

Aquilogic has multi-disciplinary teams that focus on providing personalized and reliable solutions to our clients in the following three areas:

Groundwater Contamination

Responsible Party Identification
 Remedial Investigation
 Contaminant Hydrogeology
 Fate & Transport Modeling
 Risk Assessment
 Remediation Feasibility Studies
 Remediation
 Environmental Permitting
 Facility Decommissioning
 NRDA

Groundwater Management

Water Resources Assessment
 Water Balance & Safe Yield
 Groundwater Modeling
 Groundwater Development
 Contaminant Hydrogeology
 Source Water Assessment
 Water Re-use & Conjunctive Use
 Aquifer Storage & Recovery
 Drinking Water Treatment
 GIS & Geomatics

Strategic Solutions

Litigation Support
 Expert Witness
 Forensic Engineering
 Environmental Risk Management
 Stakeholder/Public Participation
 Regulatory Strategy
 Environmental Cost-Benefit Analysis
 Public Relations Support



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| | |
|---------|-----------------------|
| ujë | Albanian |
| ماء | Arabic |
| ջուր | Armenian |
| su | Azerbaijani/Turkish |
| ura | Basque |
| вады | Belarusian |
| জল | Bengali |
| води | Bulgarian/Ukrainian |
| aigua | Catalan |
| 水 | Chinese |
| voda | Croatian/Czech/Slovak |
| vand | Danish |
| water | Dutch/English |
| vesi | Estonian/Finnish |
| tubig | Filipino |
| eau | French |
| auga | Galician |
| წყალო | Georgian |
| wasser | German |
| νερό | Greek |
| પાણી | Gujarati |
| dlo | Haitian |
| מים | Hebrew |
| पानी | Hindi |
| viz | Hungarian |
| vatn | Icelandic |
| air | Indonesian/Malay |
| uisce | Irish |
| acqua | Italian |
| 水 | Japanese |
| ನೀರು | Kannada |
| 물 | Korean |
| ūdens | Latvian |
| vanduo | Lithuanian |
| вода | Macedonian/Serbian |
| vann | Norwegian |
| آب | Persian |
| woda | Polish |
| água | Portuguese |
| de apă | Romanian |
| ВОДЫ | Russian |
| vode | Slovenian |
| agua | Spanish |
| maji | Swahili |
| vatten | Swedish |
| தண்ணீர் | Tamil |
| น้ำ | Thai |
| پانی | Urdu |
| nuóc | Vietnamese |
| dŵr | Welsh |
| וואסער | Yiddish |

environment • water • strategy

water in any language

Groundwater
 Contamination
 Groundwater
 Management
 Strategic
 Solutions



The team of professionals at **aquilogic** is committed to the development and application of solutions that deliver value to our clients while protecting and restoring the environment.

Our mission

To enjoy our work while making a positive difference to our clients' organizations and the environment. We achieve this by combining exceptional technical capability with a personal approach to service

Our vision

1. An open and collaborative **culture** based on integrity and respect.
2. Challenging and rewarding work that amounts to a **career** that matters.
3. The highest **quality** of work.
4. Exceptional **service** that delivers value to a client.
5. Long-lasting **relationships** with our colleagues and clients that develop into friendships.
6. A truly **sustainable** company – financially strong, operationally effective, environmentally sustainable, and socially responsible.

Our focus

Our focus on **people and projects** drives our success as an organization. Financial performance is an outcome of this focus, not a business driver. Our employees are our only real asset. Collectively, they provide an unsurpassed level of expertise in earth sciences and environmental engineering. More importantly, our employees embody our core values: be **smart**, be **honest**, be **agile**, and most of all, be **passionate**!

Environmental and Water Resources Consulting

Our approach

At **aquilogic**, we provide our clients with the highest level of service and responsiveness, **developing personal relationships** with client staff. In addition to technical advice, we provide input in the regulatory, legislative, and legal aspects of projects. Our ability to work as a team with client's staff, counsel, and other consultants has been critical to the success of these projects.

Our culture

- **Smart**: the experience and expertise to produce quality work and deliver results that are trusted and valued.
- **Honest**: saying what needs to be said, not just what someone wants to hear.
- **Agile**: responding immediately and working to get the job done – and done right.
- **Passionate**: dedicated to our profession, colleagues, clients, and projects.

Your success

So, why **aquilogic**? If you want a consultant that listens to what you need, works with you to identify solutions, pays attention to details, speaks up when it matters, and is committed to you and your project – **we're the right choice!**

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Aquilogic Groundwater eNews:

www.aquilogic.com/subscribe.php

A Basic Groundwater Glossary

Aquifer: An underground geological formation of sand, soil, gravel and rock able to store and yield water.

Aquitard: A geologic formation that restricts the movement of water.

Artesian Well: a well screened within a confined aquifer that flows at the land surface without pumping.

Capillarity: The suction that results from porosity and the interfacial tension between the water, air and the soil grains; creates a capillary fringe above the water table where the pores are saturated with water, but under negative pressure.

Cone of Depression: The zone around a pumping well in an unconfined (water table) aquifer that becomes de-watered as groundwater is withdrawn at the well.

Confined Aquifer: An aquifer that is confined by an aquitard where the total hydraulic head in the aquifer is within or above the aquitard.

Darcy's Law: $Q = K.i.A$ (Groundwater flow is equal to the hydraulic conductivity times the hydraulic gradient times the cross-sectional area through which flow occurs)

Drawdown: A lowering of the groundwater level caused by pumping.

Effective Porosity: the fraction of the soil or rock volume that actually transmits water (a value less than the porosity).

Gaining Stream: A stream into which groundwater discharges (versus a losing stream where stream bed seepage recharges groundwater)

Groundwater: Water contained under the ground's surface, located in the pores and cracks in sand, gravel, and rock.

Groundwater Basin: The underground area that contains an aquifer or aquifers bound by geologic features that limit groundwater flow.

Groundwater Velocity: $v = (K.i)/ne$ (the hydraulic conductivity times the hydraulic gradient divided by the effective porosity).

Hydraulic Conductivity or Permeability: A measure of the soil or rock's ability to transmit water.

Hydraulic Continuity: $Q_{in} = Q_{out} +/- \Delta S$. Water inflow to a hydrologic system must equal outflow, plus or minus any change in water storage.

Hydraulic Gradient: The difference in hydraulic head between two measuring locations, divided by the distance between the locations (i.e. the slope of the groundwater surface).

Hydraulic Head: The potential energy of the groundwater at any location in the aquifer: The elevation of the water table in an unconfined aquifer (elevation head), the elevation at the top of the aquifer plus the rise of water in the well above that point (pressure head) in a confined aquifer.

Infiltration: Flow of water into the subsurface; leading to percolation in the vadose zone and recharge of groundwater.

Over-draft: Withdrawal (removal) of groundwater over a period of time that exceeds the recharge rate of the supply aquifer.

Porosity: The non-mineral fraction of soil or rock volume that represents voids or pores that can be filled with water and/or air.

Safe Yield: The annual amount of water that can be taken from a source of supply over a period of years without depleting storage.

Aquifer Storage: The volume of groundwater stored within an aquifer or groundwater basin.

Storativity: A measure of an aquifer's ability to store water

Specific Yield: The fraction of the soil or rock volume in an unconfined aquifer that actually transmits water to a pumping well.

Transmissivity: A measure of the capability of the entire thickness of an aquifer to transmit water.

Unconfined Aquifer: An aquifer where no aquitard confines the aquifer and the water table can fluctuate within the permeable sediments of the aquifer and vadose zone.

Watershed: The land area from which surface runoff drains into a stream, channel, lake, reservoir, or other body of water.

Well: A drilled, driven or dug borehole to intercept groundwater and inject, extract, or monitor water.

Aquilogic – the consultant to call!