

The federal Underground Injection Program

How the program relates to Kennecott Eagle Mine



Kennecott Eagle Mine

- Kennecott has applied for a Class V UIC permit for the Treated Water Infiltration System (TWIS)
- This application is under review
- When the review is complete, EPA will announce a proposed (draft) decision for public comments

The UIC Program

- The federal Safe Drinking Water Act created the Underground Injection Control (UIC) Program.
- In Michigan the UIC program is implemented by EPA.
- EPA's role is to ensure federal environmental regulations are followed.

The mission of the UIC program is...

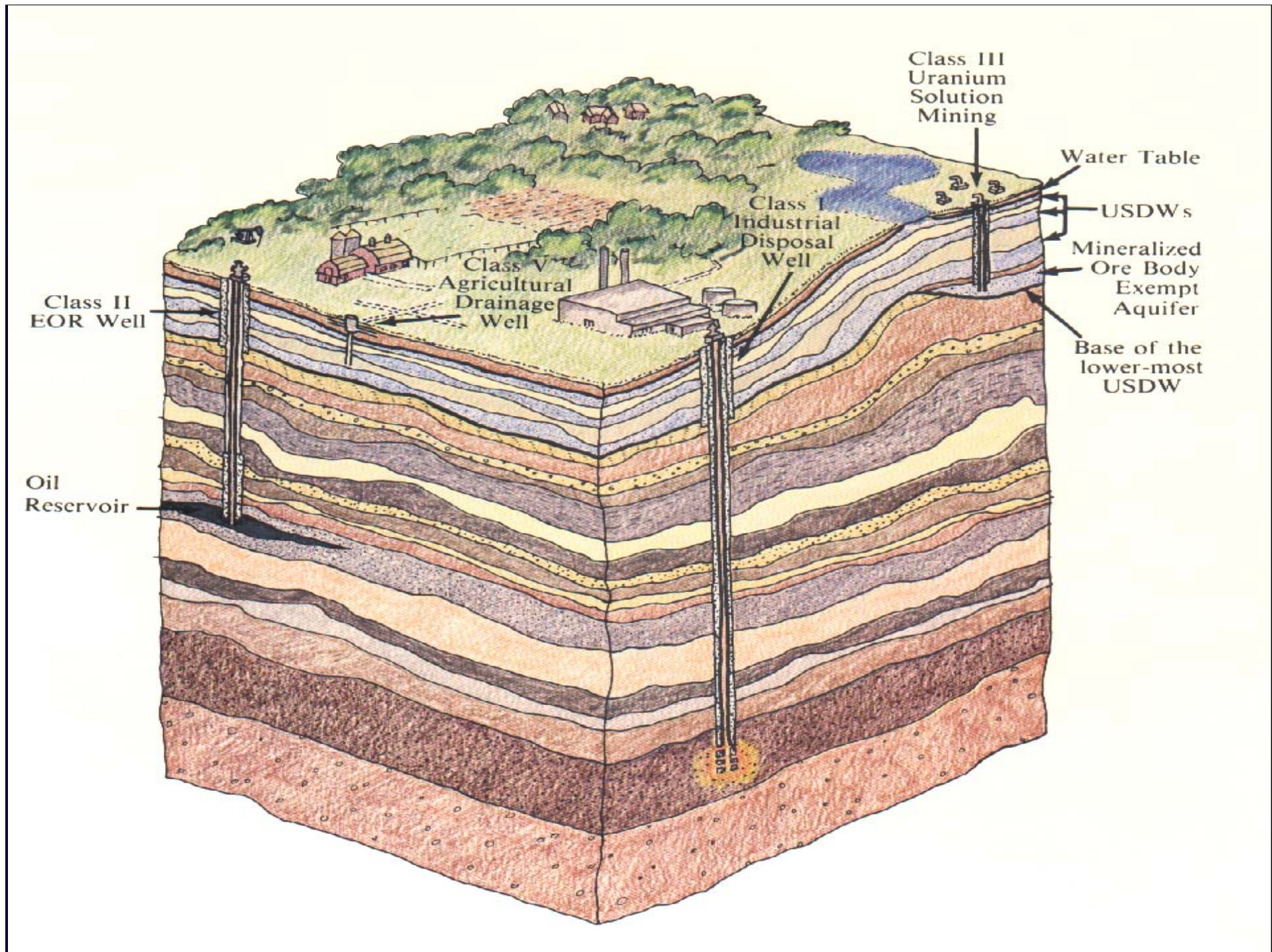
...to protect underground sources of drinking water from contamination by regulating construction and operation of injection wells.

Underground Injection is...

...Discharge of fluids through a well below the earth's surface.

A “well” is...

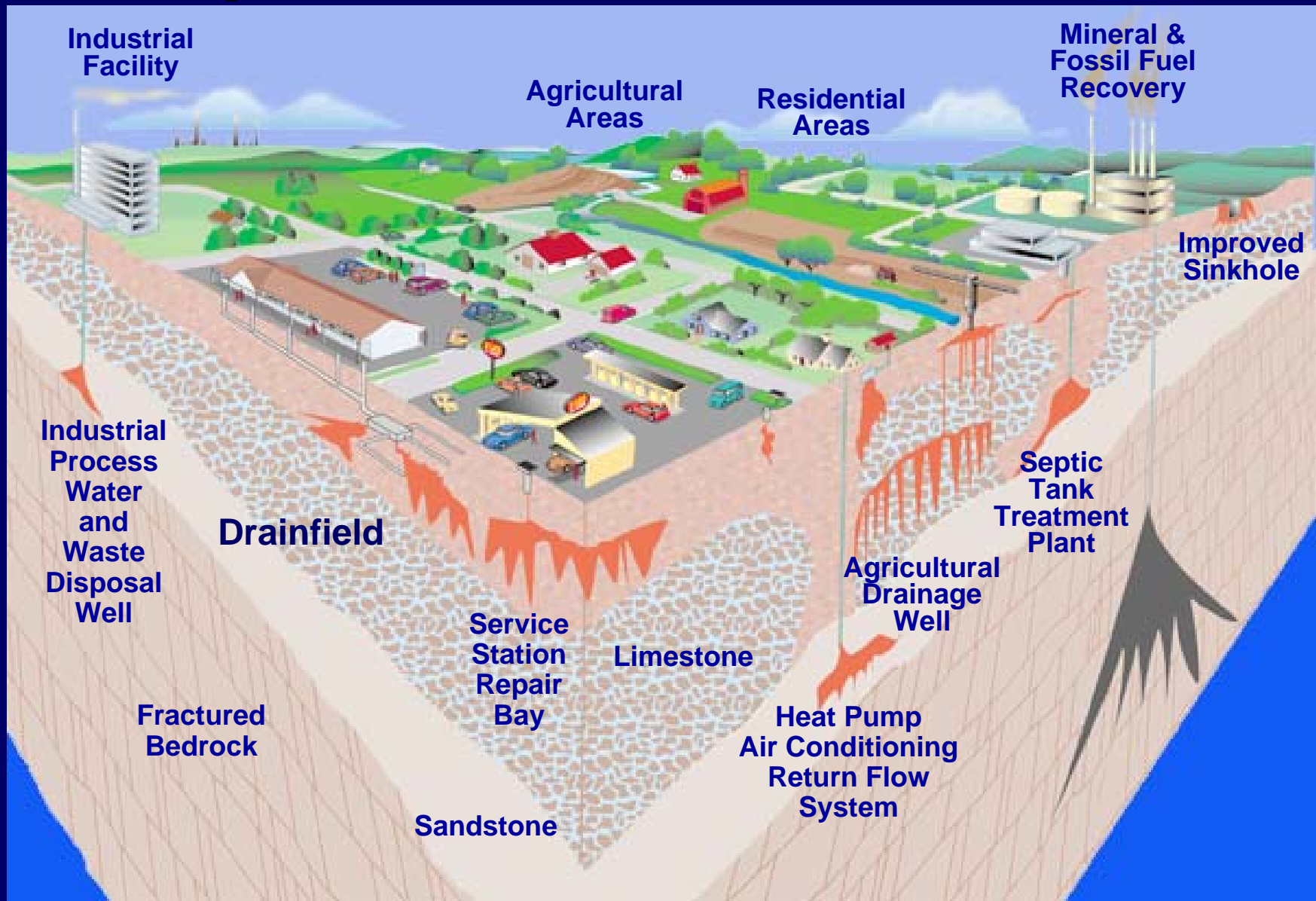
...A bored, drilled, or driven shaft, or a dug hole where the depth is greater than the largest surface dimension; or an improved sinkhole; or a subsurface fluid distribution system



In this case....

The well is a grid-like series of buried pipes that will slowly release treated liquid from the proposed wastewater treatment plant.

Examples of Class V Wells



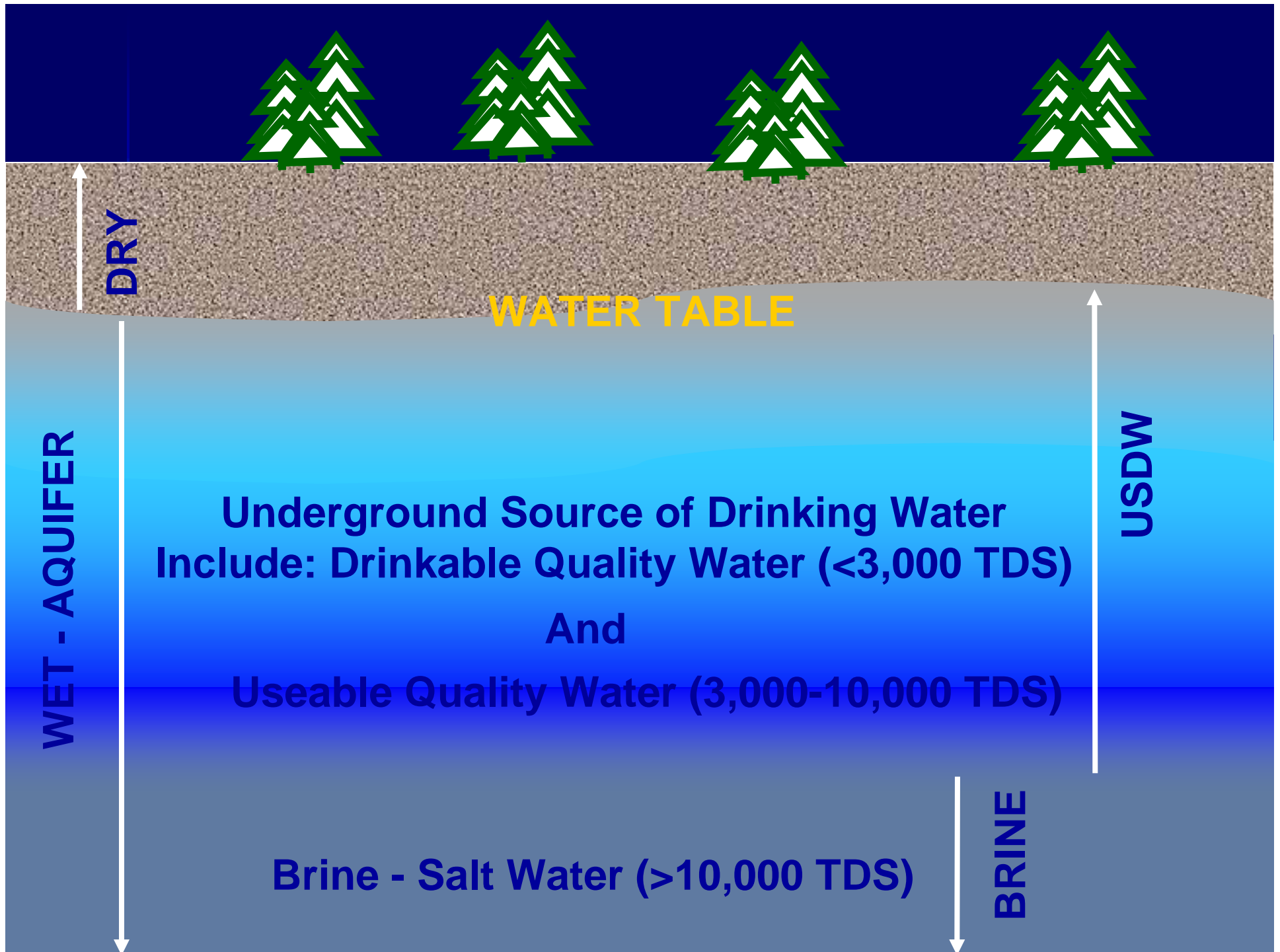
An aquifer is...

... a geologic formation capable of yielding a significant amount of water to a well or spring

Underground Source of Drinking Water is....

An aquifer (or part of one) that supplies water or has enough water to supply a public water system, and currently supplies drinking water for human consumption, or

Contains fewer than 10,000 mg/L total dissolved solids and is not an exempted aquifer



In order to operate a well

- Owners must submit inventory data
- The well must not endanger an underground source of drinking water
- Some well owners must apply for permits

UIC Permit Process

- Permit application review
- Proposed (draft) decision
- Public comment period
- Public hearing
- Response to all public comments and final decision

Permit application review includes

- Assessing siting
- Construction
- Operation
- Maintenance and closure

Federal Laws Considered

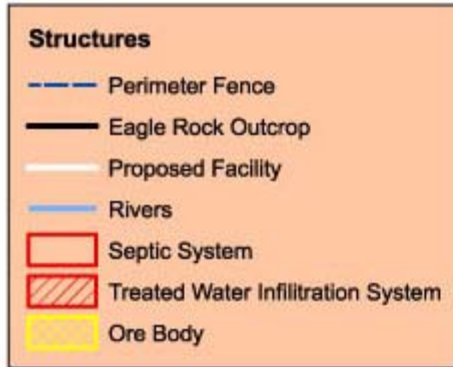
- Wild and Scenic Rivers Act
- National Historic Preservation Act
- Endangered Species Act
- Coastal Zone Management Act
- Fish and Wildlife Coordination Act
- Tribal policies

How to get more information

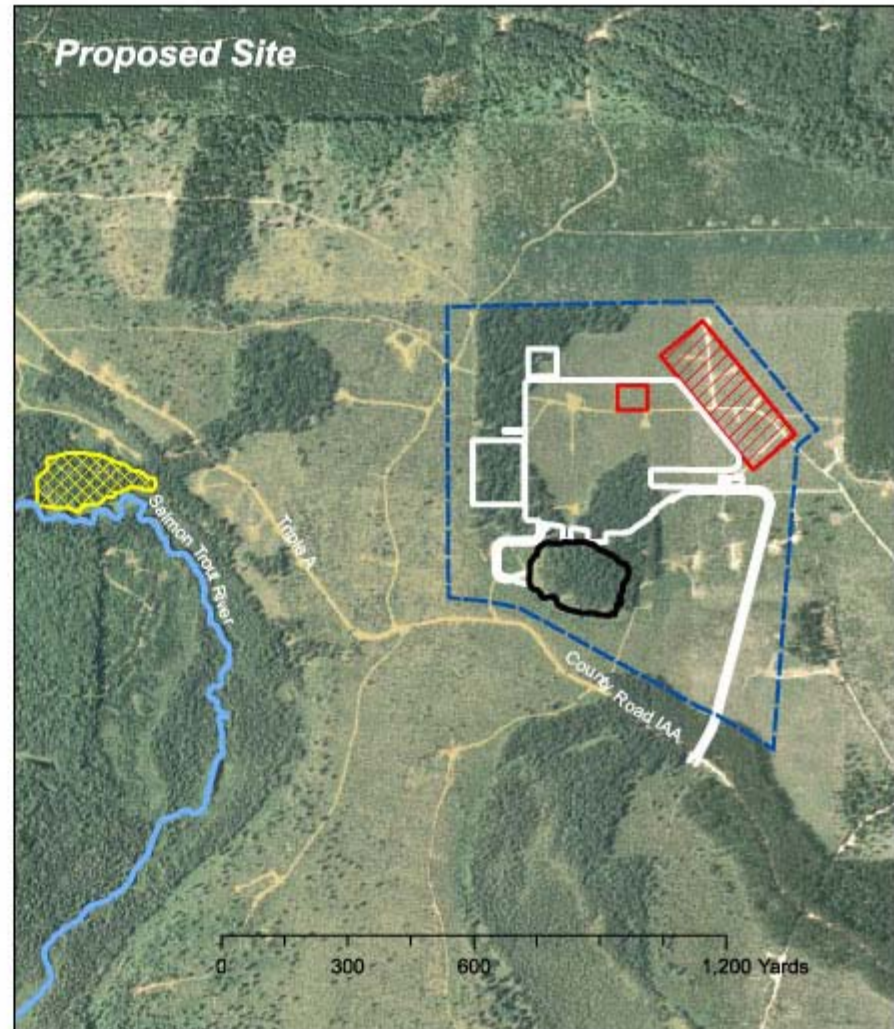
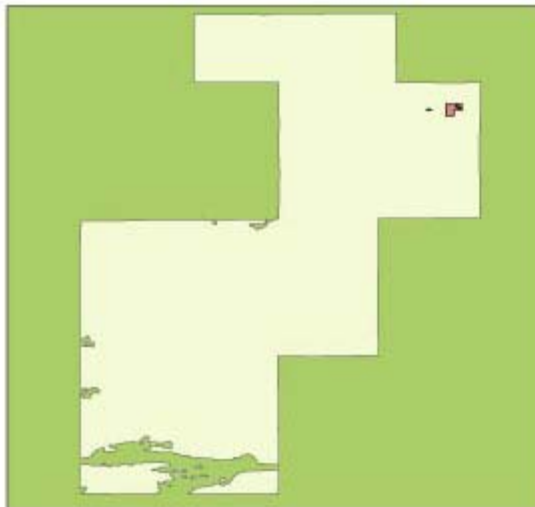
The complete permit application and other documents are available at:

www.epa.gov/region5/water/uic/kennecott

Kennecott Eagle Project



Project Site - Michigamme Twp



UIC Permit Process

