### CORPORATE

# STATEMENT OF QUALIFICATIONS



### **MISSION**

To contribute to a sustainable future through environmental investigation and restoration.

### **VISION**

To be the premier company that leverages safety, employee expertise, technology, and sustainability to continuously outperform our competition in the infrastructure and environmental remediation industry.

### **CORE VALUES**

#### SAFETY

We believe in providing a workplace free of recognized hazards for the safety, health, and well-being of our employees, clients, and communities.

#### **SUSTAINABLE GROWTH**

We believe in growing our business in a responsible manner through significant investment in our people, our company, and our communities.

#### **EXCELLENCE**

We believe in exceeding expectations in everything we do.

#### **COLLABORATION**

We believe in working together to achieve goals though integrity, accountability, and trust.

#### WHO WE ARE

Cascade is a field services contractor that partners with our clients to provide seamless environmental and geotechnical solutions from concept to completion. We provide the industry's most comprehensive in-house suite of field services to support your geotechnical and environmental drilling, site characterization, and environmental remediation projects—no matter how routine or complex.

Our breadth of services and technologies, highly skilled field and support staff, and a world-class safety program are here to support you in every stage of your project.

### **OUR HISTORY**

Cascade Drilling was founded in 1991 as a highly regarded Northwestern US regional drilling company operating across three states. Cascade developed a strong reputation for safety, service and reliability, with a particular emphasis on traditional drilling technologies: auger, rotary and direct push. In 2013, the company made a significant investment in sonic drilling technology and expanded its geographic reach across the United States.

Since then, Cascade expanded our service offerings through strategic acquisitions. Today's Cascade family of brands include Cascade Drilling, Cascade Remediation Services, TerraTherm, and Aquifer Drilling & Testing.

### **SERVICES**

#### **DRILLING**

Cascade Drilling Services provides a full range of environmental and geotechnical drilling services. Regardless of lithology or location, Cascade has the right equipment, experience and expertise to do the job. We offer sonic and conventional drilling technologies, and with a fleet that includes track-mounted, truck-mounted, and limited access rigs, we can access almost any drill site.

#### REMEDIATION

Cascade Remediation Services focuses on subsurface investigation and remediation applications. With experts ranging from field technicians to environmental data scientists, we partner with you to deliver the right technology for every job, no matter how routine or complex. We also offer a line of injectable amendments designed to help you reach site closure faster and cost effectively.

### **SUBSIDIARIES**



**TerraTherm** is a worldwide leader in the development and implementation of in situ and on-site thermal remediation of organic contaminants. We design, build and operate projects from concept to completion, using thermal conduction heating (TCH), steam enhanced extraction (SEE), electrical resistance heating (ERH), and combinations of the above technologies.



#### Aquifer Drilling and Testing™

(ADT) provides environmental and geotechnical drilling for a variety of applications in the greater New York City area. ADT's experienced drilling crews operate a diverse drilling fleet including sonic, auger, rotary and specialty equipment.

### SUITE OF SERVICES



#### Environmental / Infrastructure / Utility Clearance

Drilling techniques for any terrain or geology, matched to state-of-the-art measurement methods.

- Environmental & Geotechnical
- Well Completion
- Investigation Derived Waste (IDW) Management



#### **CHARACTERIZATION**

### Traditional / High Resolution Site Characterization (HRSC)

From quick to quantitative, low to high resolution; collect the data to build a powerful CSM and make dynamic, data-driven decisions.

- Discrete Soil, Groundwater & Soil Vapor Sampling
- Continuous Coring
- Direct Sensing
- High Resolution Site Characterization
- 3D Data Visualization

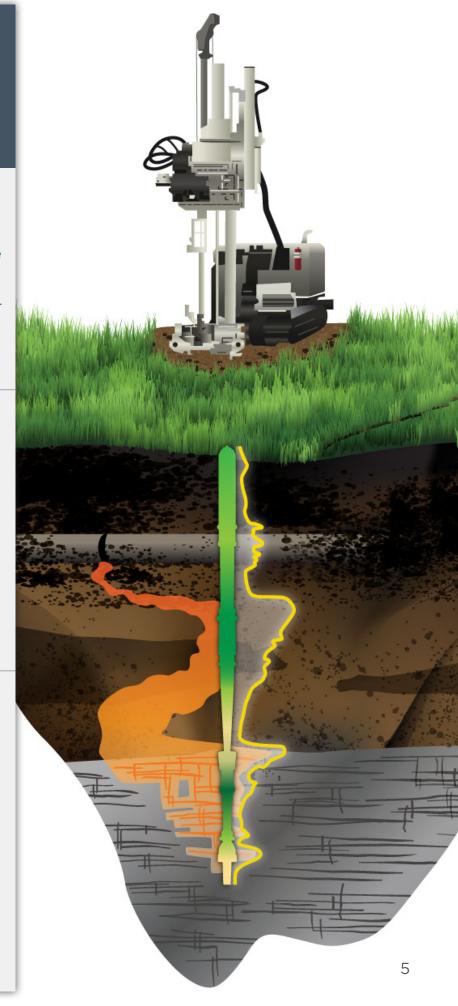


#### **REMEDIATION**

#### Thermal / Injection / Emplacement

Work with remediation implementation experts to access a wide range of remedies, a high level of precision, and outstanding results.

- Pre-Design Testing
- Reagent & Amendment Injection
- Thermal System Design, Build, Operation
- Combined Thermal Technology Solutions
- Soil Mixing
- Enhanced Recovery or Emplacement
- Method Feasibility Advice



### **BY THE NUMBERS**

800 employees

31 locations

4,930 jobs performed

\$252M net sales 1925 fleet assets

### Ranked #83

2023 ENR Top 200 Environmental Firms

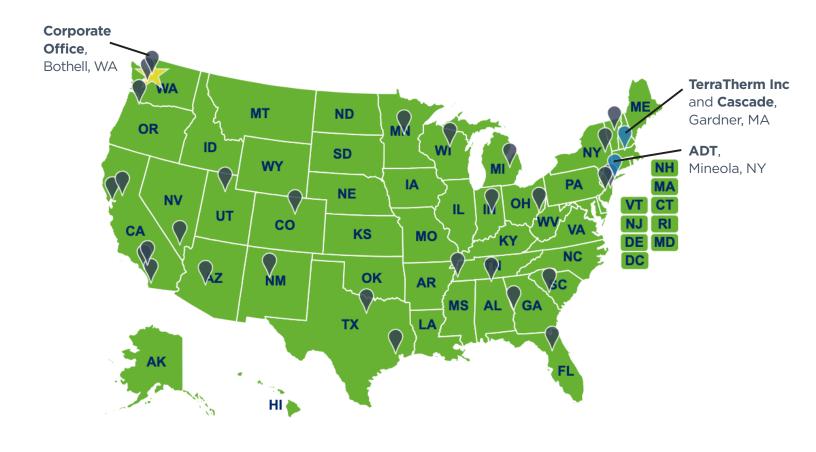
10th consecutive year on the list



**Drilling Industry Ranking** 

#1 SONIC
Drilling Contractor in the US

### LOCATIONS



Visit the Cascade website <a href="https://www.cascade-env.com/locations">https://www.cascade-env.com/locations</a> for the full list of Cascade offices

31 offices nationwide

**Corporate Office** 22722 29th Drive SE, Suite 228 Bothell, Washington 98021

### FLEET

No matter when or where you need it, we have the equipment and coverage to support your project. Cascade's fleet includes more than 1,900 vehicles, rigs, and support equipment nationwide. They include rigs appropriate for restricted and limited access project sites, track-mounted equipment for sensitive surfaces, and electric portable rigs for safe indoor drilling. Whether you need sonic, rotary, auger, direct push or diamond coring technologies, our full range of rig options can reach any site.

Reliable equipment is essential in getting the job done safely, on time and on budget. Our extensive maintenance and repair program minimizes breakdowns and ensures quick turnaround when they occur. We manage a network of 15 maintenance and repair (M&R) shops across the country that perform preventative maintenance and small to medium class repairs. Our three refurbishment centers handle large-scale restoration and refurbishment of rigs and support equipment.





1,925
FLEET ASSETS

Sonic
Auger
Rotary
Direct Push
Diamond Coring

### **HEALTH & SAFETY**

	2023	2022	2021
TRIR	0.91	0.93	0.86
DART	0.73	0.84	0.38
LTC	0.45	0.56	0.19
FATALITIES	0.00	0.00	0.00
EMR	0.65	0.57	0.55
HOURS WORKED	2,197,848	2,149,339	2,098,390

#### **Understanding Safety Stats**

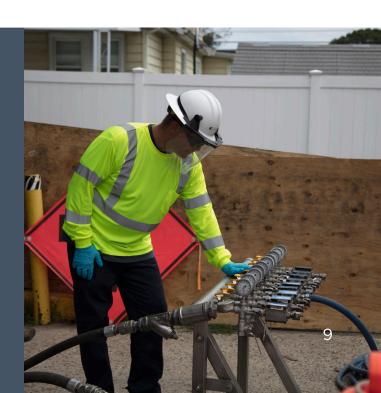
- TRIR: The Total Recordable Incident Rate reflects the number of OSHA recordable injuries during the total hours worked by all employees that year.
- **DART:** The Days Away, Restricted, and Transfer case rate reflects the number of cases which involve days away from work, days of restricted work activity, and/or days of job transfer during the total hours worked by all employees that year.
- LTC: The Lost Time Case rate reflects the number of occupational injuries or illnesses which result in an employee being unable to work a full assigned work shift during the total hours worked by all employees that year.
- Fatalities: The number of workplace incidents that result in death of an employee.
- **EMR:** The Experience Modification Rate is a number used by insurance companies to gauge both past cost of injuries and future chances of risk. An EMR of 1.0 is considered the industry average.

An average of

To

hours of training
per employee

64,000 hours of training conducted in 2023



### **COMPASS™**



At Cascade, we believe sustainability is about taking care of the natural environment, investing in our communities, and growing our business in a way that positively impacts all our stakeholders. Our corporate sustainability program, Compass™, aligns our sustainability efforts with our core values and the expectations of those impacted by our business. Under leadership of the Sustainability Council, the program fosters accountability, transparency, and continuous improvement in understanding the company's financial, environmental and social performance.

### Since Compass was founded in 2014, we have...

- Provided \$100K in charitable contribution matching grants
- Reduced fuel consumption 7% while increasing fleet 4%
- Invested \$200M to directly improving our environmental impact, workforce safety and employee wellbeing

Cascade's annual sustainability report details our goals and progress. The report is prepared in accordance with the Global Reporting Initiative's (GRI) guidelines and is available on our website.

### Cascade's Sustainability Policy

Cascade supports the advancement of sustainability by integrating the principles of environmental stewardship, social responsibility and economic prosperity into the decisions and actions that drive our business.

### **CASE STUDIES**



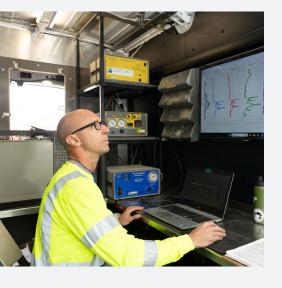
**CASE STUDY #1** 

### **Soil & Groundwater Sampling**

LOCATION: Yosemite National Park, CA

#### **PROJECT OVERVIEW**

Cascade was hired to collect soil and groundwater samples in a remote wilderness setting. Track-mounted direct push technology (DPT) rigs were used to handle access restrictions, stream crossings, mud, heavily wooded areas and complex lithologies. Two rigs completed more than 700 shallow borings for soil sampling and 20 DPT groundwater samples. When hard rock was encountered, an HQ coring technique was used.



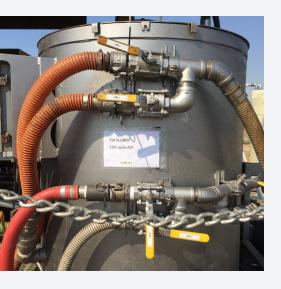
**CASE STUDY #2** 

#### **Site Characterization**

**LOCATION:** Deepwater, NJ

#### **PROJECT OVERVIEW**

Cascade scoped and implemented a high resolution site characterization (HRSC) triad investigation, utilizing multiple means of investigation to identify DNAPL and the distribution of dissolved and sorbed contamination. Cascade crews installed temporary piezometers to determine hydraulic head distribution, conducted a soil gas survey with on-site analytic analysis, and collected shallow soil samples. An MIP survey was performed at 25 locations, and the data was used to determine locations for Waterloo<sup>APS™</sup> sampling. Waterloo<sup>APS™</sup> transects were used to define hydrostratigraphy, vertical hydraulic gradient and water quality. Soil coring was also conducted to analyze VOCs, bulk density, porosity, organic carbon and moisture content. The investigation was completed in one mobilization. DNAPL was detected at 54 locations and contaminant distribution was delineated.



#### **CASE STUDY #3**

## **Chemical Reduction and Bioremediation**

LOCATION: Concord Naval Air Weapons Station, CA

#### **PROJECT OVERVIEW**

Cascade's consulting client was contracted by the Navy to address a large TCE plume. Cascade performed field activities using Geoprobe 8040DT deep application drill rigs. Cascade mixed chemicals on site and performed more than 350 direct push injections of a combined ZVI/emulsified oil substrate. The target interval was between depths of 45 to 95 bgs in heterogeneous sands and clays. The ZVI solution was suspended in guar along with shearing a 100% substrate solution to a 4% emulsion. Each injection received between 1700 and 600 gallons of solution. The project was completed on time and within budget.



#### **CASE STUDY #4**

# **Chemical Oxidation and Remediation**

LOCATION: McConnell Air Force Base, KS

#### PROJECT OVERVIEW

The low permeability of the silty and swelling clays prohibited the use of standard injection technologies at this site. Cascade conducted three pilot tests (two AVI and one activated persulfate) to refine the injection designs in a basewide program. For full scale implementation, Cascade used three pneumatic emplacement systems and injection crews to inject more than 2,700 tons of ZVI and 197 tons of activated sodium persulfate over three years. Nine different sites on base were treated with ZVI and three with the persulfate in 1,283 pneumatic fracturing points over 25 acres.



#### **CASE STUDY #5**

#### **Thermal Remediation**

**LOCATION:** Hazardous Waste Facility, CT

#### **PROJECT OVERVIEW**

The client's site was the former home of Solvents Recovery Service of New England, a hazardous waste treatment and storage facility. For decades, the company had received waste industrial solvents, and poor handling practices resulted in subsurface contamination. TerraTherm was brought in to perform thermal conduction heating (TCH) to remove the contaminants. Heating and treatment occurred in two overlapping phases, which were intended to help manage peak removal mass rates and make the design and procurement of the off-gas treatment system practical.

During the installation of the thermal wells, our experts discovered the bedrock elevation varied more than anticipated. To address the variance, heater borings were installed and then heaters were custom designed to the appropriate depths.

By project's end, TerraTherm successfully removed 496,000 lbs of VOC contamination, a greater than 99% reduction in COC mass, and achievement of all soil cleanup goals.

Find more case studies and project highlights on our website: https://www.cascade-env.com/resources/project-highlights

### **CONTACT US**

Your journey towards efficient and sustainable environmental solutions begins here. At Cascade, we are committed to delivering exceptional remediation services and our team of experts is ready to assist you with any inquiries or specific needs you may have.

Whether you're seeking expert advice, need detailed information about our capabilities, or want to discuss potential projects, our door is always open. Reach out to us through the contact details below, and let's explore how we can collaborate to achieve your environmental goals.

Email: communications@cascade-env.com

**Phone:** 425.527.9700

Request a Quote:

https://www.cascade-env.com/request-a-quote/

Learn more about Cascade on <a href="https://www.cascade-env.com/">https://www.cascade-env.com/</a>



