



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Nevada Fish and Wildlife Office

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November 20, 2006

File Nos. 1-5-07-SP-012

1-5-07-SP-424

05-0774

Mr. Marshall, Senior Biologist
Southern Nevada Water Authority
1900 East Flamingo Road
Las Vegas, Nevada 89119

Dear Mr. Marshall:

Subject: Species List for the Clark, Lincoln, and White Pine Counties Groundwater Development Project, Nevada

This responds to your letter received October 16, 2006, requesting a species list for the Clark, Lincoln, and White Pine Counties Groundwater Development Project. Enclosed with this letter is a list of endangered, threatened, and candidate species, and designated critical habitat that may be affected by the proposed project. This list fulfills the requirement of the Fish and Wildlife Service (Service) to provide information on listed species pursuant to section 7(c) of the Endangered Species Act of 1973 (Act), as amended, for projects that are authorized, funded, or carried out by a Federal agency. We developed this list based on a preliminary evaluation of project effects to aquatic and terrestrial resources within the hydrographic basins to be developed as well as down-gradient basins. Potentially affected areas are located within three groundwater flow systems (Great Salt Lake Desert, White River, and Meadow Valley Wash), and include sites within four counties in Nevada (White Pine, Lincoln, Nye, and Clark) and five counties in Utah (Tooele, Juab, Millard, Beaver, and Iron).

This species list is an update to the list that we provided to the Southern Nevada Water Authority on May 10, 2005. Substantial changes in project design, specifically the removal of the Tikaboo North lateral pipeline and resizing of the main transmission pipeline to carry additional groundwater from Spring and Lake Valleys, Nevada, necessitate revisions to the original species list. The proposed exportation of additional groundwater from these areas increases our concern for sensitive water-dependent resources in east-central Nevada and western Utah, both within these valleys and in down-gradient hydrographic basins of the Great Salt Lake Desert and Meadow Valley Wash flow systems. On the other hand, removal of the Tikaboo North lateral

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line means that no basins within the Death Valley Regional Flow System (DVRFS) will be developed as part of the proposed project. At this time, we believe that this change alleviates our concern for water-dependent resources within the DVRFS associated with this project, and we have revised the species list to reflect this.

As you are aware, the Service is a Cooperating Agency with the Bureau of Land Management (BLM) in developing the Environmental Impact Statement for this project. The Nevada Fish and Wildlife Office is the lead for the Service in this endeavor. In this capacity, we will be reviewing hydrological and biological data collected by Southern Nevada Water Authority, BLM, and others, as well as groundwater flow models developed for these areas, to help delineate the geographic extent of potential impacts. If the hydrological data and/or models indicate potential effects to water-dependent resources in Nevada and/or Utah not considered herein (e.g., effects to aquatic resources within the DVRFS due to cross-boundary flow between the White River flow system and DVRFS), the Service will revise this species list accordingly. Additionally, species lists are good for only 90 days per Service policy. While it is not necessary for long-term projects to request a new species list every 90 days, we may recommend updating the species list as we move through the consultation process.

The enclosed species list contains one candidate species that may be affected by the proposed action: yellow-billed cuckoo (*Coccyzus americanus*) (Western U.S. DPS). Candidate species receive no legal protection under the Act, but could be proposed for listing in the near future. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. Even if we subsequently list a candidate species, the early notice provided here could result in fewer restrictions on activities by prompting candidate conservation measures to alleviate threats to the species.

The Nevada and Utah Fish and Wildlife Offices no longer provide species of concern lists. Most of the species for which we have concern are also on the sensitive species lists maintained by state Natural Heritage Programs (Heritage). Instead of maintaining our own lists, we have adopted Heritage's sensitive species list and partnered with them to provide distribution data and information on the conservation needs for sensitive species to agencies or project proponents. The mission of Heritage is to continually evaluate conservation priorities for native plants, animals, and their habitats, particularly those most vulnerable to extinction or those in serious decline. Consideration of these sensitive species and exploration of management alternatives early in the planning process can provide long-term conservation benefits and help avoid future conflicts.

For a list of sensitive species by county in Nevada, visit Heritage's website at www.heritage.nv.gov; for Utah, visit the Utah Division of Wildlife Resources/Utah Conservation Data Center at website <http://dwrcdc.nr.utah.gov/ucdc>. For a specific list of sensitive species that may occur in the project area, you can obtain a data request form from the Heritage websites or by contacting the Nevada Natural Heritage Program at 1550 East College Parkway, Suite 137, Carson City, NV 89706, 775-687-4245, and by contacting the Utah Natural Heritage Program, Salt Lake City Office, at 1594 W. North Temple, Salt Lake City, Utah 84116, 801-538-4759.

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Please indicate on the form that your request is being obtained as part of your coordination with the Service under the Act. During your project analysis, if you obtain new information or data for any Nevada or Utah sensitive species, we request that you provide the information to the respective organizations at the above addresses or phone numbers.

Furthermore, certain species of fish and wildlife are classified as protected by the states of Nevada and/or Utah. Before a person can hunt, take, or possess any part of a wildlife species classified as protected, they must first obtain the appropriate license, permit, or written authorization from Nevada Department of Wildlife (visit <http://www.ndow.org> or call 702-486-5127 for southern NV or 775-777-2300 for eastern NV) or the Utah Division of Wildlife Resources (visit <http://www.wildlife.utah.gov> or call 801-538-4700).

We are concerned that the proposed project will have far-reaching effects on ground and surface water resources, including wetlands, wet meadows, riparian areas, springs, seeps, and streams that are fed to some extent by groundwater from the hydrographic basins to be developed. Areas of immediate concern are water-dependent ecosystems in: Spring and Snake Valleys, including Shoshone Ponds in Spring Valley, Nevada, and the Big Springs subwatershed in Snake Valley, Nevada and Utah; Fish Springs in Juab County, Utah; Upper White River and the Flag Springs complex in White River Valley, Nevada; Hiko, Crystal, and Ash Springs and outflow streams including the Pahranaagat River in Pahranaagat Valley, Nevada; Upper Meadow Valley Wash springs and outflow streams in Nevada; and Muddy River Springs and outflow in Nevada. These areas support a variety of listed and sensitive species that may be adversely affected by diminished surface water flows. We recommend that you consider the cumulative effects of diminished surface water flows on the aquatic species of these areas during the environmental documentation process, and consider alternatives that would avoid or minimize, to the maximum extent practicable, any adverse effects to water resources and associated aquatic species inhabiting these areas.

Sensitive, non-listed aquatic species that may be affected by the proposed project include: least chub (*Iotichyhs phlegethontis*), California floater (*Anodonta californiensis*), and Columbia spotted frog (*Rana luteiventris*; West Desert DPS) in western Utah; relict dace (*Relictus solitarius*) in Spring Valley; White River desert sucker (*Catostomus clarki intermedius*), Preston White River springfish (*Crenichthys baileyi albivallis*), and White River speckled dace (*Rhinichthys osculus* ssp.) in White River Valley; Pahranaagat speckled dace (*Rhinichthys osculus velifer*) and Pahranaagat dace (*Rhinichthys osculus* spp.) in Pahranaagat Valley; Meadow Valley Wash desert sucker (*Catostomus clarki* ssp.) and Meadow Valley speckled dace (*Rhinichthys osculus* ssp.) in upper Meadow Valley Wash; and Moapa White River springfish (*Crenichthys baileyi moapae*), Virgin River chub (Muddy River population; *Gila seminuda*), and Moapa speckled dace (*Rhinichthys osculus moapae*) in the Muddy River/Springs area.

Two species that may be affected by the proposed project, Columbia spotted frog and least chub, are currently managed under separate Conservation Agreements/Strategies. Conservation

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Agreements are voluntary cooperative plans among resource agencies and partners that identify threats to a species and implement conservation measures to pro-actively conserve and protect species in decline. Successful implementation of the Conservation Agreements/Strategies for the Columbia spotted frog and least chub is important for improving the status of the species and reducing the need to list the species under the Act. Because these species occur in potentially affected hydrographic basins, if you determine that one or both species or their habitat(s) may be affected by the proposed project, we recommend that you support their conservation by ensuring that your project is consistent with the requirements of the agreements. Copies of these Conservation Agreements are available from the Utah Fish and Wildlife Service Office.

Because wetlands, springs, and streams are known to occur in or near the area where ground-disturbing activities are proposed, we ask that you be aware of the potential impacts these activities may have on sensitive aquatic resources. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (Corps) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the Corps' Regulatory Section at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979 regarding the possible need for a permit.

Furthermore, the springs within or near the project site may be occupied by rare aquatic macroinvertebrates that may be affected by the proposed actions. Recent studies have found approximately 100 species of aquatic macroinvertebrates in springs and springbrooks throughout the western United States, including springsnails, caddisflies, beetles, true bugs, and crustaceans. There is concern for these species because some are narrowly distributed and, in many cases, their habitats have become highly degraded. Many springs in Nevada and Utah have not been surveyed to determine if they are occupied by macroinvertebrates. For those which have been surveyed, gravel substrate, flowing high quality water, and minimal disturbance are believed to be important habitat components to maintain viable populations of these species. We ask that you include measures to protect the springs, springsnails, and other macroinvertebrates that inhabit these areas during project planning and implementation.

We are concerned with the potential for this project to adversely affect sensitive terrestrial species, including banded Gila monster (*Heloderma suspectum cinctum*), pygmy rabbit (*Brachylagus idahoensis*), and sage grouse (*Centrocercus urophasianus*). The banded Gila monster is listed as sensitive under the Heritage Program and is protected under Nevada State law. This species resides primarily in the Mojave desert scrub and salt desert scrub ecosystems in southern Nevada, southeastern California, southwestern Utah, and western Arizona. The Gila monster is one of only two venomous lizard species in the world. Gila monsters are difficult to locate as they spend the majority of the year in underground burrows; however, illegal collection, construction of roads, and loss of habitat continue to threaten this sensitive. Given that the Gila monster may occur within the project area, we encourage you to minimize project impacts to any existing populations and suitable habitat for this species.

On May 20, 2005, the Service published a non-substantial 90-day finding determination on a petition to list the pygmy rabbit as threatened or endangered under the Act. While the pygmy

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rabbit is not currently a federally listed species, we continue to monitor the species' status, and we remain concerned about impacts to pygmy rabbit populations. Draft survey guidelines have been developed for this species and are available upon request from the Nevada Fish and Wildlife Office. We encourage you to survey the proposed project area for pygmy rabbits prior to any ground disturbing activities and to consider the needs of this species as you complete project planning and implementation. The Bureau of Land Management State Director for Nevada has directed all Field Office staff in Nevada to address the pygmy rabbit in all upcoming Land Use Plan revisions.

The sage grouse is listed as sensitive under the Heritage Program. The Western States Sage and Columbian Sharp-tailed Grouse Technical Committee, under direction of the Western Association of Fish and Wildlife Agencies, has developed and published guidelines to manage and protect sage grouse and their habitats in the Wildlife Society Bulletin (Connelly *et al.* 2000). We ask that you consider incorporating these guidelines (<http://ndow.org/wild/sg>) into the proposed project.

We are also concerned that the project may impact several plant species listed as sensitive under the Heritage Program: Las Vegas bearpoppy (*Arctomecon californica*), threecorner milk-vetch (*Astragalus geyeri* var. *triquetrus*), and Las Vegas buckwheat (*Eriogonum corymbosum* var. *nilesii*). While the Las Vegas buckwheat has been recommended for full protection under State law, the other two species are listed as critically endangered by the State of Nevada under Nevada Revised Statutes (NRS) 527.260-300. For these species, no member of its kind may be removed or destroyed at any time by any means except under special permit issued by the State Forester (NRS 527.270). Requests for permits should be directed to the State Forester, Nevada Division of Forestry at 2525 South Carson Street, Carson City, Nevada 89701, (775) 684-2500. It should be noted that many of the plant species on Nevada's critically endangered list are not federally listed by the Service because of the protection afforded to them under the State law. Consideration of these species during project planning and early coordination with the State is important to assist with species conservation efforts and to prevent the need for Federal listing actions in the future.

Also, note that one federally listed plant species, the Ute ladies'-tresses (*Spiranthes diluvialis*), may be affected by the proposed groundwater development project. This species, which is located in moist soils near springs, lakes, or perennial streams, requires permanent sub-irrigation, indicating a close affinity with floodplain areas where the water table is near the surface throughout the growing season and into the late summer or early autumn. Recently, Ute ladies'-tresses has been confirmed as present at Panaca Spring, Nevada. This population is estimated to be between 80 and 100 individuals and is located in emergent wetlands adjacent to the spring. Changes in the water level at the spring would adversely affect the population. In addition, there is a high potential for the species to be present in the Meadow Valley Wash between Panaca and Caliente, and potentially in other areas with appropriate habitat in Lincoln and White Pine

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Counties. We recommend that a habitat assessment and surveys for this species be conducted by an experienced biologist if effects to the wash and its flows are anticipated.

Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 U.S.C. 703 *et. seq.*), we are concerned about potential impacts the proposed project may have on migratory birds in the area. Direct impacts to migratory birds on project lands and indirect impacts to migratory birds on adjacent areas should be considered during project evaluation. For example, we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible, we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

It is also important that the project analysis consider any impacts to the conservation efforts being implemented and the 79 species covered under the Clark County Multiple Species Habitat Conservation Plan (MSHCP), a plan permitted under section 10 of the Act. We also recommend close coordination with agencies and organizations involved in other planning efforts for the area to ensure that the proposed project does not conflict with future conservation measures or actions under development through these efforts. These planning efforts include, but are not necessarily limited to, the Southeastern Lincoln County Habitat Conservation Plan (HCP) and Coyote Springs Investment (CSI) HCP. Cumulative effects to federally listed species from these planning efforts should also be considered in the proposed project analysis, where appropriate.

Finally, we want to bring it to your attention that CSI has agreed to protect in perpetuity approximately 6,219 acres of BLM-leased land east of Pahrangat Wash in Clark County, Nevada, in an area that has been identified by the Southern Nevada Water Authority for well exploration. Coyote Springs Investment has agreed to establish a reserve and put a conservation easement on these lands, with future use limited to passive recreation (*i.e.*, no real property improvements, roads, or other development is to be allowed within the boundaries of the reserve). This reserve is considered mitigation for impacts to Waters of the United States associated with CSI's development of lands in Clark County, and is thus linked to issuance of the Corps' permit for this project. Therefore, these reserve lands should not be considered available to well exploration.

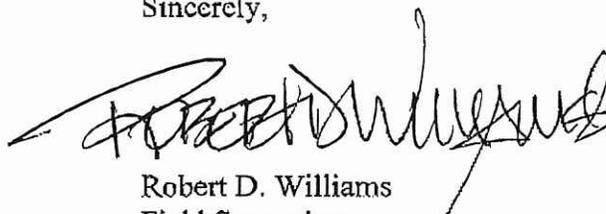
Please reference File Nos. 1-5-07-SP-012 (Nevada Fish and Wildlife Office, Reno), 1-5-07-SP-424 (Southern Nevada Field Office), and 05-0774 (Utah Ecological Services Office) in future correspondence concerning these species lists.

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If you have any questions regarding this correspondence or require additional information, please contact me or Annalaura Averill-Murray at (775) 861-6300.

Sincerely,



Robert D. Williams
Field Supervisor

Enclosure

cc:

Director, Nevada Department of Wildlife, Reno, Nevada
Supervisory Biologist-Habitat, Nevada Department of Wildlife, Las Vegas, Nevada
Regional Supervisor, Nevada Department of Wildlife, Ely Field Office, Ely, Nevada
Director, Utah Division of Wildlife Resources, Salt Lake City, Utah
Project Manager, Clark, Lincoln, and White Pine Counties Groundwater Development Project,
Nevada State Office, Bureau of Land Management, Reno, Nevada
Field Manager, Ely Field Office, Bureau of Land Management, Ely, Nevada
Field Manager, Las Vegas Field Office, Bureau of Land Management, Las Vegas, Nevada
Assistant Field Supervisor, Southern Nevada Field Office, U.S. Fish and Wildlife Service,
Las Vegas, Nevada
Field Supervisor, Utah Ecological Services Office, U.S. Fish and Wildlife Service,
West Valley City, Utah
Project Leader, Fish Springs National Wildlife Refuge, U.S. Fish and Wildlife Service,
Ibapah, Utah
Project Leader, Desert National Wildlife Refuge Complex, U.S. Fish and Wildlife Service,
Las Vegas, Nevada
Project Leader, Ruby Lake National Wildlife Refuge, U.S. Fish and Wildlife Service,
Ruby Valley, Nevada

**LISTED AND CANDIDATE SPECIES AND DESIGNATED CRITICAL HABITAT THAT MAY
BE AFFECTED BY THE CLARK, LINCOLN, AND WHITE PINE COUNTIES
GROUNDWATER DEVELOPMENT PROJECT**

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Endangered Species

Birds

Southwestern willow flycatcher
Yuma clapper rail

Empidonax traillii extimus
Rallus longirostris yumanensis

Fishes

White River springfish
Hiko White River springfish
Pahrump poolfish
Pahranagat roundtail chub
White River spinedace
Moapa dace

Crenichthys baileyi baileyi
Crenichthys baileyi grandis
Empetrichthys latos
Gila robusta jordani
Lepidomeda albivallis
Moapa coriacea

Threatened Species

Bird

Bald eagle

Haliaeetus leucocephalus

Reptile

Desert tortoise (Mojave population)

Gopherus agassizii

Fish

Big Spring spinedace

Lepidomeda mollispinis pratensis

Plant

Ute ladies'-tresses

Spiranthes diluvialis

Critical Habitat

White River springfish
Hiko White River springfish
Desert tortoise (Mojave population)
White River spinedace
Big Spring spinedace

Crenichthys baileyi baileyi
Crenichthys baileyi grandis
Gopherus agassizii
Lepidomeda albivallis
Lepidomeda mollispinis pratensis

Candidate Species

Bird

Yellow-billed cuckoo (Western U.S., DPS)

Coccyzus americanus