operation & maintenance plans, sampling & analysis plans

### Occupational Health & Safety

- EHS audits/compliance assessments/training
- Emergency response programs & contingency plans
- OSHA compliance programs

## Site Assessment & Remediation

ECT offers site assessment and remediation services focused on the identification, quantification, and mitigation of environmental risk. Its comprehensive research, assessment, and reporting skills combine to enable informed decisions regarding human health, safety, and the environment.

Using innovative assessment tools and scientifically sound evaluations, ECT provides a rapid, cost-effective, and statistically relevant means of defining the magnitude, nature, and extent of contamination from which site-specific cleanup levels are established and realistic solutions are identified.

Whether the goal is short- or long-term, ECT integrates talent, technology, and regulatory knowledge to reduce costs and balance agency requirements with a client's economic realities. ECT supports these realities by offering access to incentive-based redevelopment and cleanup programs. These include those involving tax increment financing, tax credits, job bonus refunds, and grant and loan funding, and incorporates cost reduction strategies in all our specifications and contractor coordination plans.



### Due Diligence

- Phase I environmental site assessments (ESA)
- Transaction screens (ASTM 1528)
- Detailed site inspections & waste inventories

### Characterization

- Soil quality evaluations & hydrogeological assessments
- Groundwater resource development/flow system analysis
- Geophysical investigations/evaluations

### Engineering/Remedial Design

- Remedial design, evaluations, action plans & oversight
- Compliance monitoring
- RCRA investigations & permitting

### Brownfield Redevelopment

- Remediation/demolition design, preparation & oversight

- Master planning, reuse planning & strategies
- Ecosystem restoration & management

### Contaminated Sediment

- Remedy selection & implementation
- Early action/initial abatement

### Demolition & Reclamation Management

- Preparation/evaluation of engineering design specs
- Construction management, demolition & remedial actions

### Storage Tank Compliance & Closure

- Compliance assessments
- Storage tank management plans
- Storage tank removal specifications
- Contamination/closure assessments
- Risk-based assessments & corrective action

# Service Lines



## Water Resources

ECT offers unique client-specific, water resources solutions to clients ranging from large, international corporations and federal agencies to state and local governments, regional organizations, and nonprofits of all sizes. ECT performs water resources assessments, planning, and policy analysis for clients seeking effective solutions that are innovative, economically viable, and environmentally sustainable. ECT also provides program management support and evaluates the engineering, economic, social, environmental, and cultural impacts of water resource projects.

ECT has significant experience in water resource engineering, from concept and design development, through construction and follow-up monitoring. Skill sets include green infrastructure and low-impact development practices, dam safety evaluations, innovative/decentralized wastewater treatment design, and modeling related to coastal processes or river/lacustrine hydraulics and hydrology.

### Policy, Planning & Assessment

- Municipal ordinance development & implementation
- Natural features assessment & monitoring
- Invasive species mapping & management
- Watershed management planning
- Program management support
- Information management systems & technology development
- Water quality monitoring
- Wetland delineation & functional assessment
- Threatened & endangered species evaluation
- Climate adaption support
- Securing grant funding

### Water Resources Engineering

- Stormwater systems/best management practices evaluation & design
- Coastal, hydraulic & hydrologic modeling
- Watershed studies & stormwater master planning
- Green infrastructure/low-impact development stormwater practices
- Stream & streambank restoration
- Dam removal & fish passage modifications

### Compliance

- National Pollutant Discharge Elimination System permitting
- Stormwater pollution prevention
- 316 a/b & total maximum daily load



## ECT Office Locations

### GAINESVILLE (Headquarters)

3701 Northwest 98<sup>th</sup> Street  
Gainesville, Florida 32606-5004  
(352) 332-0444  
(352) 332-6722 (FAX)

### TAMPA

1408 North Westshore Boulevard, Suite 115  
Tampa, Florida 33607-4520  
(813) 289-9338  
(813) 289-9388 (FAX)

### FORT LAUDERDALE

6820 Lyons Technology Drive, Suite 105  
Coconut Creek, Florida 33073-4366  
(954) 771-0444  
(954) 771-8118 (FAX)

### JACKSONVILLE

6440 Southpoint Parkway, Suite 130  
Jacksonville, Florida 32216-8063  
(904) 296-0544  
(904) 296-2473 (FAX)

### TALLAHASSEE

2507 Callaway Road, Suite 102  
Tallahassee, Florida 32303-5268  
(850) 383-0009  
(850) 383-0008 (FAX)

### ORLANDO

3660 Maguire Boulevard, Suite 107  
Orlando, Florida 32803-3059  
(407) 903-0005  
(407) 903-0030 (FAX)

### NEW SMYRNA BEACH

707 East Third Avenue  
New Smyrna Beach, Florida 32169-3101  
(386) 427-0694  
(386) 427-0889 (FAX)

### SARASOTA

1211 Sarasota Center Boulevard  
Sarasota, Florida 34240-7881  
(941) 377-8608

### CHARLOTTE\*

6135 Park South Drive, Suite 510  
Charlotte, North Carolina 28210-0100  
(704) 749-3134  
(704) 945-7101 (FAX)

### RALEIGH\*

7208 Falls of Neuse Road, Suite 102  
Raleigh, North Carolina 27615-3244  
(919) 861-8888  
(919) 615-2012 (FAX)

### KNOXVILLE

9111 Cross Park Drive, Suite D200  
Knoxville, Tennessee 37923-4521  
(865) 470-4115  
(865) 694-0848 (FAX)

### IOWA CITY

332 South Linn Street, Suite 22  
Iowa City, Iowa 52240-1697  
(319) 338-2840  
(319) 338-2928 (FAX)

### ANN ARBOR

2200 Commonwealth Boulevard, Suite 300  
Ann Arbor, Michigan 48105-2957  
(734) 769-3004  
(734) 769-3164 (FAX)

### BENTON HARBOR

376 West Main Street, Suite 120  
Benton Harbor, Michigan 49022-3651  
(269) 927-3366  
(269) 927-3684 (FAX)

### LANSING

3125 Sovereign Drive, Suite 9C  
Lansing, Michigan 48911-4240  
(517) 272-9200  
(517) 272-9703 (FAX)

### TRAVERSE CITY

3399 Veterans Drive  
Traverse City, Michigan 49684-4508  
(231) 946-8200  
(231) 946-8208 (FAX)

### DETROIT

1155 Brewery Park Boulevard, Suite 115  
Detroit, Michigan 48207-2642  
(313) 963-6600  
(313) 963-1707 (FAX)

### BAY CITY

1403 South Valley Center Drive  
Bay City, Michigan 48706-9754  
(734) 769-3004  
(734) 769-3164

### CHICAGO

125 South Wacker Drive, Suite 314  
Chicago, Illinois 60606-4424  
(312) 421-0444  
(312) 421-0220 (FAX)

### BOXBOROUGH

1740 Massachusetts Avenue  
Boxborough, Massachusetts 01719-2209  
(978) 263-3335

**Environmental Consulting & Technology, Inc. (ECT)**, is growing as clients increasingly request our considerable expertise, experience, and understanding of their business to help them with their challenges. Our clients operate in an environment where the need to maintain and enhance their position and contribution to the economy is constantly being challenged by the increased pressure to use natural resources wisely.

We know the projects our clients entrust to us have the potential to significantly benefit their organizations and employees and have a profound and positive impact on surrounding communities and people. This fact inspires the ECT team to develop innovative solutions for a broad range of environmental challenges while partnering with our clients to achieve their organizational objectives.

ECT serves clients and markets throughout the United States and on four continents. Call 855-737-0444 for additional information or visit [www.ectinc.com](http://www.ectinc.com) for office locations and contacts across the United States.