

4.0 DISTURBANCE PERMIT REQUIREMENTS

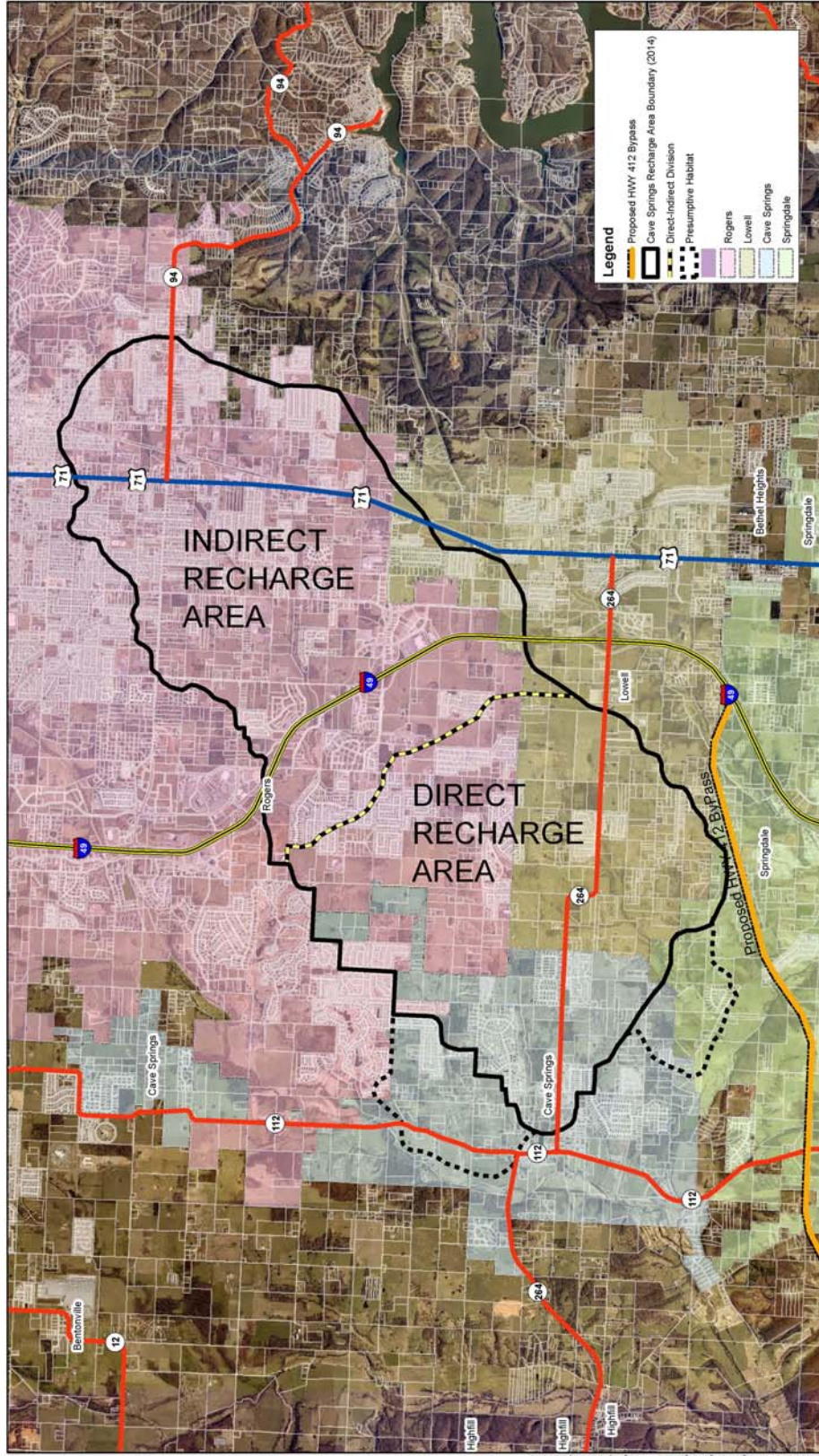
A Disturbance Permit Application, Report, and permit are required for all development projects in the Direct Recharge Area (Zones 1, 2, and 3) under the *Cave Springs Area Karst Resource Conservation Regulations*. Disturbance Permits are not required in the Indirect Recharge Area (Zone 4); however, MS4 and State of Arkansas requirements apply in these areas.

The Disturbance Permit Application and Report should provide the following information at a minimum:

1. Description of proposed development project including land use, proximity to sensitive features, potential contaminant sources (both surface and subsurface) associated with development (construction and post-construction), proposed plan to disconnect impervious surfaces (as recommended by *Drainage Criteria Manual*, etc.).
2. Mapping should identify karst areas, stream buffers, floodplains, and other vulnerable areas. Filtration practices shall be implemented in conjunction with conventional BMPs to provide a high level of treatment for runoff discharging to these sensitive areas.
3. Preliminary grading and drainage plans should be provided.
4. Preliminary wastewater plans should be provided.
5. Identification of other sensitive features and risk factors including steep slopes (greater than 15%); erosive soils; areas with poor vegetative cover and areas of existing erosion; floodplains; unstable stream reaches; storage areas for hazardous materials, fertilizers, pesticides, etc.; wetlands and waterbodies; sanitary wastewater collection/storage/treatment/pumping facilities; and other potential subsurface sources.
6. Delineation of inner and outer buffers in accordance with buffer widths described by zone herein. In general, each zone will have a restrictive inner buffer where development activities will be strictly limited and an outer buffer that is determined based on site-specific characteristics. The outer buffer may be reduced in some circumstances based upon the use of BMPs that replace functions of the buffer. In these cases, encroachments into the outer buffer may be allowed as long as there are BMPs that would offset or mitigate impacts.
7. Identification of BMPs for stormwater (construction and post-construction), wastewater, industrial source controls, and runoff management practices. In cases where encroachments into the outer buffer are proposed, the applicant shall provide documentation of mitigating factors for buffer width reductions using the *Cave Springs Outer Buffer Width Adjustment Worksheet* (provided in this chapter).

8. Documentation of funding mechanism for maintenance of buffer areas and BMPs and Maintenance Plan describing the nature, frequency and entity responsible for maintenance activities.

An Arkansas-registered Professional Engineer must prepare the Disturbance Permit Application and Report, and the final version of the report and supporting drawings must be signed and stamped by an Arkansas-registered Professional Engineer.



Cave Springs Area Karst Resource Conservation Study
 Rogers, Lowell, Cave Springs, Springdale
 Direct & Indirect Recharge Area Location
 Exhibit "10-1"

Cave Springs Direct Recharge Area Vulnerability Zone Map Exhibit "10-2"



- Legend**
- Living Stream Corridor
 - Streams & Rivers
 - Cave Springs Recharge Area Boundary (2014)
 - Directed Division
 - Cave Springs Groundwater Trough

