Survey Protocol for Presence of or Negative Finding
for the Barefoot Banded Gecko (*Coleonyx switaki*)
California Department of Fish and Game
(August 2011)

Background biological information:

- small (2-3 in. snout to vent length) secretive lizard
- strictly nocturnal; above ground during warmer part of year
- relative porosity of skin compared to other desert lizards causes it to seek humid conditions in its refugia, or when active above ground
- large boulders and rock outcroppings are habitat indicators, since these elements create the underground microclimate refugia that the lizards require.
- found from sea level to ~2,300 ft elevation
- most active above ground May-July, but can be found as early as February and as late as September
- present above ground when days above 100° F create night time temps above 75° F
- humidity above 25% usually facilitates above ground activity.
- recaptures in pitfall arrays indicate a home range; this points to the utility of using surveys to detect rather than relying completely on habitat indicators

Survey Protocol:

This protocol is for use in surveys required by the California Environmental Quality Act. Surveys are to determine presence and not abundance or relative density.

1). Determine the extent of suspected habitat to be impacted by the proposed project, based on sightings of the species recorded in CNDDB. Surveys are not necessary in flat or gently sloping areas of loose fine sand or without 20% or more rock cover. Survey coverage will include the actual footprint of disturbance, and within an additional perimeter 50 feet from the footprint boundary. Disturbance includes grading, digging, trenching, watering, vehicular traffic, parking, staging of equipment or supplies, and temporary buildings and sheds.

2). Twenty four hours prior to conducting surveys, notify the Department of Fish and Game (DFG) office in Bermuda Dunes (760 200-9158) of the locations, dates and times of surveys.

3). Perform visual nighttime surveys four times, at least one week apart, within the period from May 1 through July 31. Visual surveys are conducted on foot by walking slowly back and forth through putative habitat, using lanterns to observe lizards on the ground, and shining a light on rocks and into crevices. The entire area of the survey coverage will be walked on the center lines of 10 ft wide transects.

4). Surveys will be conducted between one half hour after sunset and 02:00. Surveys will be conducted on occasions when the night time air temperature is above 75° F at the start time, and humidity is above 25% at the survey site, as measured by hygrometer.

5). Survey participants must posses a current Scientific Collecting Permit (SCP) issued by the Department, which includes authorization language equivalent to an MOU specifically allowing capture and handling of this State-listed Threatened species. Participants must have the ability to distinguish among California geckos, to be able positively identify Barefoot Banded Geckos with a minimum of careful handling. Individual lizards (as per SCP conditions) may be handled only if necessary, and only long enough for positive identification and photographs. Individuals will immediately be released at the site of capture, except lizards found on roads

will be released off the shoulder of the road.

6). Habitat disturbance (e.g., rock flaking or rolling) is prohibited.

7). If no lizards are detected within four surveys conducted according to this protocol, it will be assumed for the purposes of CEQA requirements that the species is not present in the surveyed area.

8). If a single lizard is detected, the site will be considered to be Barefoot Banded Gecko habitat; the project proponent will be required to obtain a 2081(b) permit for Incidental Take of the species (http://www.leginfo.ca.gov/cgi-bin/displaycode?section=fgc&group=02001-03000&file=2080-2085). The full set of four surveys need not be completed once the species is detected.

9). Location data for the detection will be provided to the Department, as per SCP requirements.