The following description of amphibians of the reserve is modified from the California Department of Fish and Game website on California's Wildlife .

The **California slender salamander** (*Batrachoseps attenuatus*) is able to enter termite tunnels, earthworm burrows and other small openings that are unavailable to other more robust salamanders. It.inhabits a variety of low- to middle-elevation habitats, including valley-foothill hardwood, hardwood-conifer, riparian, mixed conifer. It forages primarily under or within surface objects such as decaying logs, pieces of bark or flat rocks, or in leaf litter or the tunnels and burrows of termites and earthworms. Its primary food is small arthropods such as spiders and mites, and insects as well as earthworms and snails. Eggs are laid in clusters of 4 to 21 on moist substrates within and under decaying logs, bark, boards, and other surface objects, but are more commonly laid underground. The slender salamander retreats to subterranean refuges during dry periods.

The **ensatina** (*Ensatina eschscholtzi*) is found in a variety of habitats including ponderosa pine as well as hardwood-conifer habitats and mixed chaparral. Most feeding appears to occur at night during wet periods. They feed on spiders, insects, millipedes, centipedes, and sowbugs. During the moist periods of fall, winter, and spring precipitation,ensatinas are found under surface objects such as logs and boards, rocks, and moist leaf litter. They retreat to rodent burrows or other moist places underground in summer. Females brood from three to 25 eggs on moist surfaces under or within decaying logs, under pieces of bark, or in moist rock fissures. Although uncommon, they are sometmes encountered in the BCCER in winter.

California newts (*Taricha torosa*) occur primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, and mixed conifer habitats. They are very common in the reserve, often seen migrating to or from Big Chico Creek in Spring. They are easily identified by the dark brown back and orange underside. Their skin ranges from rough in summer, to smooth during spawning season. They reach 15 cm in length. Newts spend the drier portions of the year dormant under rocks and logs in dense vegetation. In late fall through early spring (September to May) they move into the creek to mate and lay eggs in small clusters on the submerged portion of emergent vegetation and on the underside of rocks. Their spherical egg masses are clear to yellowish. The aquatic larvae are common in Big Chico Creek in summer where they eat many small aquatic organisms, especially small crustaceans and larval aquatic insects. Terrestrial adults consume earthworms, snails, slugs, sowbugs, and insects

The **Western Toad** (*Bufo boreas*) is the common garden toad. They are up to 12 cm in length, and dusky gray-brown above, with darker blotches and a pale mid-dorsal stripe. Adults feed on a variety of terrestrial insects and other small arthropods, earthworms, snails, and slugs. Males make a weak twittering sound during the breeding season. Toads breed in January-July, leaving black eggs in strings of over 16,000 in shallows of standing or very slow-moving water. Their tadpoles are black when small and brownish when nearly mature.

Western spadefoot (toads) (*Scaphiopus hammondi*) have been recorded from several other areas in the Big Chico Creek Watershed and may be expected on the reserve. They are olive or gray with hourglass markings on the back and have horny "spades" on their hindfeet and vertical oval pupils. They frequent open grassland or woodland and spawn in seasonal ponds or streams. Egg masses are attached to plant material or the upper surfaces of submerged rocks They spend much of their time in

burrows but are active on the surface nocturnally during rains or periods of high humidity. Adults eat insects, worms, and other invertebrates.

Pacific treefrogs (*Hyla regilla*) are the only treefrogs at BCCER. They are small (< 5 cm) and have many color forms, but always with a black eye stripe and toepads. They can change color freely. Their voice is a loud two-part "rip-pet" lasting about 1 second. They are good climbers, but are usually found on the ground in damp areas. Adults eat a variety of larval and adult invertebrates including slugs, spiders, isopods, centipedes, earthworms, and insects. They breed from January to July, attaching walnut-size jelly clusters of eggs to vegetation usually in seasonal ponds or streams. Their tadpoles are dusky to olive-brown with eyes protruding at the sides of the head.

The **foothill yellow-legged frog** (*Rana boylii*) is listed by the CDFG as a Species of Special Concern. They are found mainly in permanent streams and occasionally found in backwater habitats, isolated pools, and slow moving rivers. Historically, it occurred in most Pacific drainage's west of the Sierra/Cascade Crest in Oregon but over the years it has disappeared from more than 50% of it's historic range (Jennings 1996). Foothill yellow-legged frogs are common along Big Chico Creek within the reserve and have been observed along springs, small tributaries and in Mud and Rock Creeks to the north. Adults eat both aquatic and terrestrial invertebrates, especially insects.
The foothill yellow-legged frog needs shallow, slow flowing water with pebble/cobble substrate for breeding sites. Clusters of 200 to 300 eggs are attached under water to the substrate. Tadpoles require water for at least three or four months before metamorphosis.
Foothill yellow-legged frog are susceptible to many threats including habitat loss, water diversions, unnatural flow regimes, introduced non-native fishes and bullfrogs, and activities which increase sediment such as road construction, logging, and intensive cattle grazing within frog habitat. In a 1996 report to congress regarding the Sierra Nevada Ecosystem Project, the Big Chico Creek Watershed was categorized as a watershed with especially high values for foothill yellow-legged frog conservation (Jennings 1996).

Bullfrogs (*Rana catesbeiana*) are occasionally seen along Big Chico Creek in the reserve. They are native to the eastern half of the United States and are an introduced species in California. They eat virtually anything they can swallow, and their presence is destructive to native species. Bullfrogs are olive to brownish above, often grading to light green on the head, and have a prominent fold of skin from the eye to the eardrum. Their voice is a low-pitched "jug-o-rum" bellow and juveniles usually make an "eeep" sound as they jump away from potential predators. Bullfrogs breed in March to July, and deposit their eggs in huge floating masses of 10,000 to 20,000, one egg thick.