

Appendix F

Species-Specific Mitigation Measures

Appendix F

Species-Specific Mitigation Measures

This appendix contains mitigation measures specific to special-status plants and special-status wildlife along the proposed route. All measures are in addition to project-wide construction and resource protection techniques found in Section 2.

Special Status Plant Species

Peirson's Milk-vetch (*Astragalus magdalенаe*)

1. Pre-construction surveys will be conducted within 1 to 2 weeks prior to surface disturbing activities to detect any possible occurrence of Peirson's milk-vetch within/near the road ROW traversing the Algodones Dunes (Link 4, mileposts 63 to 74).
2. A trained biological monitor will be present on-site during all cable installation through the dunes system. The monitor will check the construction corridor for any Peirson's milk-vetch that was possibly overlooked during the pre-construction sweeps and directed surveys. Impacts to observed or marked/flagged Peirson's milk-vetch will be avoided by maintaining at least 25 foot buffer around the individual(s) either by realigning the fiber optic line or directionally boring underneath the plant(s) utilizing a 150 foot setback and a 10 foot boring depth.

Special Status Wildlife Species

Quino Checkerspot Butterfly (*Euphydryas editha quino*)

3. A United States Fish and Wildlife Service (USFWS) approved, federally-permitted Quino biologist will evaluate the construction alignment and will identify areas of potential Quino habitat. Areas along the alignment that contain high quality habitat (large patches of *Plantago sp.*) will be avoided by directional boring.

Couch's Spadefoot Toad (*Scaphiopus couchii*)

4. Couch's Spadefoot Toad habitat is limited to the north side of Highway 78, from Glamis to Milpitas Wash. In this area, restricting all construction activity to the south side of Highway 78 will mitigate impacts to this species.

Arroyo Toad (*Bufo microscaphus californicus*)

The following avoidance and minimization measures will be employed when construction takes place within arroyo toad habitat. For the purposes of this document, arroyo toad habitat is defined as areas within one kilometer (0.6 miles) of Miller Creek, La Posta Creek, Kitchen Creek, Cottonwood Creek, Pine Valley Creek, Samagatuma Creek, Sweetwater River, Viejas Creek, San Mateo Creek, Santa Margarita River, San Juan Creek, Trabuco Creek, San Onofre Creek. These conservation measures are derived from the Recovery Plan for the Arroyo Southwestern Toad (USFWS 1999):

5. Daily pre-construction sweeps of the construction area will be conducted.
6. A "drift fence" of silt fence material will be installed wherever construction is taking place within suitable arroyo toad habitat. The fence will be in place far enough ahead of the construction to effectively exclude toads from the workspace for a period of 24 hours prior to construction. The fence may be removed progressively behind equipment as the line is buried and the trench re-graded. This fence will exclude foraging arroyo toads from the work area and will be cleared every morning by a biological monitor before construction begins. This process will proceed

every hour if there is any measurable precipitation. Toads found on the inside of the enclosure will be placed outside the enclosure on the stream side. Toads found on the outside of the enclosure will be placed out of harm's way and in such a manner as to facilitate the toads' presumed trajectory.

7. USFWS will approve in writing those monitors who will be permitted to handle arroyo toads. AT&T will submit to BLM, which will forward to USFWS a list of monitors with their credentials regarding their experience in identification and handling of herpetofauna. The applicant is encouraged to provide to USFWS the training schedule and curriculum that is proposed for training said monitors. USFWS will respond with a list of the approved monitors.
8. There will be continuous biological monitoring of all construction within arroyo toad habitat.
9. There will be no construction within one kilometer (0.6 miles) of arroyo toad habitat after dark.
10. During periods of precipitation within one kilometer (0.6 miles) of arroyo toad habitat, vehicle speeds will be 15 miles/hour or below within the work zone.
11. The project construction will avoid stream channels entirely.
12. Construction personnel and the biological monitors will be trained by a qualified herpetologist on the identification and avoidance of the arroyo toad.

Flat-tailed Horned Lizard (*Phrynosoma m'calli*)

13. The conservation measures outlined in the *Flat-tailed Horned Lizard Rangelwide Management Strategy* (Foreman 1997) will be implemented as part of the proposed AT&T cable installation project.

Sonoran Desert Tortoise (Arizona) (*Gopherus agassizii*)

14. A qualified tortoise biologist would be present during all construction activities where one or more pieces of heavy construction equipment are being used.
15. All construction vehicle movement outside of the right-of-way would be restricted to pre-designated access, or public roads.
16. The Op Amp sites and construction activity sites will be clearly marked or flagged at the outer limits prior to the onset of any surface-disturbing activity. All personnel would be informed that their activities must be confined within the marked or flagged areas. All construction and activity sites would be surveyed by qualified tortoise biologist no more than 15 days prior to the initiation of the construction. Surveys would provide 100 percent coverage of the entire construction area. Any desert tortoise burrows located would be conspicuously flagged or marked, and avoided. The survey of desert tortoise will be performed according to protocol set forth in the *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona* published by the Arizona Game and Fish Department, December 1996.
17. Procedures for handling, holding, or relocating tortoises from the right-of-way would follow the most current procedures established by BLM.
18. All construction personnel would participate in a tortoise-education program. The program would be developed by AT&T, in cooperation with BLM, prior to the beginning of construction. The program would include, at a minimum, the following topics: (1) the occurrence of desert tortoises, (2) the sensitivity of the species to human activities, (3) legal protection for desert

tortoises, (4) penalties for violations of federal and state laws, (5) general tortoise activity patterns, (6) reporting requirements, (7) measures to protect tortoises, and (8) personal measures employees can take to promote the conservation of desert tortoises.

Desert Tortoise (California) (*Gopherus agassizii*)

19. A biological monitor will be present during construction in all areas of potential desert tortoise habitat.
20. Should a tortoise wander onto the project site during construction, adjacent activities will be halted until the tortoise has been moved off the project site out of harm's way.
21. If a tortoise is located on the project site and is not moving, construction will be halted until an authorized biologist is able to move it out of harm's way.
22. USFWS will approve and authorize biologists responsible for moving tortoises out of harm's way.
23. The project proponent will submit the names of all proposed, authorized biologist(s) to BLM for review and approval at least 30 days prior to initiation of any desert tortoise clearance surveys. Project activities will not begin until an authorized biologist(s) has been approved.
24. A clearance survey for the desert tortoise will be conducted within 48 hours prior to ground disturbance.
25. When burrows are found, they will be checked for desert tortoises. When tortoises are found, such burrows will be flagged.
26. All unoccupied burrows will also be flagged, but in a different manner than the occupied burrows. Burrows outside of the limits of construction will be flagged so that the biological monitor will be able to more easily locate them during construction.
27. All desert tortoise burrows and pallets will be flagged for avoidance. All desert tortoise burrows or pallets in the construction zone that cannot be avoided will be excavated by a qualified biologist or blocked. All desert tortoise handling and burrow excavation will be in accordance with handling procedures developed by USFWS and conducted by qualified desert tortoise biologists.
28. Desert tortoises that are found aboveground and need to be moved from harm's way will be placed in the shade of a shrub. All desert tortoises removed from burrows will be placed in an unoccupied burrow of approximately the same size as the one from which it was removed.
29. If an existing burrow is unavailable, the authorized biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows to ensure their safety. The authorized biologist will be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely.
30. All persons authorized by USFWS to handle desert tortoise will follow the guidelines established in the *Guidelines for Handling Desert Tortoises During Construction Projects* (Desert Tortoise Council 1994, revised 1999).

31. Op Amp locations will be fenced with chain link. Within desert tortoise habitat, the lower 18 inches of the fence will be “tortoise-proof” (i.e., the mesh will be 0.5 inches or less to prevent tortoise access to the Op Amp facility).
32. All fiber-optic line marker signs within desert tortoise habitat will be fitted with “bird-be-gone” or similar bird repellent devices.
33. Existing routes of travel will be used whenever possible. To the extent possible, previously disturbed areas within the project sites will be used for temporary storage areas, laydown sites, and any other surface-disturbing activities. Any routes of travel that require construction or modification will have a qualified biologist(s) survey the area for tortoises prior to modification or construction of route.
34. Trench segments or other excavations will either be fenced with temporary tortoise-proof fencing, covered at the close of each working day, or provided with tortoise escape ramps. All excavations will be inspected for tortoises prior to filling.
35. Anytime a vehicle is parked, the ground around and under the vehicle will be inspected for desert tortoises before the vehicle is moved. If a desert tortoise is observed, it will be left to move on its own. If this does not occur within 15 minutes, an authorized biologist will remove and relocate the tortoise. Within desert tortoise habitat, any construction pipe, culverts, or similar structures with a diameter of 3-12 inches that are stored on the construction site for one or more nights will be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored on the construction site.
36. All construction related activities in desert tortoise habitat will be conducted from dawn until dusk.
37. A speed limit of 20 miles/hour will be maintained while on the construction site, dirt or unposted access roads, and storage areas.
38. Impacts to desert tortoise habitat will be offset through either an acceptable land acquisition or an assessed financial contribution.

California Coastal Gnatcatcher (*Polioptila californica*)

39. All California coastal gnatcatcher habitat will be avoided by one of the following methods: constructing in the pavement, boring beneath the coastal sage scrub habitat area, or use of a bridge hang over the area.
40. Any construction or installation work performed within 1,000 feet of potential habitat for California coastal gnatcatcher during the period of March 1 to June 1 of any given year will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. Construction or installation work performed within 1,000 feet of potential habitat for California coastal gnatcatcher during the period of March 1 to June 1 will be monitored at least weekly by a qualified biologist. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, U.S. Army Corps of Engineers (Corps) and USFWS.
41. Any work that would subject potential habitat for gnatcatcher in critical areas as directed by USFWS to sound levels above 60 dBA L_{eq} or background, whichever is higher, will be completed between September 1 and June 1.

Southwest Willow Flycatcher (*Empidonax traillii*) and Least Bell's Vireo (*Vireo bellii pusillus*)

42. All southwest willow flycatcher and Least Bell's vireo habitat in riparian areas will be avoided by one of the following methods: constructing in the pavement; boring beneath the drainage and riparian area; or, use of a bridge hang over the riparian area.
43. Any construction or installation work performed within 1,000 feet of potential habitat for Southwestern willow flycatcher or Least Bell's vireo during the period of March 15 to June 15 of any given year will limit noise, dust, nighttime lighting, and human presence to the greatest extent feasible. Because of the expected limited nature of the work performed during this period, it is predicted that no "take" of listed species will occur as a result. Construction or installation work performed within 1,000 feet of potential habitat for Southwestern willow flycatcher or Least Bell's vireo during the period of March 15 to June 15 will be monitored at least weekly by a qualified biologist. Monthly monitoring letter reports of construction activities and their effects on biological resources will be provided to the BLM, the Camp Pendleton Environmental Security staff, Corps, and USFWS. In addition, from May 1 through June 15, dawn surveys for the flycatcher will be conducted three times weekly while construction or installation work is occurring within 1,000 feet of potential habitat for Southwestern willow flycatcher.
44. Any work that would subject potential habitat for southwest willow flycatcher or Least Bell's vireo in critical areas as directed by USFWS to sound levels above 60 dBA L_{eq} or background, whichever is higher, will be completed between September 16 and June 15.

Mountain Plover (*Charadrius montanus*)

45. During construction, incidental sightings/observations of mountain plovers will be recorded concurrently with those for burrowing owls in areas that maintain potential habitat (i.e., agricultural lands) for the species. Any information gathered will be submitted to USFWS as part of the final biological report.
46. Any construction planned for Mountain plover breeding season in areas identified as potential habitat from April 1 to June 30 will require protocol preconstruction surveys. If nesting birds are present, no construction will occur in that area until the young are fledged.

Burrowing Owl (*Speotyto cunicularia*)

47. Although passive relocation of burrowing owls may be employed to move birds from harm's way (under conditions outlined in the above-mentioned report), the avoidance of occupied burrows through the maintenance of a defined buffer (i.e., 160 feet during the nonbreeding season of September 1st through January 31st or 250 feet during the breeding season of February 1st through August 31st) is preferred. Avoidance will be accomplished through minor realignment of the cable line or directionally boring beneath the burrow(s).
48. All occupied/unoccupied burrows situated outside the immediate impact zone, but within the surveyed buffer area, will be conspicuously flagged/marked. During construction, a biological monitor will be present on-site to ensure that potential affects to the burrowing owl and the species' associated habitat are avoided/minimized.

Cliff Swallow (*Hirundo pyrrhonota*)

49. If proposed bridge attachments are planned to occur during the swallows' breeding season, the prior year's nests will be removed before March 1 to discourage nesting, and the bridge area will

be hosed at least weekly to remove new mud and prevent swallows from completing their nests until the bridge attachment is complete or until swallows desist nesting attempts.

50. If a swallow successfully completes a nest, attachment to the bridge will stop and will not resume before September 1 unless a qualified biologist determines that the young have fledged.

Le Conte Thrasher (*Toxostoma lecontei*) and Crissal Thrasher (*Toxostoma crissale*)

51. Where vegetation-forming part of potential thrasher habitat would be impacted or removed by construction, the construction corridor will be limited to 25 feet in width.

Cactus Ferruginous Pygmy Owl (*Glaucidium brasilianum*)

52. There is a small possibility that a pygmy-owl would attempt to nest in the mapped critical habitat areas adjacent to the project corridor. Since nesting activities take place in late winter and early spring in Arizona, no construction will be permitted in those areas from February 1 through July 15. This will prevent even the remote possibility of indirect impact through noise or visual disturbance.
53. The low quality of the habitat in the vicinity of the project corridor through mapped critical habitat will be improved by planting perennial vegetation as directed by USFWS at project completion.
54. Qualified and permitted biologists will conduct surveys according to USFWS revised protocol from March to May of 2001 if construction has not been completed in mapped critical habitat areas prior to February 1. If after the required three visits, no owls are detected, then construction may proceed.

Peninsular Bighorn Sheep (*Ovis canadensis californiana*)

55. A trained biological monitor will be on-site for activities conducted along Interstate 8 within the boundaries of proposed critical habitat for the Peninsular bighorn sheep.
56. The monitor will perform pre-construction surveys of the alignment in areas adjoining potential or known bighorn sheep habitat.
57. Peninsular bighorn sheep sightings will be reported to USFWS within 24 hours.
58. If a bighorn sheep is noted within 300 feet of ongoing cable installation, then all operations will cease until the individual/group has moved 300 feet beyond the construction corridor.

Northern Aplomado Falcon (*Falco femoralis septentrionalis*)

59. There will be no operations in potential aplomado falcon nesting habitat from February 1 through August 30. If protocol surveys indicate the absences of aplomado falcons then operations may resume at the conclusion of the surveys. Protocol surveys could be completed as early as March.

Interior Least Tern (*Sterna antillarum athalassos*)

60. Presonstruction surveys will be performed to determine the presence of birds, if construction is planned in the vicinity of the Alkali Lakes region of Texas, during March 1 through August 15. If birds are present construction will be suspended during that time.

Lesser Prairie Chicken (*Tympanuchus pallidicinctus*)

61. Preconstruction surveys will be performed to determine the presence of birds, if construction is planned between Hobbs, New Mexico and Carlsbad, New Mexico from March 1 through August 15. If birds are present construction will be suspended during that time.

Migratory Birds and Birds of Prey

62. Preconstruction survey will be required in Hudspeth County, Texas to determine the presence of occupied nests if construction is planned between March 1 and August 15. If nests are occupied by migratory birds construction will be suspended until the young are fledged.

Burrowing Owl (*Speotyto cunicularia*)

63. If burrowing owls are determined to inhabit areas along the right-of-way subject to impact the contractor, in cooperation with the landowner, will obtain a permit from the US Fish and Wildlife Service for the trapping. Following construction birds will be released.