Groundwater Monitoring Encyclopedia Article

Groundwater Monitoring

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites".

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers".

Contents

Groundwater Monitoring

Monitoring **groundwater** quality and **aquifer** conditions can detect contamination before it becomes a problem. The appropriate type of monitoring and the design of the system depends upon **hydrology**, **pollution** sources, and the population density and **climate** of the region. There are four basic types of groundwater monitoring systems: ambient monitoring, source monitoring, enforcement monitoring, and research monitoring.

Ambient monitoring involves collection of background **water quality** data for specific aquifers as a way to detect and evaluate changes in water quality. Source monitoring is performed in an area surrounding a specific, actual, or potential source of contamination such as a **landfill** or spill site. Enforcement monitoring systems are installed at the direction of regulatory agencies to determine or confirm the origin and concentration gradients of contaminants relative to regulatory compliance. Research monitoring **wells** are installed for detection and assessment of cause and effect relationships between groundwater quality and specific **land use** activities.

See Also

Aquifer Restoration; Contaminated Soil; Drinking-Water Supply; Hazardous Waste Siting; Leaching; Water Quality Standards