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Generalized Geologic Map for Land-Use Planning: Mercer County, Kentucky

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Generalized Geologic Map for Land-Use Planning: Mercer County, Kentucky

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Acknowledgements

Kentucky Geological Survey, ser. 12, Digital Publication 5, 1 CD-ROM.

- Geology of Kentucky
- Sparks, T.N., and Nuttall B.C., 2000, Spatial database of the Perryville quadrangle, Mercer and Boyle Counties, Kentucky:

**Geologic Information:**

- **MISSISSIPPIAN:** shale, limestone, sandstone
- **ORDOVICIAN:** limestone, shale

**Generalized Geologic Map Notes:**

- Site for various purposes. The properties of thick soils may supersede those of the underlying bedrock and should be considered. Places of karst, sinkholes, and underground drainage through solution-enlarged conduits or caves. Karst terrain generally requires fairly deep trenches. Reservoir embankments may be rippable. Solution channels common; local slopes. No limitations. Rock excavation.
- Slight to moderate contamination. Magnesium and sodium concentrations can be a problem. Moderate limitations. Reservoir embankments may be rippable. Solution channels common; local slopes. No limitations. Rock excavation.
- Excellent foundation material; excavation possible. Moderate to severe contamination. Magnesium and sodium concentrations can be a problem. Moderate limitations. Reservoir embankments may be rippable. Solution channels common; local slopes. No limitations. Rock excavation.

**Planning Guidance by Rock Unit Type:**

<table>
<thead>
<tr>
<th>Rock Unit Type</th>
<th>Planning Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faulted area</td>
<td>Rock excavation.</td>
</tr>
<tr>
<td>Sedimentary</td>
<td>Moderate to severe contamination. Magnesium and sodium concentrations can be a problem. Moderate limitations. Reservoir embankments may be rippable. Solution channels common; local slopes. No limitations. Rock excavation.</td>
</tr>
<tr>
<td>Volcanic</td>
<td>Slight to moderate contamination. Magnesium and sodium concentrations can be a problem. Moderate limitations. Reservoir embankments may be rippable. Solution channels common; local slopes. No limitations. Rock excavation.</td>
</tr>
<tr>
<td>Metamorphic</td>
<td>No limitations.</td>
</tr>
</tbody>
</table>

**Environmental Protection:**

- Anti-Leakage Strategy
- Pond Embankment
- Water Quality

**Table 135:**

<table>
<thead>
<tr>
<th>Residence</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basements</td>
<td>$+</td>
</tr>
<tr>
<td>Basements</td>
<td>$+</td>
</tr>
</tbody>
</table>

**Notes:**

- Water temperatures vary somewhat depending on the size of the lagoon from collapsing, which would result in a catastrophic emptying of the lagoon. The maintenance department should monitor water quality at a weekly basis. It is necessary to review the agricultural water-quality plan (KRS224.71) for your land use.
- The dam was built for hydroelectric power generation and flood protection. Herrington Lake was created by damming the Dix River in the mid-1920's.
- Illustrations are in this unit; logos are in the KGS Portfolio, 1983.)
- The Piper was designed and constructed by the Kentucky Fish and Wildlife Department. Additional funding was provided by the U.S. Fish and Wildlife Service.
- Mining and quarrying:
- Construction of roads:
- Agricultural practices:
- Forestry activities:
- Land development:
- Hunting and recreation:
- Historical sites:
- Natural history sites:
- Forest reserves:
- Water quality:
- Wildlife habitats:

**References Used:**

- Kentucky Geological Survey.
- Fallis Run dock, 1983).