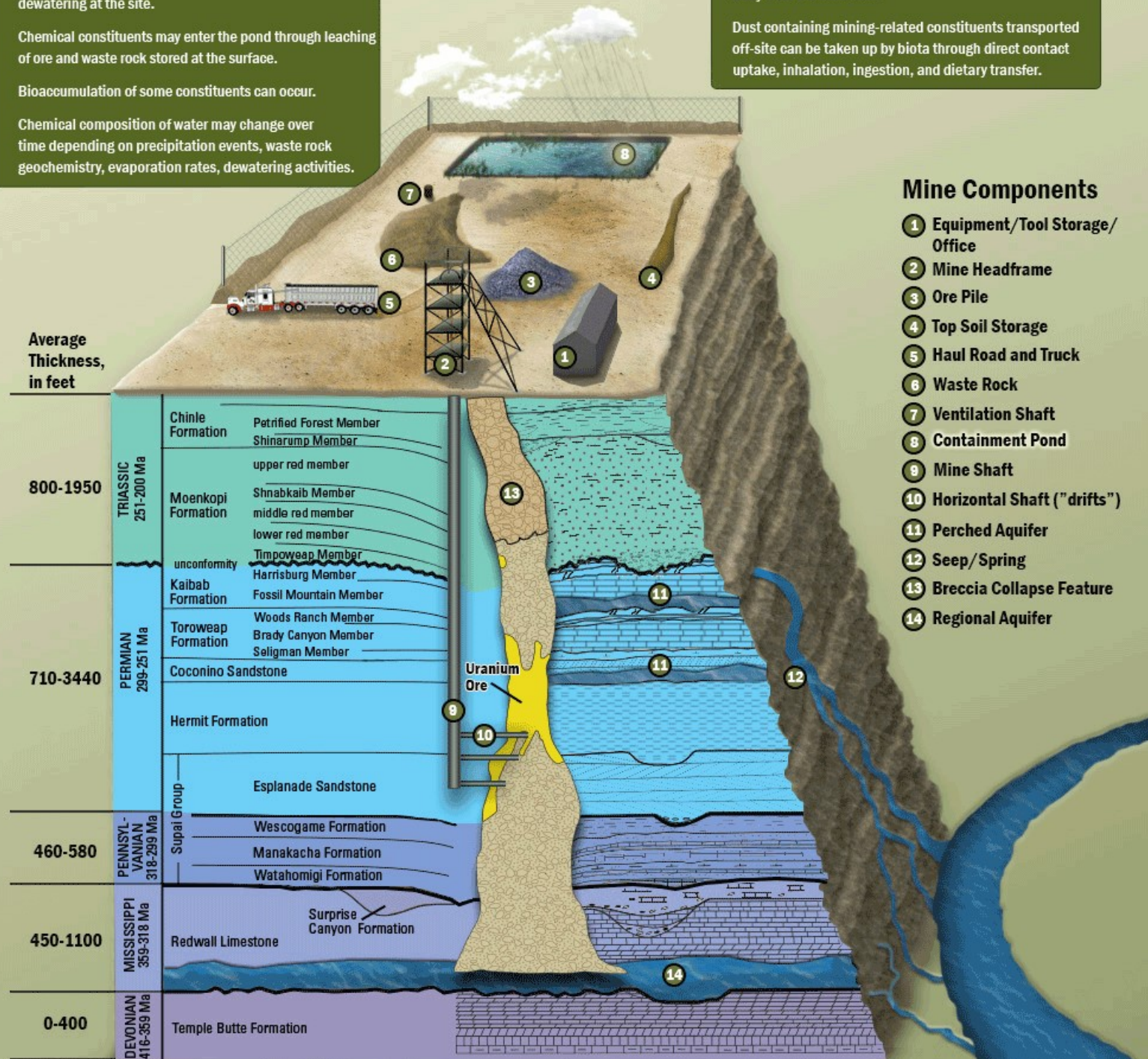


The containment pond provides aquatic habitat at the mine.

- Provides relatively constant water source for local biota.
- Documented habitat for vegetation, invertebrates, amphibians, birds, and mammals.
- Captures all water from precipitation events and mine dewatering at the site.
- Chemical constituents may enter the pond through leaching of ore and waste rock stored at the surface.
- Bioaccumulation of some constituents can occur.
- Chemical composition of water may change over time depending on precipitation events, waste rock geochemistry, evaporation rates, dewatering activities.

Weather events can be important soil/sediment transport mechanisms.

- Precipitation events can cause movement of soil/sediment.
- Wind can cause aerial deposition of mining related material away from the mine site.
- Dust containing mining-related constituents transported off-site can be taken up by biota through direct contact uptake, inhalation, ingestion, and dietary transfer.



Mine Components

- 1 Equipment/Tool Storage/Office
- 2 Mine Headframe
- 3 Ore Pile
- 4 Top Soil Storage
- 5 Haul Road and Truck
- 6 Waste Rock
- 7 Ventilation Shaft
- 8 Containment Pond
- 9 Mine Shaft
- 10 Horizontal Shaft ("drifts")
- 11 Perched Aquifer
- 12 Seep/Spring
- 13 Breccia Collapse Feature
- 14 Regional Aquifer

Understanding groundwater transport pathways are key to identifying possible connections between mines and water resources in the area.

- Groundwater movement in the Grand Canyon region of the Colorado Plateau is complex and largely unknown.
- The potential pathways to move constituents between the uranium ore, underground mine workings, and the underlying regional aquifer is not known.
- Drilling and mining activities may impact the quality and quantity of local perched aquifers during and after mine development.
- Impacted perched groundwater could then affect deeper regional aquifers in some areas where they are connected.
- Springs and seeps discharging from impacted groundwater may result in harm to local ecosystems and the Colorado River.