

provides a conservation benefit to the species through the protection of twenty-three caves occurring on Camp Bullis. Each cave is occupied by one or more of the listed species. Under the terms of a memorandum of understanding (MOU) signed by Camp Bullis and the Service on December 20, 2002, Camp Bullis agreed to protect, manage and monitor caves containing listed species as specified in the Plan within the limits possible through the authority of Camp Bullis and its operational and mission requirements. The Plan stipulates that should Camp Bullis ever be transferred in whole or in part, local Army officials will request that the Secretary of the Army, or other appropriate authority, review and incorporate provisions from this management plan into the property disposal procedures in order to transfer responsibility for appropriate management of any former Camp Bullis karst management areas to all subsequent owners by deed recordation or other binding instrument. The Plan provides assurances that the conservation strategies and actions will be implemented by outlining a schedule of management and monitoring activities to be conducted at each occupied cave. The Plan also stipulates that funding for the management actions will be programmed in the Environmental Project Requirements database which is submitted annually. To provide assurances that the conservation strategies and measures will be effective, Camp Bullis has agreed to conduct periodic surveys of the cave environment, as well as the surface plant and animal community to determine the status of these environments and the need for adaptive management. If monitoring or other information indicates that the goals or requirements of the Plan are not being met, then adjustments will be made as appropriate. Under the Plan, Camp Bullis is required to submit a report of all management and monitoring activities conducted each year to the Service annually.

For the reasons described above, we have not included the Camp Bullis lands in proposed Units 10 and 11 in this final designation of critical habitat because these areas do not meet the definition of critical habitat as stated in section 3(5)(A)(i) of the Act.

#### *Government Canyon State Natural Area Conservation Plan*

During the comment period for the proposed rule, Texas Parks and Wildlife Department (TPWD) submitted the "Karst Management and Maintenance Plan for Government Canyon State Natural Area,

Bexar County, Texas." Government Canyon State Natural Area (GCSNA) was designated as a state natural area in 1993. As of 2002, GCSNA includes a total of 8,199 acres. As a designated natural area, GCSNA's mission is to protect the outstanding natural attributes found on the property, including caves inhabited by the listed karst invertebrates. Surveys for cave and karst features and cave fauna have been ongoing at GCSNA since 1994. To protect the listed karst invertebrates, GCSNA began treating for fire ants around the occupied caves in 1999 and has continued to implement this and other conservation measures benefitting the listed species and their ecosystem. Such on-going measures include, but are not limited to, ongoing surveys for cave and karst features and cave fauna, control of fire ants, and control of unauthorized access. As described in the following paragraphs, the 2002 karst management plan, received and approved by the Service during the comment period, includes these and additional measures to conserve the listed species and their ecosystems on GCSNA.

TPWD committed to limiting human use to a trail system and 12 primitive campsites on the portions of the property overlying the Edwards Aquifer. At least two surveys a year for fire ant mounds around cave openings will be conducted with fire ant mound densities being recorded within 50 m of cave entrances. Searches for fire ant mounds also will be made during routine maintenance inspections. Control will be conducted twice a year, with an increase in frequency if more than 80 mounds are located within 50 m of a cave entrance. Boiling water will be used to control fire ants within 50 m of the footprint of any cave. Boiling water or chemical baits will be used between 50 and 100 m from the footprint. Baits may be "broadcast" in areas greater than 150 m, and the bait use protocol is outlined in the management plan.

Wildfire fighting will, to the fullest extent practical, avoid direct or indirect impacts to caves. Pesticide and herbicide use will be prohibited unless expressly agreed to by all partners involved in the special management. Monthly monitoring and inspections of all endangered species caves will occur. Data collection will include: evidence of vandalism, evidence of vegetation damage due to off-trail use, condition of the cave gate and/or security fence, evidence of feral hogs and/or white tailed deer, presence of fire ants, and results of recent fire ant treatments. Cave cricket counts will be performed

yearly at all caves. Through photographic documentation, changes in vegetation structure and composition around caves will be monitored. Volunteers holding valid scientific research and recovery permits for karst invertebrates will assist in monitoring listed and unlisted species. An annual report of activities will be submitted by October 31st of each calendar year.

Based on our evaluation of the Karst Management and Maintenance Plan for Government Canyon State Natural Area, we find that it provides adequate special management considerations and protection for Units 1a, 1b, 1c, and 1d that were proposed for designation as critical habitat. We believe that TPWD's karst management plan submitted for GCSNA meets the three criteria used by the Service to determine if a plan provides adequate special management or protection to a listed species. The Plan provides a conservation benefit to the species through the protection of seven caves, each occupied by one or more of the listed species. As a designated natural area, GCSNA's mission is to protect the outstanding natural attributes found on the property, including caves inhabited by the listed karst invertebrates. The property will be protected in perpetuity and used in a sustainable manner for scientific research, education, aesthetic enjoyment, and appropriate public use, not detrimental to the primary purposes for which the property was acquired. The Plan provides assurances that the conservation strategies and actions will be implemented by outlining a schedule of management and monitoring activities to be conducted at each occupied cave. Surveys for cave and karst features and cave fauna have been ongoing at GCSNA since 1994. The Plan also stipulates that funding for the management actions will be programmed into GCSNA's operating budget annually. To provide assurances that the conservation strategies and measures will be effective, TPWD has agreed to conduct periodic surveys of the cave environment, as well as the surface plant and animal community to determine the status of these environments and the need for adaptive management. If monitoring or other information indicates that the goals or requirements of the Plan are not being met, then adjustments will be made as appropriate. Under the Plan, TPWD is required to submit a report of all management and monitoring activities conducted each year at GCSNA to the Service annually. Therefore, we are not including these units in this final designation of critical habitat because