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|  | [Note: Best if viewed at Full Screen]  Introduction  Part 4           Circumstances such as this are potentially the most devastating to aquatic ecosystems, such as that of the Arroyo Del Valle creek, because there is more interaction between the organisms and the chemistry of their ecosystem.  And as with every ecosystem, any change in the populations size of one species can affect every species in the food chain.         In terms of the creek environment, if the pH levels of the water were ever to venture as low as six, many of the crawdads and any other crustaceans in the area would die, along with any insects.  As the level moves lower into the 5 pH range, many species of fish would begin to die, and foreign algae and mosses might begin to invade.  Although research did not state for certain, this is presumably the same level that frog populations would die off.  Beyond this level, few fish can survive, and much of the life that would carry on would be in the form of mosses. [(1)](http://docs.google.com/biblio.html)          The pH level for which an organism is suited, and cannot live outside of, is called its optimum pH.  The farther from an animal�s optimum pH the environment may stray, the more dangerous and deadly it is for that animal.  The basic premise of our research is whether or not the creek environment exceeded the bullfrogs� optimum pH, which in turn may have contributed to their population drop.         Before beginning our experiment, it was necessary to perform a test to determine the optimum pH for the bullfrog tadpoles.  As a rule for our testing, we decided that if any tadpoles could survive the pH levels to which they were subjected for at least one week, then the conditions fell within their optimum pH.  There was some initial concern as to whether the one week time allotment could truly yield realistic and valid results.  For this we turned to [Southern Nevada Enviroinmental, Inc.](mailto:snei@vegasnet.net), whom are a group of biologists from which we learned that one week was indeed a substantial enough amount of time for the relatively fragile tadpoles to survive within harsh conditions to yield valid results.    [Back to Part One](http://docs.google.com/intro.html) [Back to Part Two](http://docs.google.com/intro2.html) [Back to Part Three](http://docs.google.com/intro3.html) |

*This Web Site is Best viewed with 256 or more colors.*

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