



US Army Corps of Engineers®



# Luckey Site Ground Water Fact Sheet

September 2000

## Formerly Utilized Sites Remedial Action Program

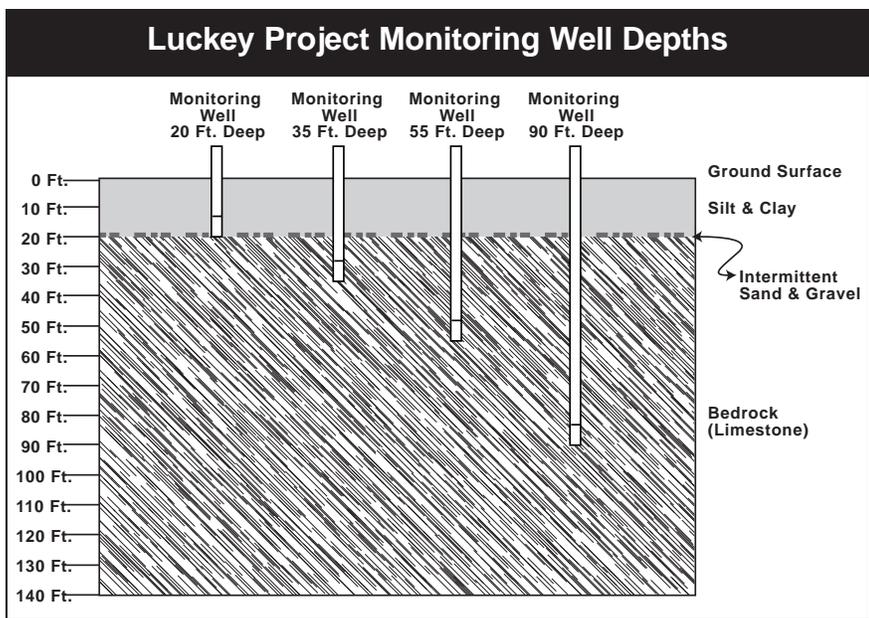
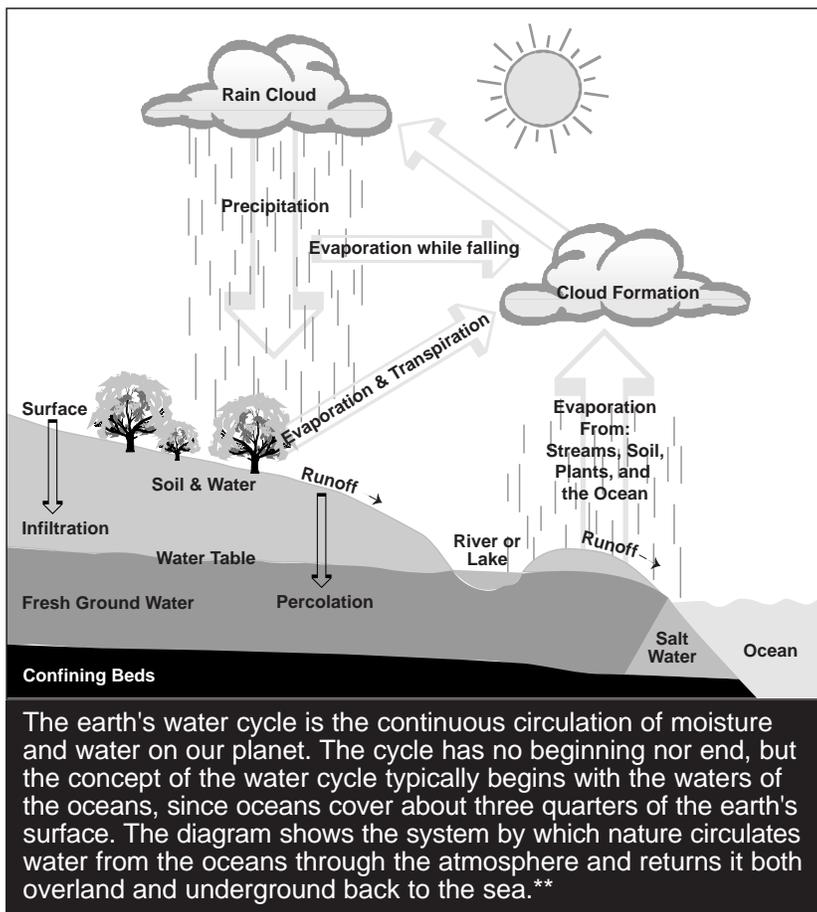
### Ground Water

Ground water is the source of water for wells and springs. Ground water exists underground, within cracks in bedrock or filling the spaces between particles of soil and rocks. The ground water layer in which all available spaces are filled with water is called the saturated zone. The dividing line between the saturated zone and overlying unsaturated rock or sediments is called the water table.\*

### Remedial Investigation

As part of the remedial investigation conducted by the U.S. Army Corps of Engineers, ground water monitoring wells have been installed to evaluate ground water. A total of 23 monitoring wells have been installed, at several different depths, on the FUSRAP site. A total of 12 monitoring wells were installed in the farm field north of the FUSRAP site.

Based on our investigations, FUSRAP-related compounds have been found in the ground water in localized areas at the site. Of the 23 monitoring wells installed on the site,



beryllium has been detected above the drinking water standard (4 parts per billion) in 3 of the wells.

Beryllium has also been detected above the drinking water standard in the West Production Well (not currently used), but has not been detected in the East Production Well (currently used to supply water to the Uretech International facility).

Beryllium has not been detected above the drinking water standard in any of the 12 monitoring wells installed in the farm field north of the site.

Ground water depth measurements have been collected periodically from all of the monitoring wells. In the fall of 1999, with the support of Luckey residents, depth measurements were also collected at 41 residential drinking water wells in a 15 square mile area surrounding the Luckey site. At about the same time, an investigation was conducted on the West Production Well at the Luckey Site, including videotaping the entire 320 foot interior of the well. All of this data, along with geological data obtained during our sampling activities and published reference sources has been used to determine the direction of ground water flow in the vicinity of the site.



### Ground Water Flow Model

Information collected during our remedial investigation has allowed us to successfully develop and calibrate a ground water model. The ground water model encompasses an area approximately 3 miles wide by 3-1/2 miles long. The model allows us to:

- Improve our conceptual understanding of ground water flow conditions at the site.
- Simulate the current ground water flow system at the site.
- Forecast future ground water movement under a variety of scenarios.
- Provide input to the risk assessment for scenarios evaluated as part of the feasibility study.



Therefore, the model will continue to be an important component as we progress to the next phase of the project and will help make informed decisions.

*The FUSRAP team welcomes questions and comments from the public regarding the Luckey FUSRAP Site and encourages interested citizens to become involved. By participating in the decision-making process for the site, you are ensuring that your voice is being heard. Please see the information below on how you can get in touch with us.*

#### Telephone:

Please call the FUSRAP toll-free public access line with any questions.  
Toll-free telephone number: 1-800-833-6390

#### Internet:

Information on FUSRAP is also available on the internet.  
The Buffalo District home page address is:  
<http://www.lrb.usace.army.mil/fusrap/luckey/index.htm>

#### Mail:

U.S. Army Corps of Engineers  
FUSRAP Public Information Center  
1776 Niagara Street  
Buffalo, New York 14207-3199

\*The reference source for the introductory paragraph on Groundwater is:  
Cornell Cooperative Extension • Groundwater Protection Fact Sheet • Page 400.04 • December 1985

\*\*The reference source for the water cycle diagram and the paragraph on the water cycle is:  
Ground Water and Wells • Johnson Division, UOP Inc. • 1975