

described by an 8-digit Hydrological Unit Code or HUC (hereafter, we refer to these specific subdrainages as "HUCs."). We adopted some of the same elements when developing a conservation strategy for designating critical habitat. For some HUCs there is little or no available information on the existence of Preble's populations or the extent of occupied habitat. In these cases we exercised our judgement as to whether the areas were essential to the conservation of the Preble's and whether designation of critical habitat was warranted based on any confirmed occurrence of the Preble's, and quality and distribution of appropriate habitat. The Draft Discussion Document provided minimum stream lengths deemed necessary to achieve population goals; however, we believe that the potential for reaching population goals increases with increased length of streams included in a recovery population. Therefore, we have not limited the extent of critical habitat to minimum stream lengths described in the Draft Discussion Document. In some HUCs we proposed critical habitat units beyond the number of recovery populations that the Draft Discussion Document specifies. We have placed emphasis on those Preble's populations occurring on Federal lands and have designated critical habitat for several Preble's populations on Federal lands independent of recovery populations proposed in the Draft Discussion Document and the subsequent Working Draft.

*Comment 5:* Proposed critical habitat units are discontinuous within some drainages. These areas should be linked even where intervening stream reaches do not support the Preble's.

*Our Response:* In most cases proposed critical habitat units exceed minimum reach lengths for large, medium, and small populations proposed in the Working Draft and reflected in our conservation strategy. All proposed critical habitat units exceed 5 km (3 mi) in length. In some cases we chose not to link stream reaches through designation of marginal habitat or to substantially extend critical habitat to cover a larger Preble's population where multiple small recovery populations are consistent with our conservation strategy.

*Comment 6:* Critical habitat should not be designated in reaches where the Preble's has not been confirmed present. The Service must clearly establish that the Preble's lives in the area before designating critical habitat.

*Our Response:* See response to Peer Review Comment 3 above.

*Comment 7:* Within proposed critical habitat units there are locations where Preble's habitat is not present. Some incised, or otherwise impacted or altered reaches of stream may be impassable for the Preble's and do not serve as travel corridors. There should be a process for site-specific exclusions from critical habitat where primary constituent elements are not present. Several commenters requested that specific sites within proposed critical habitat units not be included in the final critical habitat designation.

*Our Response:* The Act does not require that a species live in an area in order for it to be included in critical habitat. It defines critical habitat as including "specific areas outside the geographical area occupied by the species at the time it is listed \* \* \* upon a determination by the Secretary that such areas are essential for the conservation of the species" Sec. 3(4)(ii). Additionally, our regulations state: "The Secretary shall designate as critical habitat areas outside the geographical area presently occupied by a species only when a designation limited to its present range would be inadequate to ensure the conservation of the species" (50 CFR 424.12(e)). All primary constituent elements upon which the Preble's depends are present within each proposed unit of critical habitat. At any given site within the unit, one or more primary constituent element must be present for the site to qualify as critical habitat. Site-specific determination of limits of critical habitat will be made by the Service on a site by site basis. For example, it may be determined that a reach qualifies as critical habitat based on its ability to provide connectivity between habitat upstream and downstream. Reaches that provide even minimal connectivity may be essential to maintaining Preble's population over a critical habitat unit. Yet, in the same reach, uplands away from the creek may be developed and not be considered critical habitat. The scale of mapping that we used to approximate our delineation of critical habitat did not allow us to exclude all developed areas such as roads and rural development. Federal actions limited to these areas would not trigger a section 7 consultation unless they affect the Preble's or primary constituent elements within designated critical habitat.

Response to comments that suggest omitting specific areas from final critical habitat designation are included in Issue 3, Comments on Specific Units, below.

*Comment 8:* The primary constituent element addressing ecological processes should be more clearly described.

*Our Response:* We have listed and described the "dynamic geomorphological and hydrological processes" that create and maintain Preble's habitat as a primary constituent element. In designating critical habitat we consider presence of primary constituent elements. The integrity of such processes in a given area, and thus the probability that quality Preble's habitat will be maintained over time, was considered in the designation of critical habitat. As with other primary constituent elements, there is a qualitative aspect to ecological processes. Streams that have highly managed flows or whose flows are dictated by urban runoff, and those that are severely downcut, channelized, or armored to prevent erosion were less likely to be designated as critical habitat. Likewise, we chose not to designate man-made ditches as reaches of critical habitat, even though some have been shown to support Preble's populations. In some cases current land uses (mowing, overgrazing) may limit primary constituent elements relating to vegetation, but underlying ecological processes are still operative. Such areas may still qualify as critical habitat based on presence of this primary constituent element. Actions that would degrade these ecological processes would be viewed as adversely affecting critical habitat.

*Comment 9:* One component of a primary constituent element for the Preble's is "open water throughout the Preble's active season." In some proposed reaches, water is not present throughout the Preble's active season.

*Our Response:* We believe that in each critical habitat unit proposed, open water is generally available throughout the Preble's active season. Portions of certain critical habitat units, including side tributaries, may have little or no water in late summer. In drought years availability of open water may be more generally limited.

*Comment 10:* Mountain streams areas are less important for the Preble's than streams with wider floodplains that are present in the foothills or on the plains.

*Our Response:* While it is likely that streams with wider floodplains support higher numbers of the Preble's per unit length of stream, we believe that mountain streams are also essential to the overall conservation of the Preble's. Preble's populations along mountain streams may be less subject to certain threats including water projects, residential development, flooding, and long-term climate change. For example, while the Upper South Platte River supports populations of the Preble's, few are thought to exist along the South