

Code of Federal Regulations is proposed to be amended as follows.

PART 207—[AMENDED]

1. The authority citation for part 207 continues to read as follows:

Authority: 40 Stat. 266; (33 U.S.C. 1).

2. Section 207.440 is amended by revising paragraph (u) as follows:

§ 207.440 St. Marys Falls Canal and Locks, Michigan; use, administration and navigation.

* * * * *

(u) The locks will be opened and closed to navigation each year as provided in paragraphs (u) (1) and (2) of this section except as may be authorized by the Division Engineer. Consideration will be given to change in these dates in an emergency involving disaster to a vessel or other extraordinary circumstances.

(1) *Opening date.* At least one lock will be placed in operation for the passage of vessels on March 25. Thereafter, additional locks will be placed in operation as traffic density demands.

(2) *Closing date.* The locks will be maintained in operation only for the passage of down bound vessels departing from a Lake Superior port before midnight (2400 hours) of January 14, and of upbound vessels passing Detour before midnight (2400 hours) of January 15. Vessel owners are requested to report in advance to the Engineer in charge at Sault Ste. Marie, the name of vessel and time of departure from a Lake Superior port on January 14 before midnight, and of vessels passing Detour on January 15 before midnight, which may necessitate the continued operation of a lock to permit passage of vessel.

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Dated: December 21, 1995.

John H. Zirschky,

Acting Assistant Secretary of the Army (Civil Works).

[FR Doc. 95-31543 Filed 12-29-95; 8:45 am]

BILLING CODE 3710-92-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AD62

Endangered and Threatened Wildlife and Plants: Proposed Establishment of a Nonessential Experimental Population of California Condors in Northern Arizona

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service, in cooperation with the Arizona Game and Fish Department, and the U.S. Bureau of Land Management, proposes to reintroduce California condors (*Gymnogyps californianus*) into northern Arizona. This reintroduction will achieve a primary recovery goal for this endangered species, establishment of a second non-captive population, spatially disjunct from the non-captive population in southern California. This population is proposed to be designated a nonessential experimental population in accordance with Section 10(j) of the Endangered Species Act of 1973, as amended. Captive-reared condors will be released in early 1996 (target date) and additional releases will occur annually thereafter until a self-sustaining wild population is established. The reintroduction will use tested release techniques developed in previous releases in southern California and will be managed in accordance with the provisions of this special rule. The potential impacts associated with this proposed rule were assessed in an Environmental Assessment completed in November 1995. This California condor reintroduction does not conflict with existing or anticipated Federal or State agency actions or traditional land uses on public or private lands.

DATES: Comments from all interested parties must be received by February 1, 1996. Public hearings will be held at Flagstaff High School on Tuesday, January 23, 1996, from 6:00 to 8:00 pm and Kanab High School on Thursday, January 25, 1996, from 6:00 to 8:00 pm.

ADDRESSES: Comments and materials concerning this proposal should be sent to State Supervisor, U.S. Fish and Wildlife Service, Ecological Services, Arizona State Office, 2321 W. Royal Palm Road, Suite 103, Phoenix, Arizona. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address. The public hearings will be held at the Main

Auditorium, Flagstaff High School, 400 West Elm Street, Flagstaff, Arizona and Kanab High School Auditorium, 59 East Red Shadow Lane, Kanab, Utah.

FOR FURTHER INFORMATION CONTACT: Robert Mesta, U.S. Fish and Wildlife Service, Ecological Services, Ventura Field Office, 2493 Portola Road, Suite B, Ventura, California, 93003 (Telephone: 805/644-1766; Facsimile: 805/644-3958).

SUPPLEMENTARY INFORMATION:

Background

1. *Legislative.* Section 10(j) of the Endangered Species Act of 1973 (Act) enables the U.S. Fish and Wildlife Service (Service) to designate certain populations of federally listed species that are released into the wild as "experimental." The circumstances under which this designation can be applied are—(1) The population is geographically disjunct from nonexperimental populations of the same species (e.g., the population is reintroduced outside the species' current range but within its historical range); and (2) the Service determines the release will further the conservation of the species. This designation can increase the Service's flexibility to manage a reintroduced population, because under section 10(j) an experimental population is treated as a threatened species regardless of its designation elsewhere in its range and, under section 4(d) of the Act, the Service has greater discretion in developing management programs for threatened species than it has for endangered species.

Section 10(j) of the Act requires that when an experimental population is designated, a determination be made by the Service whether that population is either "essential" or "nonessential" to the continued existence of the species, based on the best available information. Nonessential experimental populations located outside National Wildlife Refuge (NWR) or National Park Service (NPS) lands are treated, for the purposes of section 7 of the Act, as if they are proposed for listing. Thus, only two provisions of section 7 would apply outside NWR and NPS lands—section 7(a)(1), which requires all Federal agencies to use their authorities to conserve listed species, and section 7(a)(4), which requires Federal agencies to informally confer with the Service on actions that are likely to jeopardize the continued existence of a proposed species. Section 7(a)(2) of the Act, which requires Federal agencies to ensure that their activities are not likely to jeopardize the continued existence of

a listed species, would not apply except on NWR and NPS lands. Experimental populations determined to be "essential" to the survival of the species would remain subject to the consultation provisions of section 7 of the Act. Activities undertaken on private lands are not affected by section 7 of the Act unless the activities are authorized, funded or carried out by a Federal agency.

Individual animals that comprise a designated experimental population may be removed from an existing source or donor population only after it has been determined that such a removal is not likely to jeopardize the continued existence of the species; the removal must be conducted under a permit issued in accordance with the requirements of 50 CFR 17.22.

2. *Biological.* The California Condor (*Gymnogyps californianus*) was listed as endangered on March 11, 1967, (32 FR 4001) in a final rule published by the Service. The Service designated critical habitat for the California condor on September 24, 1976, (41 FR 41914). Long recognized as a vanishing species (Cooper 1890, Koford 1953, Wilbur 1978), the California condor remains one of the world's rarest and most imperiled vertebrate species.

California condors are among the largest flying birds in the world (U. S. Fish and Wildlife Service 1995a). Adults weigh approximately 10 kilograms (kg) (22 pounds (lbs)) and have a wing span up to 2.9 meters (m) (9 1/2 feet (ft)). Adults are black except for prominent white underwing linings and edges of the upper secondary coverts. The head and neck are mostly naked, and the bare skin is gray, grading into various shades of yellow, red, and orange. Males and females cannot be distinguished by size or plumage characteristics. The heads of juveniles up to 3 years old are grayish-black, and their wing linings are variously mottled or completely dark. During the third year the head develops yellow coloration, and the wing linings become gradually whiter (N.J. Schmitt *in litt.* 1995). By the time individuals are 5 or 6 years of age, they are essentially indistinguishable from adults (Koford 1953, Wilbur 1975, Snyder et al. 1987), but full development of the adult wing patterns may not be completed until 7 or 8 years of age (N.J. Schmitt *in litt.* 1995).

The California condor is a member of the family Cathartidae or New World vultures, a family of seven species, including the closely related Andean condor (*Vultur gryphus*) and the sympatric turkey vulture (*Cathartes aura*). Although the family has

traditionally been placed in the Order Falconiformes, some contemporary taxonomists believe that New World vultures are more closely related to storks (Ligon 1967, Rea 1983, Sibley and Ahlquist 1990).

The fossil record of the genus *Gymnogyps* dates back about 100,000 years to the Middle Pleistocene Epoch (Brodkorb 1964). Fossil records also reveal that the species once ranged over much of the southern United States, south to Nuevo Leon, Mexico and east to Florida (Brodkorb 1964), and two well preserved fossil bones were reported from a site in upstate New York (Steadman and Miller 1987). There is evidence indicating that California condors nested in west Texas, Arizona, and New Mexico during the late Pleistocene. The disappearance of the California condor from much of this range occurred about 10,000–11,000 years ago, coinciding with the late Pleistocene extinction of the North American megafauna (Emslie 1987).

By the time European man arrived in western North America, California condors occurred only in a narrow Pacific coastal strip from British Columbia, Canada, to Baja California Norte, Mexico (Koford 1953, Wilbur 1978). California condors were observed until the mid-1800s in the northern portion of the Pacific Coast region (Columbia River Gorge) and until the early 1930s in the southern extreme, northern Baja California (Koford 1953, Wilbur 1973, Wilbur and Kiff 1980). Prior to 1987, California condors used a wishbone-shaped area encompassing six counties—Los Angeles, Ventura, Santa Barbara, San Luis Obispo, Monterey, and Kern, just north of Los Angeles, California (U.S. Fish and Wildlife Service 1995a).

Courtship and nest site selection occurs from December through the spring. Breeding California condors normally lay a single egg between late January and early April. The egg is incubated by both parents and hatches after approximately 56 days. Both parents share responsibilities for feeding the nestling. Feeding usually occurs daily for the first two months, then gradually diminishes in frequency. At two to three months of age, condor chicks leave the nest cavity but remain in the vicinity of the nest where they are fed by their parents. The chick takes its first flight at about six to seven months of age, but may not become fully independent of its parents until the following year. Parent birds occasionally continue to feed a fledgling even after it has begun to make longer flights to foraging grounds (U.S. Fish and Wildlife Service 1995a).

Because of the long period of parental care, it was formerly assumed that successful California condor pairs normally nested successfully every other year (Koford 1953). However, this pattern seems to vary, possibly depending mostly on the time of year that the nestling fledges. If a nestling fledges relatively early (in late summer or early fall), its parents may nest again in the following year, but late fledging probably inhibits nesting in the following year (Snyder and Snyder 1989).

The only wild California condor (a male) of known age bred successfully in the wild in 1986 at the age of six years. Recent data collected from captive birds, however, demonstrates that reproduction may occur, or at least be attempted, at earlier ages. A four-year old male was the youngest condor observed in courtship display, and the same bird subsequently bred successfully at the age of five years (M. Wallace, Los Angeles Zoo, *in litt.* 1993).

California condors nest in various types of rock formations including crevices, overhung ledges, potholes, and more rarely, in cavities of giant sequoia trees (*Sequoia giganteus*) (Snyder et al. 1986).

California condors are opportunistic scavengers, feeding only on carcasses. Typical foraging behavior includes long-distance reconnaissance flights, lengthy circling flights over a carcass, and hours of waiting at a roost or on the ground near a carcass (U.S. Fish and Wildlife Service 1995a). Condors may feed immediately, or wait passively as other California condors or golden eagles (*Aquila chrysaetos*) feed on the carcass (Wilbur 1978). Most California condor foraging occurs in open terrain. This ensures easy take-off and approach and makes food finding easier. Carcasses under brush are hard to see, and California condors apparently do not locate food by olfactory cues (Stager 1964). Condors maintain wide-ranging foraging patterns throughout the year, an important adaptation for a species that may be subjected to unpredictable food supplies (Meretsky and Snyder 1992).

Prior to the arrival of European man, California condor food items within interior California probably included mule deer (*Odocoileus hemionus*), tule elk (*Cervus nannodes*), pronghorn (*Antilocapra americana*), and smaller mammals. Along the Pacific shore the diet may have included whales, sea lions, and other marine species (Emslie 1987, U.S. Fish and Wildlife Service 1984). Koford (1953) listed observations of California condors feeding on 24 different mammalian species within the

last two centuries. He estimated that 95 percent of the diet consisted of the carcasses of cattle, domestic sheep, ground squirrels (*Spermophilus beecheyi*), mule deer, and horses. Although cattle may be the most available food within the range of the condor, deer appear to be preferred (Koford 1953, Wilbur 1972, Meretsky and Snyder 1992). California condors appear to feed only one to three days per week, but the frequency of adult feeding is variable and may show seasonal differences (U.S. Fish and Wildlife Service 1995a).

Depending upon weather conditions and the hunger of the bird, a California condor may spend most of its time perched at a roost. California condors often use traditional roosting sites near important foraging grounds (U.S. Fish and Wildlife Service 1984). Although California condors usually remain at roosts until mid-morning, and generally return in mid- to late afternoon, it is not unusual for a bird to stay perched throughout the day. While at a roost, condors devote considerable time to preening and other maintenance activities. Roosts may also serve some social function, as it is common for two or more condors to roost together and to leave a roost together (U.S. Fish and Wildlife Service 1984). Cliffs and tall conifers, including dead snags, are generally used as roost sites in nesting areas. Although most roost sites are near nesting or foraging areas, scattered roost sites are located throughout the range. There may be adaptive as well as traditional reasons for California condors to continue to occupy a number of widely separated roosts, such as reducing food competition between breeding and non-breeding birds (U.S. Fish and Wildlife Service 1984).

Condor censusing efforts through the years have varied in intensity and accuracy. This has led to conflicting estimates of historical abundance, but all have indicated an ever-declining California condor population. Koford (1953) estimated a population of about 60 individuals in the late 1930s through the mid-1940s, apparently based on flock size. A field study by Eben and Ian McMillan in the early 1960s suggested a population of about 40 individuals, again based in part on the validity of Koford's estimates of flock size (Miller et al. 1965). An annual October California condor survey was begun in 1965 (Mallette and Borneman 1966) and continued for 16 years. Its results supported an estimate of 50 to 60 California condors in the late 1960s (Sibley 1969, Mallette 1970). Wilbur (1980) continued the survey efforts into the 1970s and concurred with the

interpretations of the earlier October surveys. He further estimated that by 1978 the population had dropped to 25 to 30 individuals.

In 1981, the Service, in cooperation with California Polytechnic State University at San Luis Obispo, began census efforts based on individual identifications of birds through flight photography (Snyder and Johnson 1985). Minimum summer counts from these photo-censusing efforts showed a steady decline from an estimated minimum of 21 wild condors in 1982, 19 individuals in 1983, 15 individuals in 1984, and 9 individuals in 1985. Although the overall condor population increased slightly after 1982 as a result of double clutching, the wild population continued to decline. By the end of 1986, all but two California condors were captured for safe keeping and genetic security (U.S. Fish and Wildlife Service 1995a).

On April 19, 1987, the last wild condor was captured and taken to the San Diego Wild Animal Park (SDWAP). Beginning with the first successful captive breeding of California condors in 1988, the total population has increased annually and now stands at 103 individuals, including 90 in the captive flock and 13 in the wild (U.S. Fish and Wildlife Service 1995a).

Causes of the California condor population decline have probably been numerous and variable through time (U.S. Fish and Wildlife Service 1984). However, despite decades of research, it is not known with certainty which mortality factors have been dominant in the overall decline of the species. Relatively few dead condors have been found, and definitive conclusions on the causes of death were made in only a small portion of these cases (Miller et al. 1965, Wilbur 1978, Snyder and Snyder 1989). Poisoning, shooting, egg and specimen collecting, collisions with man-made structures, and loss of habitat have contributed to the decline of the species (U.S. Fish and Wildlife Service 1984).

3. Recovery Efforts. The primary recovery objective as stated in the California Condor Recovery Plan (Plan) (U.S. Fish and Wildlife Service 1995a), is to reclassify the condor to threatened status. The minimum criterion for reclassification to threatened is the maintenance of at least two non-captive populations and one captive population. These populations must (1) each number at least 150 individuals, (2) each contain at least 15 breeding pairs and (3) be reproductively self-sustaining and have a positive rate of population growth. The non-captive populations also must (4) be spatially disjunct and

non-interacting, and (5) contain individuals descended from each of the 14 founders. When these five conditions are met, the species should be reclassified to threatened status.

The recovery strategy to meet this goal is focused on increasing reproduction in captivity to provide condors for release, and the release of condors to the wild. (U.S. Fish and Wildlife Service 1995a).

a. **Captive Breeding.** The years 1983 and 1984 were critical in formation of the captive California condor flock at the SDWAP and Los Angeles Zoo (LAZ). In 1983, two chicks and four eggs were brought in from the wild. The chicks went to the LAZ, and the eggs were hatched successfully at the San Diego Zoo (SDZ). Three of the chicks were taken to the SDWAP and one to the LAZ to be reared. In 1984, one chick and eight eggs were taken from the wild. The chick went to the LAZ and six of the eight eggs were successfully hatched at SDZ. Five of the chicks went to the LAZ and one went to the SDWAP to be reared. In 1985, two eggs were taken from the wild and hatched successfully, one at the SDZ and the other at the SDWAP. Both of these chicks were taken to the LAZ to be reared. In 1986, the last egg was brought in from the wild and hatched at the SDWAP, where it was kept for rearing. By 1986, only one pair of condors existed in the wild and the last free-flying condor was captured on April 19, 1987, bringing the captive population to 27. The first successful breeding in captivity occurred in 1988, when a chick was produced at the SDWAP by a pair of wild-caught condors. Four more chicks were produced in 1989. The number of chicks produced by captive condors continues to increase annually and the captive population has grown from the original 27 in 1987 to 90 in 1995, with 13 additional captive-reared condors that are now in the wild. In 1993, the captive breeding program was expanded to include a facility at The Peregrine Fund—s World Center for Birds of Prey (WCBP) in Boise, Idaho (U.S. Fish and Wildlife Service 1995a).

b. **Releases.** In October 1986, the California Condor Recovery Team (Team) recommended that criteria be satisfied before a release of captive-bred California condors could take place. These included having three actively breeding pairs of condors, three chicks behaviorally suitable for release, and retaining at least five offspring from each breeding pair contributing to the release. The Team added a provision to the third criterion to retain a minimum of seven progeny in captivity for founders that were not reproductively

active (U.S. Fish and Wildlife Service 1995a).

The 1991 breeding season produced two condor chicks that met the Team's criteria for release, a male from the SDWAP and a female from the LAZ. However, attempting to apply the Team's third criterion to the 1991 chicks also revealed that it would not be practical in the future, because several founders had died without producing five progeny. The Team, therefore, recommended choosing genetically appropriate chicks for future releases based on pedigree analyses developed for genetic management of captive populations (U.S. Fish and Wildlife Service 1995a).

Prior to capture of the last wild California condor in 1987, the Team recognized that anticipated future releases of captive-reared condors would pose the problem of reintroducing individuals of an altricial bird into habitat devoid of their parents and other members of their own species. Thus, the Team recommended initiation of an experimental release of Andean condors. Research objectives for the experimental release were to refine condor release and recapture techniques; test the criteria being used to select condor release sites; develop written protocols for releases, monitoring, and recapture of condors; field test rearing protocols being used, or proposed for use to produce condors suitable for release; evaluate radiotelemetry packages; supplemental feeding strategies; train a team of biologists for releasing condors; and identify potential problems peculiar to the California environment. The Andean condor experiment began in August 1988 and concluded in December 1991. During that period three release sites were tested and a total of 13 female Andean condors were released. Only one mortality occurred in the field when an Andean condor collided with a power line (U.S. Fish and Wildlife Service 1995a).

In 1991, two California condor chicks were released into Sespe Condor Sanctuary, Los Padres National Forest, Ventura County on January 14, 1992. The male died from ingesting ethylene glycol in October of the same year. The next release of California condors occurred on December 1, 1992, when six more captive-produced California condors chicks were released at the same Sespe Condor Sanctuary site. Socialization with the remaining female from the first release proceeded well, and the "flock" appeared to adjust well to the wild conditions. However, there was continuing concern over the tendency of the birds to frequent zones

of heavy human activity. Indeed, three of these birds eventually died from collisions with power lines between late May and October 1993 (U.S. Fish and Wildlife Service 1995a).

Because of the tendency for the remaining condors to be attracted to the vicinity of human activity and man-made obstacles, especially power lines, another California condor release site was constructed in a more remote area, Lion Canyon, in the Los Padres National Forest near the boundary of the San Rafael Wilderness Area in Santa Barbara County. Five hatch year condors were released at the new site on December 8, 1993. In addition, the four condors that had been residing in the Sespe area were moved to the new site. They were re-released over a period of several weeks in hopes that this approach would reduce the probability that they would return to the Sespe area. Nevertheless, three of these condors eventually moved back to the Sespe area in March 1994, where they resumed the high risk practice of perching on power poles. Because of general concern about the tameness of these birds and the possibility that their undesirable behavior would be mimicked by younger California condors, these condors were retrapped on March 29, 1994 and added to the captive breeding population. On June 24, one of the 1993 California condors died when it collided with a power line. A second condor that was in the company of this condor at the time of its death, was trapped and returned to the LAZ. The three remaining wild condors continued to frequent areas of human activity and were trapped and returned to the zoo the same week the first 1995 release took place (U.S. Fish and Wildlife Service 1995a).

As a result of the deaths due to collisions with power lines and the attraction of newly released young condors to humans and their activities, the 14 young California condors scheduled for release in 1995 were subjected to aversion training in the zoo environment. An electrified mock power pole and natural snag perches were constructed in a large flight pen holding the release candidates. When the young condors landed on the electrified pole they were given a negative experience in the form of a mild shock. When they landed on the natural snag perches they received no shock. After only a few attempts at landing on the electrified power pole and receiving a mild shock, they all avoided the power pole and used the natural perches exclusively (M. Wallace, The Los Angeles Zoo, *in litt.* 1995).

This group of California condors was also subjected to a series of human aversion exercises. Aversion maneuvers were staged in which a person would appear in view of a group of condors at a distance of approximately 100 meters (300 yds). Once it was determined that the condors spotted the person, they would be ambushed and captured by a hidden group of biologists. These condors were then placed in sky kennels, and later released after nightfall (M. Wallace, The Los Angeles Zoo, *in litt.* 1995). The goals of this exercise were to condition the condors to associate this negative experience with humans and increase the distance in which they would flush in future encounters with humans. Six of these young condors were released to the wild on February 8, 1995, at the Lion Canyon release site. To date none of these condors have attempted to land on a power pole and, although they have roosted near campgrounds, they have not approached humans. The one exception was a young condor of this group that was lured into a campground by campers that placed food and water out for it. This condor was subsequently trapped and brought into the zoo. The remaining five continue to avoid both power poles and human activities. On August 29 the remaining eight California condors of this group were released at the Lion Canyon Site. There are now 13 condors flying free in southern California.

4. Proposed Reintroduction Sites. To satisfy the objectives of the Plan, at least one subpopulation of non-captive California condors must be established in an area disjunct from the subpopulation already being reestablished in the recent historical range in California. Following a widely publicized solicitation for suggestions for suitable condor release sites outside of California, the Team recommended in December 1991 that California condor releases be conducted in northern Arizona. Because this area once supported California condors, still provides a high level of remoteness, ridges and cliffs for soaring, and caves for nesting, the probability of a successful reintroduction is very good. The Service endorsed this recommendation on April 2, 1992. In collaboration with the Federal initiative to designate a release site in Arizona, the Arizona Game and Fish Department began evaluating a possible California condor reintroduction in 1989. The Arizona Game and Fish Department determined the reestablishment as appropriate and feasible in steps 1 and 2 of the Department's "Procedures for

Nongame Wildlife and Endangered Species Re-establishment Projects," a 12-step process specifying the protocol for a nongame reintroduction to take place (U.S. Fish and Wildlife Service 1995b).

a. Site Selection Process. Potential release sites in northern Arizona were evaluated through aerial reconnaissance, site visits, and discussions with agency personnel familiar with the sites being evaluated. This evaluation process resulted in selection of four potential release sites. As required by the National Environmental Policy Act of 1969 (NEPA), the Service, in cooperation with the Arizona Game and Fish Department and the Bureau of Land Management (BLM), produced an Environmental Assessment titled—"Release of California Condors at the

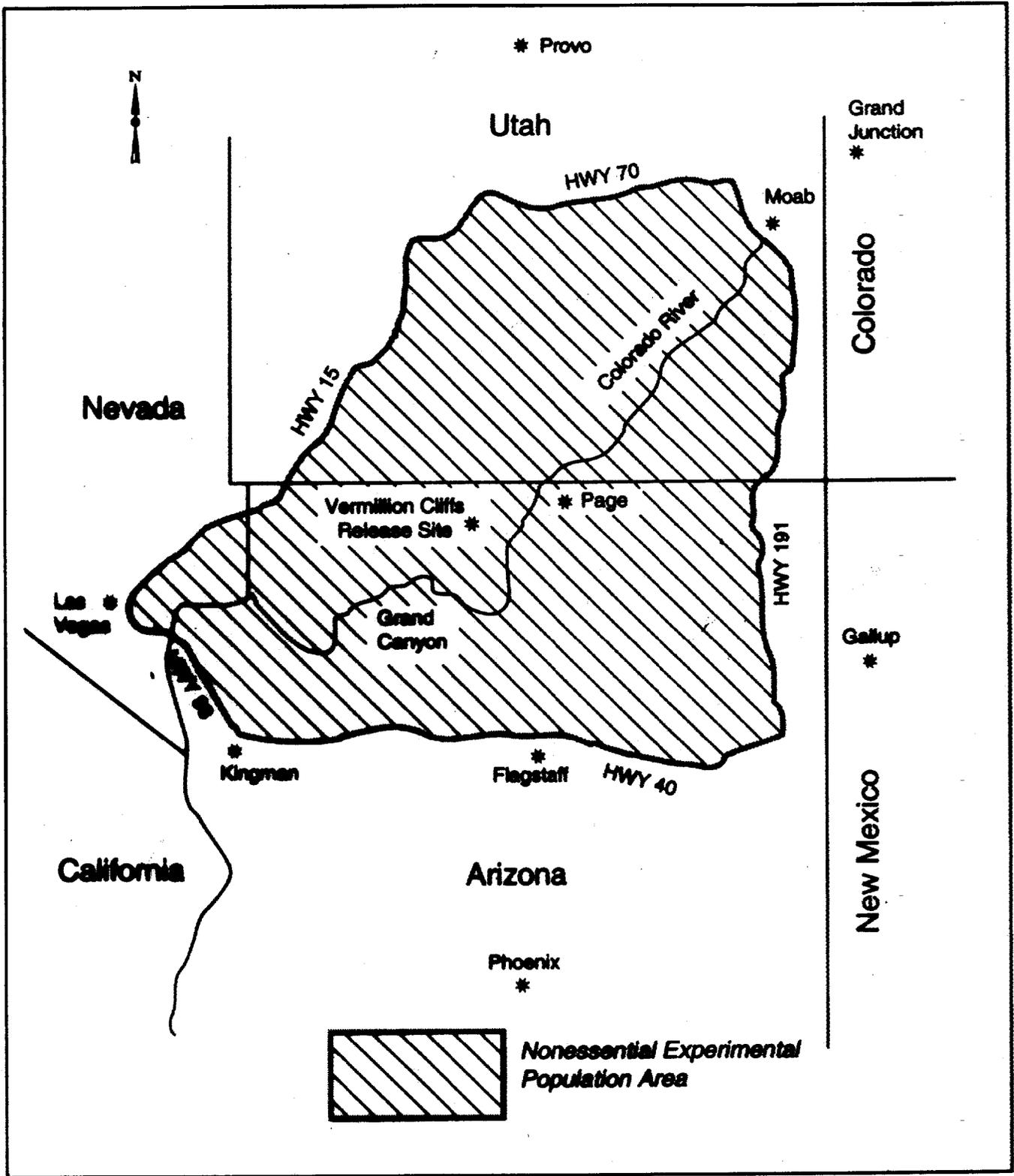
Vermilion Cliffs, 1995," in which the potential release sites were thoroughly examined and objectively evaluated. The NEPA process resulted in selection of a preferred release site at the Vermilion Cliffs located on BLM lands (U.S. Fish and Wildlife Service 1995b).

The suitability of the Vermilion Cliffs as a California condor release site was further evaluated using the Service's "The Condor Release Site Evaluation System". This system uses 25 working criteria divided into three priority classes—priority 1 includes features critical to releasing and establishing condors in the wild, priority 2 includes features that are necessary but not critical, and priority 3 includes features that would add or detract from suitability but are not critical. The working criteria are grouped into working factors that include: site

suitability, logistics, man-made threats/hazards, and suitability of adjacent lands (for population expansion). Each working criterion is assigned a quantitative value and weighted according to assigned priority criteria. The sum from the three priority classes gives the total value for a site. This rating system verified the Vermilion Cliffs (the preferred alternative) as a suitable release site (U.S. Fish and Wildlife Service 1995b).

b. Vermilion Cliffs Release Site. The Vermilion Cliffs reintroduction site is on the southwestern corner of the Paria Plateau approximately 100 meters from the edge of the Vermilion Cliffs, Coconino County, Arizona, as shown on the following map:

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The Paria Plateau is characterized by relatively flat, undulating topography dominated by pinyon-juniper/blue grama (*Pinus edulis-Juniperus osteosperma/Bouteloua gracilis*) communities and mixed shrub communities dominated by sagebrush (*Artemisia* spp.) on sandy upland soils. To the south and east of the Plateau lies the steep precipice of the Vermilion Cliffs, rising over 1,000 feet from the floor of House Rock Valley. Uplifting and differential erosion has created complex geologic structures and a diverse variety of habitats in a small geographic area. The cliffs are sharply dissected by canyons and arroyos and the lower slopes are littered with enormous boulders. Numerous springs emerge from the sides of the cliffs (U.S. Bureau of Land Management and Arizona Game and Fish Department 1983).

5. *Reintroduction Protocol.* In general, the reintroduction protocol will involve an annual release of captive-reared California condors until recovery goals, as outlined in the Plan, are achieved (U.S. Fish and Wildlife Service 1995b). These reintroduction protocols were developed and tested in the current southern California condor release project.

a. *Condor Release.* The reintroduction is designed to release a cohort of captive-reared California condors once each year, beginning in early 1996 (target date). Three captive breeding facilities (LAZ, SDWAP, and WCBP), are producing condors for release to the wild. The size of each release cohort will depend on the number of hatch-year condors produced during the late winter to early spring of that year, but releases will likely involve up to 10 hatch-year condors. These condors will be hatched in captivity and raised by a condor look-alike hand puppet, or by their parents, until they are approximately four months of age. They will then be placed together in a single large pen so they will form social bonds. At approximately 6 months of age they will be moved to a large flight pen and undergo aversion training to humans and power poles for one to two months. After the training has been completed the young condors will be transported by helicopter to the release site at Vermilion Cliffs (U.S. Fish and Wildlife Service 1995b).

At the release site they will be placed in a temporary release pen and will remain there for an acclimation period, of approximately one to two weeks. This structure will be approximately 16 ft by 8 ft and 6 ft high. Netting will cover the front of the pen, allowing the young condors to view and become

accustomed to the surrounding area. The release pen will be pre-fabricated, delivered to the release site by helicopter, and removed from the site after the young condors have fledged (U.S. Fish and Wildlife Service 1995b).

Meanwhile, biologists will remain near the release pen 24 hours a day observing the young condor's behavior and guarding against predators or other disturbance. After the initial adjustment period and when all the young condors can fly, the release will take place. Any release candidate showing signs of physical or behavioral problems will not be released. Release is accomplished by removing the net at the front of the pen allowing the birds to exit. The young condors will likely remain in the immediate area of the pen for some time before beginning exploratory forays along the cliffs. A small area of approximately 10 acres will be temporarily closed to recreational activity to protect the newly released condors and will remain closed until they have dispersed from the release area (U.S. Fish and Wildlife Service 1995b).

b. *Supplemental Feeding.* Condors are dependent on carrion and must be fed until they learn to locate carcasses independently. Newly released young condors will be dependent on carrion provided by biologists, making it necessary to maintain a supplemental feeding program. However, older condors (sub-adults and adults), should be locating carcasses on their own and hopefully would not be dependent on the supplemental feeding program for their survival. Supplemental feeding should reduce the likelihood of deaths of young condors from accidental poisoning insofar as it will help prevent them from feeding on contaminated carcasses. The diet provided to the condors will consist primarily of livestock carcasses and road killed animals. Field biologists will deliver carcasses to the condors every four to five days by carrying carcasses to the edge of the cliffs at night, to avoid detection by the condors. A network of feeding stations on prominent points with high visibility will be identified in the general area of the release. Carcasses will be placed on the ground or, if predators become a problem, elevated off the ground by placing them atop natural rock outcrops less accessible to ground predators (U.S. Fish and Wildlife Service 1995b).

c. *Monitoring.* All California condors released to the wild will be equipped with two radio transmitters, one on each patagium, or one patagial placement and one mounted on the tail. In addition, they will wear bold colored patagial

markers on each wing with code numbers to facilitate visual identification. The movements and behavior of each condor will be monitored for at least the first two to three years of its life. Ground triangulation will be the primary means of radio tracking. Aerial tracking will be used to find lost birds or when more accurate locations are desired. Telemetry flights will be coordinated with the appropriate land management agencies (U.S. Fish and Wildlife Service 1995b).

Status of Reintroduced Population

In accordance with section 10(j) of the Act, California condors reintroduced into northern Arizona are proposed to be designated as a nonessential experimental population. The experimental designation means the reintroduced California condors will be treated as a threatened population instead of an endangered population. Under section 4(d) of the Act, this designation enables the Service to develop special regulations for management of the population that are less restrictive than the mandatory prohibitions covering endangered species. Therefore, the experimental designation allows the management flexibility needed to ensure that this reintroduction is compatible with current or planned human activities in the reintroduction area and to permit management of the population for recovery purposes.

Experimental populations can be classified as either "essential" or "nonessential". An essential experimental population is a population whose loss would be likely to appreciably reduce the likelihood of the survival of the species in the wild [50 CFR 17.80 (Subpart H-Experimental Populations)]. All other experimental populations are treated as nonessential, if they are not considered essential to the continued existence of the species. "Nonessential" experimental populations are treated for purposes of section 7 of the Act as though they were only proposed for listing (except on National Wildlife Refuge and National Park System lands where they will be treated as a species listed as "threatened" under the authority of the Act). The proposed California condor experimental population merits classification as nonessential because the population will not be essential to the continued existence of the species.

Currently, the principal California condor population (90 individuals) exists in the safe environment of three captive breeding facilities located at the SDWAP, LAZ, and WCBP. The captive

breeding facilities are not included in exhibits and are under 24 hour surveillance by condor keepers or video cameras. Only essential program personnel are granted access to the captive population. The captive population is given excellent care and to date there have been no deaths of adults or sub-adults. In addition, the geographic separation of the three breeding facilities protects the captive population from the threat of extinction due to a single catastrophic event.

The reproductive rate of the captive population dramatically exceeds the mortality rate of the wild population. All condors lost in the reintroduction efforts can be replaced by current chick production, while the captive population continues to increase. The extant population will not be adversely effected by the proposed reintroduction since it is hundreds of miles away (see below).

By mid-1987, every surviving individual of the species was held in captivity following agreement that the decline of the wild population to eight surviving adults had demonstrated that the wild population was destined for extinction (Geyer et al. 1993). Genetic management, which includes control of all matings, has preserved the genetic viability of the extant captive population. No California condor hatched in captivity is considered for release to the wild unless its founder line is well-represented in the captive population. All release candidates are genetically redundant and their loss will not jeopardize the diversity of the existing condor gene pool.

The proposed reintroduction project will further the recovery of the species by—establishing a second wild population, ensuring the existence of a wild population if a catastrophic event eliminates the southern California population, enhancing the opportunity to manage the genetic diversity of the wild population, and avoiding the potential risks inherent in overcrowding the captive population.

Location of Reintroduced Population

Under section 10(j)(1) of the Act, an experimental population must be separate geographically from nonexperimental populations of the same species. The last recorded sighting of a California condor in the area of the proposed experimental release occurred in 1924, when Edouard Jacot observed a condor feeding on a carcass with golden eagles near the town of Williams, Arizona (Rea 1983). The last known free-flying California condor was captured April 19, 1987, in southern California and placed in the captive

breeding program. To date there have been no verified sightings of California condors in the wild and condor researchers are confident that there are no undocumented wild condors in the proposed release area or anywhere else in their historic range. Since January 1992, five releases of young California condors have taken place in Ventura and Santa Barbara counties, California. Currently, 13 endangered California condors are located in the wild back country of Santa Barbara County. This non-captive population is located approximately 720 kilometers (km) (450 miles (mi)) west of the proposed release site. The longest flight by these recently reintroduced condors has been approximately 40 km (25 mi), with typical daily flights from 8 km (5 mi) to 16 km (10 mi). According to Meretsky and Snyder (1992) the foraging flights by breeding California condors in the 1980's were from 70 km (44 mi) to 180 km (112 mi). Based on this information, the Service does not believe there will be any immigration/emigration between the existing non-captive and the proposed nonessential experimental populations.

The release site for reintroducing California condors into northern Arizona will be on the Vermilion Cliffs, in the southwestern corner of the Paria Plateau. However, the designated nonessential experimental population area will be significantly larger and include portions of three states—Arizona, Nevada, and Utah. The southern boundary is Interstate Highway 40 in Arizona from its junction with Highway 191 west across Arizona to Kingman; the western boundary starts at Kingman, goes northwest on Highway 93 to Interstate Highway 15, continues northeasterly on Interstate Highway 15 in Nevada, to Interstate Highway 70 in Utah; where the northern boundary starts and goes across Utah to Highway 191; where the eastern boundary starts and goes south through Utah until Highway 191 meets Interstate Highway 40 in Arizona (Fig. 1).

Management

The Vermilion Cliffs reintroduction project will be undertaken by the Service and its primary cooperators the Arizona Game and Fish Department and the BLM. Other cooperators that will provide support on an as-needed basis include—Grand Canyon National Park, Glen Canyon National Recreation Area, Kaibab National Forest, the Hualapai Tribe, the Navajo Nation, LAZ, Zoological Society of San Diego (the Zoological Society includes the SDWAP and SDZ), The Phoenix Zoo and The Peregrine Fund. All cooperators will

participate in this recovery project under the general guidance of a Memorandum of Understanding written to promote recovery of the California condor. Reintroduction procedures were explained above under "Background, 5. Reintroduction Protocols."

The reintroduction site is surrounded by remote Federal or Indian Reservation lands with only a few small private inholdings. The current general management scheme for these lands will not affect the establishment of a nonessential experimental population in this area. Furthermore, the designation of nonessential experimental will encourage local cooperation as a result of the management flexibility allowed under this designation. The Service considers the nonessential experimental population designation and associated reintroduction plan necessary to receive cooperation of the affected landowners, agencies, and recreational interests in the area.

A designation of nonessential experimental prohibits the application of section 7(a)(2) of the Act except on NWR and NPS lands. This will ensure that current land uses and activities (such as, but not limited to, forest management, agriculture, mining, livestock grazing, sport hunting and fishing, and non-consumptive outdoor recreational activities) will not be restricted.

The progress of the reintroduction project will receive an informal review on an annual basis by the primary cooperators and a formal evaluation by all cooperators within the first five years after the first release to evaluate the reintroduction project and determine future management needs. Once recovery goals are met for downlisting the species, a rule will be proposed to address the downlisting. The 5-year evaluation will not include a reevaluation of the "nonessential experimental" designation for this population. The Service does not foresee any likely situation which would call for altering the nonessential experimental status of this population.

Public Comments Solicited

The Service intends that any action resulting from this proposed rulemaking to determine the northern Arizona California condor population as a nonessential experimental population be as effective as possible. The Service therefore solicits comments or recommendations concerning any aspect of this proposed rule (see ADDRESSES section) from Federal, State, public, and local government agencies, the scientific community, industry, or any other interested party. Comments

should be as specific as possible. Final promulgation of a rule to implement this proposed action will take into consideration the comments and any additional information received by the Service. Such communications may lead to a final rule that differs from this proposal.

Section 4(b)(5)(e) of the Act requires that a public hearing be held, if requested, within 45 days of a proposed rule. The Service has scheduled two public hearings on this proposal due to the anticipated number of requests for such hearings. The first public hearing will be held at the Main Auditorium, Flagstaff High School, 400 West Elm Street, Flagstaff, Arizona, on Tuesday, January 23, 1996, from 6:00 to 8:00 pm and the second at the Kanab High School Auditorium, 59 East Red Shadow Lane, Kanab, Utah, on Thursday, January 25, 1996, from 6:00 to 8:00 pm. Anyone expecting to make an oral presentation at these hearings is encouraged to provide a written copy of their statement to the hearing officer prior to the start of the hearing. In the event there is a large attendance, the time allotted for oral statements may have to be limited. Oral and written statements receive equal consideration. There are no limits to the length of written comments presented at these hearings or mailed to the Service.

National Environmental Policy Act

A final environmental assessment as defined under authority of the NEPA, has been prepared and is available to the public at the Service office identified in the **ADDRESSES** section. This assessment formed the basis for the decision that the proposed California condor reintroduction is not a major Federal action which would significantly affect the quality of the human environment within the meaning of section 102(2)(C) of NEPA.

Migratory Bird Treaty Act

The proposed rule will not affect protection provided to the California condor by the Migratory Bird Treaty Act (MBTA). The take of all migratory birds, including the California condor, is governed by the MBTA. The MBTA regulates the taking of migratory birds for educational, scientific, and recreational purposes.

Required Determinations

This proposed rule was subject to Office of Management and Budget review under Executive Order 12866. The rule will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*).

Also, no direct costs, enforcement costs, information collection, or record-keeping requirements are imposed on small entities by this action and the rule contains no record-keeping requirements, as defined in the Paperwork Reduction Act of 1980 (44 U.S.C. 350 *et seq.*). This rule does not require a Federalism assessment under Executive Order 12612 because it would not have any significant federalism effects as described in the order.

References Cited

- Brodkorb, P. 1964. Catalogue of fossil birds. Part 2 (Anseriformes through Galliformes). Bulletin of the Florida State Museum. Biological Sciences 9:195-335.
- Cooper, J.G. 1890. A doomed bird. *Zoe* 1:248-249.
- Emslie, S.D. 1987. Age and diet of fossil California condors in Grand Canyon, Arizona. *Science* 237:768-770.
- Geyer, C.J., O.A. Ryder, L.G. Chemnick, and E.A. Thompson. 1993. Analysis of relatedness in the California condors from DNA fingerprints. *Molecular Biology and Evolution* 10:571-589.
- Koford, C.B. 1953. The California Condor. National Audubon Society Research Report No. 4:1-154.
- Ligon, J.D. 1967. Relationships of the cathartid vultures. Occasional Paper of the Museum of Zoology, University of Michigan 65:1-26.
- Mallette, R.D., and J.C. Borneman. 1966. First cooperative survey of the California condor. *California Fish and Game*. 52:185-203.
- Mallette, R.D., F.C. Sibley, W.D. Carrier, and J.C. Borneman. 1970. California condor surveys. 1969. *California Fish and Game*. 56:199-202.
- Meretsky, V.J., and N.F.R. Snyder. 1992. Range use and movements of California condors. *Condor* 94:313-335.
- Miller, A.H., I. McMillan, and E. McMillan. 1965. The current status and welfare of the California condor. National Audubon Society Research Report. 6:1-61.
- Rea, A.M. 1983. Cathartid affinities: a brief overview. In S.R. Wilbur and J.A. Jackson (eds.). *Vulture biology and management*. Pp. 26-54. University of California Press, Berkeley and Los Angeles.
- Sibley, F. 1969. Effects of the Sespe Creek Project on the California condor. U.S. Fish and Wildlife Service, Laurel, Maryland.
- Sibley, C.G., and J.E. Ahlquist. 1990. Phylogeny and classification of birds. A study in molecular evolution. Yale Univ. Press, New Haven, Connecticut.
- Snyder, N.F.R., and E.V. Johnson. 1985. Photographic censusing of the 1982-1983 California condor population. *Condor*. 89:468-485.
- Snyder, N.F.R., R.R. Ramey, and F.C. Sibley. 1986. Nest-site biology of the California condor. *Condor*. 88:228-241.
- Snyder, N.F.R., E.V. Johnson, and D.A. Clendenen. 1987. Primary molt of California condors. *Condor* 89:468-485.
- Snyder, N.F.R., and H. Snyder. 1989. Biology and conservation of the California condor. In D.M. Powers (ed.). *Current Ornithology*,

Vol. 6. Pp. 175-267. Santa Barbara Museum of Natural History. Santa Barbara, California.

- Stager, K. 1964. The role of olfaction in food location by the turkey vulture (*Cathartes aura*). Los Angeles County Museum Contributions to Science 81:1-63.
- Steadman, D.W., and N.G. Miller. 1987. California condor associated with spruce-pine woodland in the late Pleistocene of New York. *Quaternary Research* 28:415-426.
- U.S. Bureau of Land Management and Arizona Game and Fish Department, 1983. Paria-Kanab Creek habitat management plan. BLM Arizona Strip District, Vermilion Resource Area, St George Utah; Ariz. Game and Fish Department, Region 2, Flagstaff.
- U.S. Fish and Wildlife Service. 1984. California Condor Recovery Plan. Third Edition. Portland, Oregon. 110 pp.
- U.S. Fish and Wildlife Service. 1995a. Draft California Condor Recovery Plan. Fourth Edition. Portland, Oregon. 63 pp.
- U.S. Fish and Wildlife Service. 1995b. Draft Environmental Assessment: Release of California Condors at Vermilion Cliffs (Coconino County, Arizona). Ventura, California. 74 pp.
- Wilbur, S.R. 1972. Food resources of the California condor. U.S. Fish and Wildlife Service, Patuxent Wildlife Research Center, Laurel, Maryland.
- Wilbur, S.R. 1973. The California condor in the Pacific Northwest. *Auk*. 90:196-198.
- Wilbur, S.R. 1975. California condor plumage and molt as field study aids. *California Fish and Game*. 61:144-148.
- Wilbur, S.R. 1978. The California condor. 1966-76: a look at its past and future. U.S. Fish and Wildlife Service. North America Fauna. 72:1-136.
- Wilbur, S.R. 1980. Estimating the size and trend of the California condor population. 1965-1978. *California Fish and Game*. 66:40-48.
- Wilbur, S.R., and L.F. Kiff. 1980. The California condor in Baja California, Mexico. *American Birds*. 34:856-859.

Author

The Primary author of this rule is Robert Mesta, U.S. Fish and Wildlife Service, Ecological Services, Ventura Field Office, 2493 Portola Road, Suite B, Ventura, California 93003.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and record-keeping requirements, and Transportation.

Proposed Regulation Promulgation

Accordingly, the Service hereby proposes to amend part 17, subchapter B of Chapter I, Title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500, unless otherwise noted.

2. In Section 17.11(h), the table entry “Condor, California” under BIRDS is revised to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *
(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
BIRDS							
Condor, California.	<i>Gymnogyps californianus</i> .	U.S.A. (AZ, CA, OR) Mexico (Baja California).	U.S.A. only, except where listed as an experimental population below.	E	1, ___	17.95(b)	NA
Do	do	do	U.S.A. (specific portions of Utah, Nevada, and Arizona).	XN	___	NA	17.84(j)

3. Section 17.84 is amended by adding paragraph (j) to read as follows:

§ 17.84 Special rules—vertebrates.

* * * * *

(j) California condor (*Gymnogyps californianus*).

(1) The California condor (*Gymnogyps californianus*) population identified in paragraph (j)(8) of this section is a nonessential experimental population.

(2) No person may take this species in the wild in the experimental population area except when such take is accidental, unavoidable, and not the purpose of the carrying out of an otherwise lawful activity, or as provided in paragraphs (j)(3), (4), and (9) of this section.

(3) Any person with a valid permit issued by the Service under § 17.32 may take California condors in the wild in the experimental population area.

(4) Any employee or agent of the Service, Bureau of Land Management or appropriate State wildlife agency, who is designated for such purposes, when acting in the course of official duties, may take a California condor from the wild in the experimental population area and vicinity if such action is necessary:

- (i) For scientific purposes;
- (ii) To relocate California condors within the experimental population area to improve condor survival and recovery prospects, or to address conflicts with ongoing activities or private landowners;
- (iii) To relocate California condors that have moved outside the experimental population area, when removal is necessary to protect the condor, or is requested by an affected landowner or land manager;

(iv) To relocate California condors from the experimental population area into other condor reintroduction areas or captivity;

(v) To aid a sick, injured, or orphaned California condor;

(vi) To salvage a dead specimen that may be useful for scientific study; or

(vii) To dispose of a dead specimen.

(5) Any taking pursuant to paragraphs (j)(2), (j)(4)(v), (j)(4)(vi), and (j)(4)(vii), of this section must be reported immediately to the State Supervisor, U.S. Fish and Wildlife Service, Ecological Services, Arizona State Office, Phoenix, 2321 W. Royal Palm Road, Suite 103, Arizona (telephone 602/640–2720) who will determine the disposition of any live or dead specimens.

(6) No person shall possess, sell, deliver, carry, transport, ship, import, or export by any means whatsoever, any California condor or part thereof from the experimental population taken in violation of this paragraph (j) or in violation of applicable State laws or regulations or the Endangered Species Act.

(7) It is unlawful for any person to attempt to commit, solicit another to commit, or cause to be committed, any offense defined in paragraphs (j)(2) and (j)(6) of this section.

(8)(i) The designated experimental population area of the California condor includes portions of three states—Arizona, Nevada, and Utah. The southern boundary is Interstate Highway 40 in Arizona from its junction with Highway 191 west across Arizona to Kingman; the western boundary starts at Kingman, goes northwest on Highway 93 to Interstate Highway 15, continues northeasterly on Interstate Highway 15

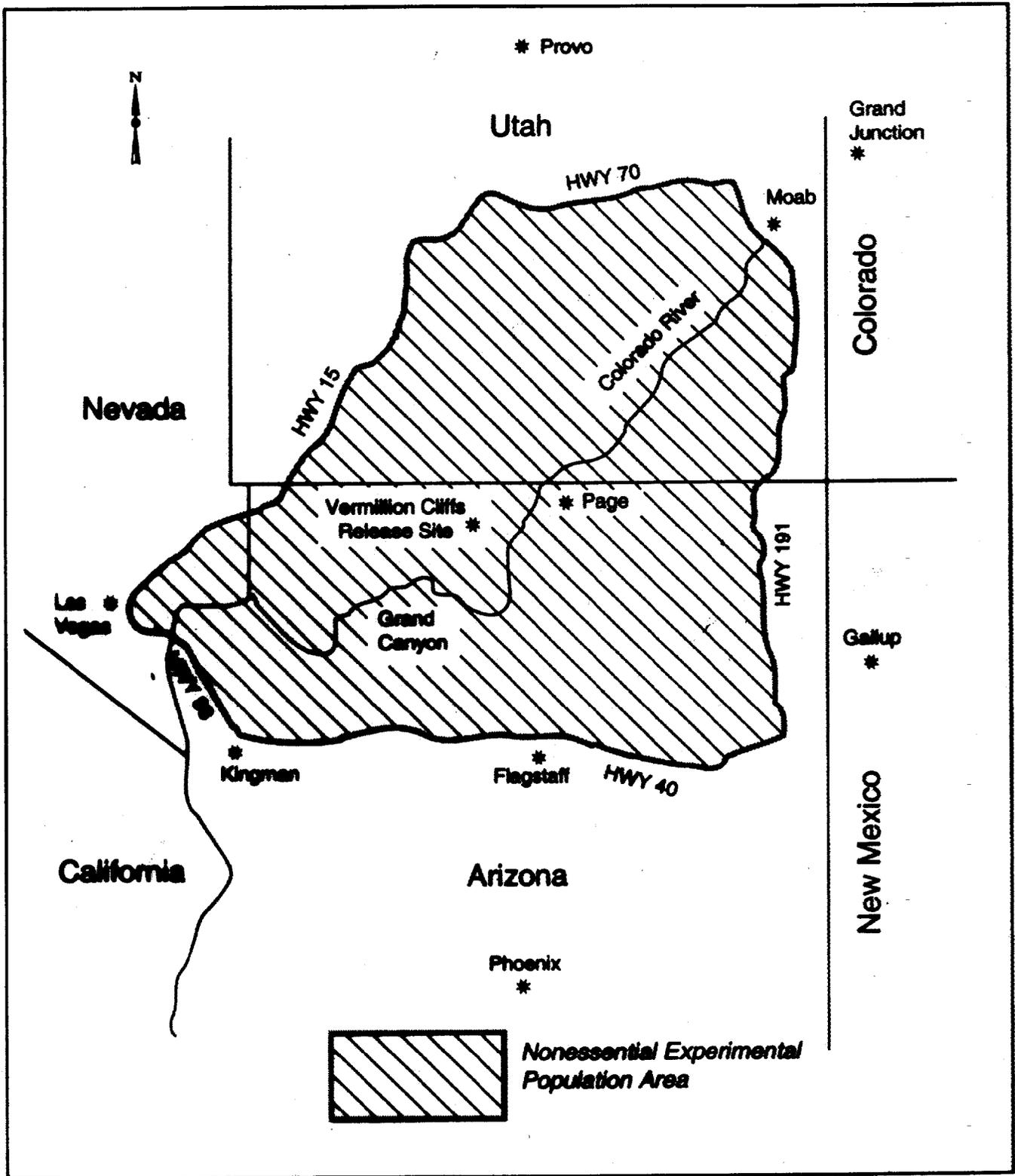
in Nevada, to Interstate Highway 70 in Utah; where the northern boundary starts and goes across Utah to Highway 191; where the eastern boundary starts and goes south through Utah until Highway 191 meets Interstate Highway 40 in Arizona (See map at end of this paragraph (j)). All California condors found in the wild within these boundaries will comprise the experimental population.

(ii) All California condors released into the experimental population area will be marked and visually identifiable. All offspring will also be marked before fledging. Any condors found outside of the experimental population area will be identifiable by colored and coded patagial wing markers. In the event that a condor moves outside the experimental population area, three options will be considered—leave the condor undisturbed and monitor it closely, capture the condor and return it to the reintroduction area, or place it in a captive breeding facility. The fate of condors that move outside the experimental population area will be decided on a case by case basis.

(9) The experimental population will be monitored continually for the life of the reintroduction project. All California condors will be given physical examinations before being released. If there is any evidence that the condor is in poor health or diseased, it will not be released to the wild. Any condor that displays signs of illness, is injured, or otherwise needs special care may be captured by authorized personnel of the Service, Bureau of Land Management or appropriate State wildlife agency or their agents, and given the appropriate care. These condors will be re-released

into the reintroduction area as soon as possible, unless physical or behavioral problems make it necessary to keep them in captivity for an extended period of time, or permanently.

BILLING CODE 4310-55-P



Dated: December 20, 1995.

George T. Frampton, Jr.,

*Assistant Secretary for Fish and Wildlife and
Parks.*

[FR Doc. 95-31450 Filed 12-29-95; 8:45 am]

BILLING CODE 4310-55-P