



Environmental Services, Inc.

**QUALIFICATIONS SUMMARY**  
**GENERAL ENVIRONMENTAL SERVICES**

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## INTRODUCTION

### CORPORATE DESCRIPTION

Horizon Environmental Services, Inc. (Horizon) is particularly well qualified to provide both the technical and administrative support required for project planning and permitting efforts related to various federal, state, and local permits and/or approvals. Horizon's capabilities and experience are very broad in the area of work efforts to support compliance with the National Environmental Policy Act (NEPA), particularly as related to multidisciplinary Environmental Assessments/Environmental Impact Statements (EAs/EISs), jurisdictional wetlands, endangered species, cultural resources issues, and expert testimony.

Services that Horizon provides for various clients include multidisciplinary EAs/EISs in support of federal and state environmental reviews; jurisdictional wetland determinations; endangered species habitat assessments and surveys; archeological surveys and mitigation (prehistoric and historic); ecological risk and damage assessments; wildlife habitat and wetlands restoration/creation; baseline aquatic and terrestrial investigations (inland and coastal); geologic resource assessments; real estate environmental site assessments; environmental constraints analyses for alternative project sites, routes, and land development scenarios ("fatal flaw" analyses); post-project land use planning and mitigation; and permit management, including preparation, agency coordination, and expert testimony.

Horizon is based in Austin, Texas, and provides services nationally. Horizon was founded in 1987 and is a certified Historically Underutilized Business (HUB), Disadvantaged Business Enterprise (DBE), and Small-Business Enterprise (SBE). Composed of senior professional personnel with many years of applied experience and specific training in environmental assessments, permitting, and management, members of Horizon's staff have worked on the majority of energy development and reservoir projects, either proposed or developed, in Texas and Louisiana from 1976 to the present. Our staff's experience and background have allowed Horizon to gain an applied knowledge of the environmental requirements of various federal and state regulations and permits affecting natural resource development and an excellent identity with agency personnel. The *Austin Business Journal* recently ranked Horizon sixth among Austin-area environmental consulting firms, which included large, national corporations with substantial engineering staffs.

Horizon's key personnel assigned to various work efforts are committed to being available from work initiation through expert testimony, if required. Depending on the scope of environmental investigations required for a given project, Horizon may network with other qualified firms, not only to provide both environmental and engineering services in a cost- and time-efficient manner, but also to assure that only the most technically qualified and experienced persons are providing personal attention to the work effort. Moreover, Horizon is committed to assisting its clients in achieving HUB and SBE contracting goals, as required.

Please visit our web site: [www.horizon-esi.com](http://www.horizon-esi.com).

## NEPA PROCESS

The National Environmental Policy Act of 1969 (NEPA) mandates all federal agencies to review the effects of their actions, and alternatives to those actions, on the quality of the human environment. Federal actions include such things as issuing permits, promulgating new regulations, and financing projects.

To perform an environmental review of a proposed action, the proposed project is superimposed upon both the existing (i.e., baseline) biophysical and socioeconomic parameters to assess the resulting beneficial and adverse effects (impacts). These environmental parameters are commonly referred to as "NEPA topics" and are addressed in varying degrees at the discretion of the federal or state agency, given its perception of the severity of negative impacts associated with the proposed action upon various site- and regional-specific parameters of the human environment. The environmental review often includes input from other coordinating agencies (as well as the general public) and can take several forms that may be progressive and/or approached in an iterative manner by the agency. For example, the agency's environmental review could begin and end with the submittal of a permit application, progress to the agency's (or permit applicant's) preparation of an Environmental Assessment (EA), or even progress to the agency's (or the permit applicant consultant's) preparation of an Environmental Impact Statement (EIS) to address all agency and public concerns related to the proposed project.

The scope of work to satisfy a specific permitting and/or approval agency at either the state or federal level begins with reviewing the proposed project with the agency to identify what environmental issues they perceive need to be specifically addressed in either an informal or formal form. Informal environmental review may be limited to specific data requested by the agency to review and include in its permitting process. Formal environmental reviews for larger, more complex projects can range from an EA, which can provide the basis for no EIS being required if a Finding of No Significant Impact (FONSI) is the result, to a full-scale EIS. The time frame for completing environmental reviews can range from a few weeks to a few years, depending on the complexity of the project, the agency's perception of significant negative impacts, and potential public and private interest group intervention.

## **PROJECT-RELATED EXPERIENCE**

Horizon has provided both technical and administrative support services for the permitting of a variety of proposed projects, ranging from single stream crossings for pipelines and roads to the 16,000-acre Three Oaks Lignite Mine. We have performed environmental baseline investigations (e.g., jurisdictional wetlands, endangered species, cultural resources, etc.); prepared Federal Energy Regulatory Commission (FERC) Environmental Reports; prepared federal and state permit applications (e.g., wastewater discharge, dredge and fill, temporary water rights, etc.); and performed environmental inspections during construction related to FERC requirements. As stated earlier in this Qualifications Summary, Horizon's capabilities and experience are very broad in the area of NEPA Compliance, ranging in project size from a few acres to several tens of thousands of acres and including Environmental Assessment (EA) and 3rd Party Environmental Impact Statement (EIS) preparation.

## KEY PERSONNEL

A list of Horizon's key project personnel is presented below.

### **Project Management**

Russ Brownlow  
Ken Carothers  
Shannon Dorsey  
Jesse Owens  
Lee Sherrod  
Jim Wiersema

### **Phase I and II ESA**

Shannon Dorsey  
Ken Carothers  
Kris Billings  
Michelle Dorsey  
David Young

### **NEPA Process (EA/EIS)**

Shannon Dorsey  
Ken Carothers  
Lee Sherrod  
Jim Wiersema

### **Wetlands**

Shannon Dorsey  
Ken Carothers  
Michelle Dorsey  
Scott Flesher  
Lee Sherrod

### **Threatened or Endangered Species**

Shannon Dorsey  
Ken Carothers  
Michelle Dorsey  
Lee Sherrod  
Jim Wiersema

### **Cultural Resources**

Russ Brownlow  
Reign Clark  
Michael Mudd  
Jesse Owens  
Jared Wiersema

### **Vegetation, Wildlife, Aquatic Ecology**

Shannon Dorsey  
Ken Carothers  
Michelle Dorsey  
Lee Sherrod  
Jim Wiersema

### **Ecological Risk Assessment**

Jim Wiersema  
JoAnn Wiersema

### **GIS/AutoCAD**

John Alesch  
Scott Flesher  
Kris Billings  
Michael Mudd  
Greg Sherrod

## PROJECT MANAGEMENT

### Project Manager

The prime focus of Horizon's philosophy is the concept of the Project Manager. This concept holds a single individual totally responsible for the successful management, both fiscal and technical, of a project, regardless of its size or scope. The Project Manager organizes the project in terms of technical scope, budget, scheduling, and human resources needs (including any subconsultants required); oversees its implementation; organizes and oversees report preparation; and participates in both client and agency coordination. The Project Manager, especially on large multidisciplinary projects, must bring to bear not only his or her own special abilities, but also the resources of Horizon's staff and subconsultants. On such projects, the Project Manager must delegate some of the actual work performed on the project. In doing so, the Project Manager must also depend on the abilities and judgments of others, and their prime responsibilities in crisis avoidance and/or resolution. Authority and responsibility may be delegated by the Project Manager, but accountability is not.

The Project Manager is responsible for completing the project on time and within budget, while ensuring that the project satisfies the client's needs. Toward this end, the Project Manager:

1. Organizes the project to ensure the fulfillment of contractual objectives.
2. Participates in the assignment of qualified personnel to the job.
3. Monitors the progress of the project on a regular basis.
4. Identifies and solves technical, scheduling, or budgetary problems.
5. Coordinates with Task Managers as necessary to set priorities and solve personnel availability problems.
6. Reviews and issues manpower requests each month.
7. Interacts with the client and regulatory agencies and, as necessary, represents the client before regulatory or other agencies or groups.
8. Maintains the Project Record.
9. Keeps the client informed of significant project developments.
10. Oversees the organization, preparation, and publication of the deliverables in preliminary and final form.
11. Monitors and evaluates the performances of personnel assigned to the project.

### **Task Management and Coordination**

Horizon organizes multidisciplinary projects in such a manner as to ensure both technical and fiscal control. The Project Manager has overall fiscal responsibility for the project and serves an integral function in coordination between tasks. Each task has a Task Manager whose duties include technical quality control of the task. Horizon, in selecting project personnel, has matched the specific educational qualifications and levels of experience of the various individuals who will participate in the project with the stated project requirements and objectives. This ensures a technically sound and cost-effective product.

In every multidisciplinary project, it is extremely important that the work effort and information be coordinated among the tasks. Many tasks require common data and, frequently, work done for one task can be accomplished in a more cost- and time-efficient manner when coordinated with and/or performed in conjunction with one or more related tasks. To this end, it is primarily the function of the Project Manager to monitor the progress of each task and to coordinate the schedule and cooperative efforts among project personnel.

Horizon's Project Manager, in conjunction with information from the client and Task Managers, develops a project task schedule. This permits the monitoring of critical activities and deliverables. This schedule is based upon contract award data, dates for submission of data or authorization from the client, the date for submittal of the data or authorization from the client, the date for submittal of a draft report, review time requested by the client, the date for submittal of the final report, and manpower needs and availability provided by the task directors.

By tracking the progress of each task through frequent communication with the Task Managers, the Project Manager is immediately aware of any potential problems involving the successful completion of any task and the timely transfer of information. The Project Manager takes all necessary steps to preclude these types of problems and to keep the project within the overall schedule. If problems arise beyond the control of Horizon, the Project Manager will communicate the nature of the problem and provide recommendations for solutions to the client.

### **Data/Document Control**

Horizon's experience has shown that the documentation of project transactions is an essential part of any project. Horizon takes every measure to provide complete control through retention and organization of letters, memos, meeting minutes, and telephone conversation records, as appropriate. Written documentation allows for quality assurance and document control through proper dissemination of information among the project personnel and the client. The Project Record can be provided to the client upon completion of work at the client's request.

Horizon assigns a job name, "in-house" job number, job task numbers/names (e.g., vegetation, wildlife, etc.), and a central project file to all jobs at the onset of the work effort. Horizon's job name and number (or job task number) are recorded upon each page of all products of work, including raw data/office forms, meetings/telephone communications, reports, and invoices. Horizon also follows specific data/document control procedures that may be specified by the client. Horizon utilizes forms specific to the project for all field and office data compilations and meetings/telephone communications. The transfer of data from raw field forms to office forms to word processing is carefully reviewed and verified by the Task Manager and checked by the Project Manager.

### **Schedule and Control**

Horizon's Project Manager continually monitors the progression of work efforts pursuant to the project schedule and budget. All decisions concerning changes of scope, costs, schedule, and other such matters critical to project performance are implemented only through and with the concurrence of the client and Horizon's Project Manager. If such decisions, directions, or approvals are communicated verbally, they are confirmed by project correspondence as soon as practicable thereafter.

#### *Progress Reports*

Horizon's Project Manager submits written monthly progress reports to the client during the course of the project. These reports will contain:

1. An itemized list of Horizon's progress during the preceding month, including activities started, ongoing activities, and activities completed.
2. The schedule status and any problem areas that could adversely affect the work schedule.
3. Discussion of any problem areas that could adversely affect task budgets.
4. Discussion of any problem areas that remain unresolved since the last progress report.

#### *Invoicing*

The progression of project expenditures is monitored by Horizon's Project Manager pursuant to the contract budget. Labor charges are entered on Horizon's computer on a weekly basis, and non-labor charges are entered as they are received. The Project Manager has direct access to this information for frequent review.



Normally, Horizon forwards monthly invoices to the client on or before the 5th of each month. Horizon's invoicing period is from the 26th of one month to the 25th of the next, and requested invoice payment is "net 30 days." Invoices normally include the following information, unless otherwise specified by the client:

1. Cover sheet presenting a summation of charges for the current invoicing period by work task. This summation also presents total charges accrued to date for each work task, the total work effort, and backlog by task and total budget.
2. Task-by-task breakdown of labor, subcontractor, and non-labor charges for the period invoiced. Each task breakdown presents total hours for each labor grade and associated cost subcontractor charges, and non-labor charges, as applicable.
3. Backup information required by the client (e.g., travel vouchers, receipts for purchases, subcontractor invoices, time sheets, etc.). Horizon provides backup information to the level required by the client.

## LIST OF AVAILABLE EQUIPMENT

### General Equipment

Cingular GSM Phones  
Digital Cameras  
35 mm Cameras  
Video Cameras (VHS)  
Panasonic VCR with S-video  
GE 31" color television  
CB Radios (Hand-held and Auto)

### Computer Hardware

Dell PowerEdge 2850 Win2003 Server  
(3) HP DL385 Win2003 Servers  
Compaq DL380 Win2000 Server  
DELL 14-Tape SuperDLT Tape Library  
Overland Storage REO 4000 Disk Backup  
(13) Dell Inspiron Laptops (1 Ghz +)  
(7) Dell Dimension Desktops (2 Ghz +)  
(2) Dell Precision Workstations (Dual 2.8 Ghz)  
(2) Dell Precision Workstations (Dual 600 Mhz)  
(2) Dell Optiplex Desktops (2 Ghz +)  
Canon IR6570 Printer/Copier/Scanner  
Canon IRC5180 Printer/Copier/Scanner  
Canon IRC4180 Printer/Copier/Scanner  
HP DesignJet 1055CM  
HP DesignJet 1050C  
HP LaserJet 8100N  
(2) HP Deskjet 930 Series Printers  
Snappy Image Capture Device  
(20) Misc. CD-Rewritable Drives  
4Mbps Down / 2Mbps Up Internet Connection  
(3) 3COM Gigabit Switches  
56K Modems (Field Communications)

### Computer Software

Windows 2003 Server  
Windows XP Professional  
Corel WordPerfect Suite 2000  
Corel Draw X3  
Microsoft Office 2007  
Microsoft Access 2007  
Microsoft Excel 2007  
Microsoft FrontPage 2003  
Microsoft PowerPoint 2007  
Microsoft Publisher 2007  
Microsoft PhotoDraw 2003  
Microsoft Outlook 2007  
Microsoft Project 2000  
Microsoft Expedia Streets and Trips 2002

### Computer Software, cont.

Microsoft Exchange Server 2007  
AutoCAD Map 2007  
Quicksurf 2007  
ESRI ArcInfo 9.2  
ESRI ArcView GIS 9.2  
Delorme MapExpert 2.0  
Delorme Streets Atlas 9.0  
ImageAXS Pro 3.02  
PhotoStyler  
Adobe Acrobat 8.0  
Adobe Acrobat 8.0 Reader  
Adobe Illustrator 10.0  
Adobe Photoshop 7.0  
Adobe Pagemaker 7.0  
OmniPage OCR Software  
Easy CD Creator 6.0 Platinum  
TextBridge Millenium Pro OCR Software  
Veritas Backup Exec 11  
Trend Micro TVCS, ScanMail, OfficeScan  
Earthlink ISP Dial-up Software  
Wind2 2007 Financial Management Software  
Maximizer 97 Enterprise Contact Manager  
Wind2 A/E Marketing Manager 2004  
SPSS 12.0  
PSI-Plot  
StatMost  
Ecological Statistics  
Habitat Evaluation Procedure (HEP)  
Wetland Evaluation Technique (WET)  
DOQQ Viewer  
DLG Viewer (USGS)  
Mr. SID Viewer  
ECW Viewer  
Winzip 9.0  
WS-FTP Pro 2006

### Vehicles

2-wheel drive trucks and sedans  
4-wheel drive trucks  
4-wheel ATV with trailer  
2-wheel AT motorcycle

### Trailers

16-ft utility trailer  
12-ft enclosed utility trailer  
8-ft utility trailer

**Boats**

20-ft boat with 100hp motor  
17-ft boat with 85hp motor  
16-ft boat with 25hp motor  
14-ft boat with 9.5hp motor

**Fish Sampling Equipment**

Smith Root GP5, 11 horsepower, 5000-watt electrofishing unit  
Boat-mounted 48-in umbrella electrode arrays  
Shoreline capability for 2 simultaneously operated, 6-ft handheld cathode ring electrodes, each wired for 200-ft range from generator  
Assorted 1/8- to 3/4-in mesh seines ranging 20 to 60 ft in length, 4 to 6 ft in depth  
Experimental gill nets, 150 ft x 8 ft, 6 panels (3/4- to 3.5-in stretch mesh)  
Various other single-mesh gill nets, 100 to 300 ft long, 8 to 12 ft deep, 1.5- to 3.5-in stretch mesh  
Three-meter otter trawl  
Assorted fish, crab, hoop nets, slot traps, etc.  
Ichthyoplankton net – 12-in mouth, 1 to 6 ratio, and 0.5-mm mesh  
Conical plankton net – 12-in mouth, 1 to 3 ratio, 150-micron mesh  
Long handle, heavy duty, round bag, dip nets  
Long handle, heavy duty, rectangular, bag, kick nets  
12x12-in Surber sampler plus 3-in base extension  
6x6-in Ekman dredge with fixed 6-ft handle  
12-in Ponar dredge  
#30 mesh wash bucket for littoral samples  
Various shallow core samplers  
Multiple plate dandy-type periphyton and invertebrate samplers  
YSI model 51 B dissolved oxygen meter  
YSI model 33 salinity, conductivity, temperature meter  
Fisher portable pH meter  
A.O. current meter  
Water depth meter  
Droques  
Secchi disc  
Kemerer and Alpha bottle water samples  
O'Haus dial O'Gram balance (1600 gram)  
Variable power 10 to 45x stereoscope

50-lb capacity hanging pan balance

**Wildlife Sampling Equipment**

Digital hydrometers  
Mist nets (birds and bats)  
Spotting scopes  
Halogen survey lights  
Rangefinder  
Binoculars  
Sherman live traps (small mammals)  
Have-A-Heart live traps (large mammals)  
Gopher traps  
Turtle nets

**Vegetation Sampling Equipment**

Plant press  
Slope inclinometer  
Tree borer  
Clinometer  
Quadrat sampling hoops  
Drying oven

**Archeological Equipment**

Brunton & Leitz Pocket Transits  
K&E Transit and Rod and Tripod  
100m measuring tapes (nylon)  
100m measuring tape (steel)  
3m measuring tapes  
35mm cameras and lens  
Sieve set  
Light table  
Munsell Soil Color books  
Soil pH sampling kit  
Spades  
Flat shovels  
Sharpshooter spades  
Metal detector (terrestrial)  
Drying racks  
Shaker screens, 1/4 in  
Shaker screens, 1/8 in  
Coring auger  
Variable power 10 to 45x stereoscope  
Total Data Station field data collector and CG-Survey software