allowed in three management zones and was disallowed in seven other zones. In addition, properties of applicants for non-commercial culling of red or gray kangaroos within the closed areas were subject to physical inspection by NSW Rangers prior to license grant considerations.

Drought conditions continued to widen across NSW in 1984. The midwinter 1984 population estimate indicated a total NSW kangaroo population of about 2.8 million with an increasing red kangaroo population, a static gray kangaroo population in the eastern management zones, and a decline in both red and gray populations in western management zones. A harvest quota of 300,000 (11 percent of the 1984 population) was established for 1985, but no harvest was allowed in areas containing estimated population densities of one or fewer red or gray kangaroos per sq km. Drought conditions still extended across NSW in early 1985, except for the extreme southwestern portion of the state. Drought-breaking rains fell in late 1985, and early 1986 and the state was declared drought-free in 1986. The midwinter 1985 population estimate indicated a total kangaroo population of about 4.15 million with a recovery of both red and gray kangaroo populations. Some pockets with low populations remained, and no harvest was allowed during 1986 in areas with a kangaroo density less than or equal to one per sq km. A 1986 harvest quota of 577,000 was established (14 percent of the population) but 15 percent of the quota was withheld and not allocated.

Drought conditions did not occur in NSW from 1987–1991, and populations of both red and gray kangaroos and harvest quotas progressively increased each year. The total harvest also usually increased each year. The mid-winter 1990 population estimate indicated a total kangaroo population in NSW of 8.55 million with increases in both red and gray kangaroos. A 1991 harvest quota of 1.5 million was established which was 18 percent of the population estimate. Thirteen percent of the quota was held back and not allocated. Drought conditions began to extend southward from Queensland into the northern management zones of NSW. The mid-winter 1991 population estimate indicated a total kangaroo population in NSW of 9.1 million. A harvest quota of 2.1 million was established which was about 23 percent of the 1991 population estimate. Fifteen percent of the harvest quota was held back and not allocated. By January 1992, the 1991-2 drought had extended further into NSW and was declared to

cover the northern and eastern portions of the state. Kangaroos reportedly moved to the south as the drought progressed and some quota allocations were transferred from northern management zones to more southern zones. The notional quotas for July-December 1992 were reviewed in July 1992. Preliminary 1992 survey figures indicated that central and southern populations were barely impacted by the drought and kangaroo populations were increasing in the most southern management zones.

By December 1992 the drought declarations indicated that the drought had retreated to the most northern management zones of NSW. The midwinter 1992 population estimate indicated a total NSW kangaroo population of 8.04 million. A harvest quota of 1.66 million was established which was about 21 percent of the 1992

population estimate.

The 1992 survey indicated declines of the red kangaroo throughout the northern management zones, stability in the central management zones and increases in the southern management zones. Populations of the gray kangaroo were somewhat diminished in some management zones. Harvest quotas for 1993 were diminished for populations in those management zones where kangaroo populations were found to be reduced. Fourteen percent of the potential harvest quota was held back and not allocated.

The notional quota for the second half of 1993 was reviewed when preliminary mid-winter 1993 population estimates were available. February 1993 reports indicated that drought-breaking rains were widespread in NSW and that drought conditions were retracting to the north.

This synopsis indicates how New South Wales strives to manage kangaroos on ranges periodically impacted by droughts. It is not possible to attain and maintain a specific kangaroo population on such landscapes, and such populations are expected to cycle as periodic droughts overtake portions of the continent. Management strives to follow the cycle. This requires frequent monitoring of kangaroo populations and the setting of low harvest quotas when populations are low but allows for the setting of higher quotas when kangaroo populations are expanding. This is exhibited by the NSW data where a harvest quota of 300,000 was established for 1985 when the midwinter 1984 NSW population was estimated at 2.7 million and a harvest quota of 2.07 million was established for 1992 when the 1991 mid-winter NSW

kangaroo population was estimated at 9.11 million.

Harvest quotas represent the maximum number of kangaroos that can enter domestic or international commerce in a given year after having been taken in accordance with stateapproved plans. About 70 percent of the quota has been harvested during recent calendar years. The maximum allowable kill is regulated as is the relative location of that kill. New South Wales has closed management zones to harvest, has closed degree blocks within management zones to harvest, has reallocated harvest quotas between management zones as a result of new population survey information, routinely issues the second half of the harvest quota in the second half of the calendar year, and routinely holds back some percentage of the commercial quota as a safety precaution. In addition, the legal harvesting of kangaroos is a licensed operation and all aspects of licensing can be suspended at any time during the calendar year if such actions are necessary. Other harvesting States also have regulatory measures that allow the reduction of take if environmental or other factors adversely impact kangaroo populations.

A comment supporting the Service's proposed rule was provided by The Wildlife Legislative Fund of America (WLFA) which had filed the November 6, 1990, petition to delist the three kangaroo species. WLFA stated it is a strong supporter of the Endangered Species Act when it is applied to species that truly require protection from over-exploitation or critical habitat destruction. WLFA also stated that listing species like these three species overburdens the system and detracts from the ultimate goal of protecting truly endangered species. WLFA stated that recovered species should be delisted as quickly as possible to encourage recovery efforts for other listed species and to focus the limited efforts of the Service on species and populations in greater need of scientific and public attention. WLFA stated that keeping these species on the threatened list could only be interpreted as bureaucratic red tape designed to stifle the legitimate trade in a closely controlled and monitored renewable resource. WLFA further stated that delisting does not foreclose continued efforts by the Service to selectively monitor the kangaroo management programs of Australia. The Service concurs.

The Australian National Parks and Wildlife Service, now known as the Australian Nature Conservation Agency (ANCA), also submitted comments