

436. As described in Section 2 of this analysis, lands belonging to 15 Indian Tribes are included within the boundaries of the proposed flycatcher CHD as highlighted in Exhibit 7-1. This section provides an analysis of economic impacts associated with flycatcher conservation activities on these Tribal lands. The administrative costs associated with section 7 consultation for activities occurring on Tribal lands are discussed in Section 3 of the report, while impacts related to surveying and monitoring efforts funded by the Tribes, and project modifications associated with Tribal activities are discussed in this section.

Exhibit 7-1		
TRIBAL LANDS OVERLAPPING PROPOSED CHD FOR THE FLYCATCHER		
Recovery Unit	Management Unit	Tribal Lands
Coastal California Recovery Unit	San Diego Management Unit	La Jolla
		Pala
		Rincon
		Santa Ysabel
Lower Colorado Recovery Unit	Middle Colorado Management Unit	Hualapai
	Hoover to Parker Management Unit	Fort Mohave
		Chemehuevi
		Colorado River Indian Tribes
Parker to Southerly International Border Management Unit	Fort Yuma (Quechan)	
Gila Recovery Unit	Verde Management Unit	Camp Verde Yavapai Apache
	Upper Gila Management Unit	San Carlos Apache
Rio Grande Recovery Unit	Upper Rio Grande Management Unit	San Ildefonso
		San Juan
		Santa Clara
	Middle Rio Grande Management Unit	Isleta

437. This section first provides an outline of past and future economic impacts on Tribal lands associated with the flycatcher; it then provides information on the background and socioeconomic status of the potentially affected Tribes. Finally, this section discusses in detail the individual Tribes and projects that are potentially affected. In general, these Tribal

economies are poorer than their respective regional economies. The poverty rates on Tribal lands, for example, range from 12.5 percent to 48.2 percent, which at the high end is four times the National average. In each case, per capita income on the Tribal lands (which ranges from \$5,200 to \$14,848) is less than the respective State average per capita income (which ranges from \$17,261 to \$22,711 in the three States containing Tribal lands). As is evidenced in the remainder of this section, the Tribal lands are primarily poor, rural areas that may be particularly vulnerable to economic impact associated with increased regulatory burden.

7.1 Summary of Impacts on Tribal Activities

7.1.1 Past Impacts

438. Past impacts resulting from flycatcher conservation activities on Tribal lands primarily include administrative costs and costs of surveying and monitoring efforts. To date, project modifications required for the flycatcher have not greatly impacted Tribal activities.

439. Where information was available on past impacts, costs related to flycatcher conservation are estimated. A summary of these past impacts is provided in Exhibit 7-2. Data on impacts to past Tribal activities are included for three Tribal land areas: Hualapai, Colorado River Indian Tribes, and San Carlos Apache. Of these three, past economic impacts as estimated were greatest for the Colorado River Indian Tribes. This is primarily due to annual funding of \$150,000 for the past nine years for riparian habitat restoration activities designed to benefit all riparian species, including the flycatcher. For the remaining Tribes in Exhibit 7-2, costs of flycatcher conservation activities were either entirely administrative costs of consultation (and therefore included in Section 3 of this report) or not available for inclusion in this analysis.

440. The following Tribes have not experienced a measurable economic impact associated with flycatcher conservation activities:

- La Jolla
- Pala
- Rincon
- Santa Ysabel
- Santa Clara

Exhibit 7-2

SUMMARY OF PAST IMPACTS ON TRIBAL ACTIVITIES

CHD Unit	Tribal Lands	Description of Impact (year(s) incurred)	Cost Impact (2004\$)
<i>Lower Colorado Recovery Unit</i>			
Middle Colorado MU	Hualapai	Surveying for species (1997 – 2003)	\$420,000 ^a
Hoover to Parker MU	Fort Mojave*	Project modifications were recommended related to a casino construction project, but the project was not undertaken. Recommended project modifications included: <ul style="list-style-type: none"> - Species surveys, - Project timing restrictions, - Conservation of replacement habitat, and - Development and implementation of a wetlands enhancement plan. 	Unknown
	Chemehuevi	Project timing restrictions on exotic plant removal activities	Unknown
	Colorado River Indian Tribes	Surveying for species (1998, 1999, 2000, and 2002) Riparian habitat conservation and restoration activities (1995 – 2003)	\$16,000 \$1,469,000
Parker to Southerly Border MU	Fort Yuma	Surveying for species Project timing restrictions resulting in delays to restoration projects	Unknown
<i>Gila Recovery Unit</i>			
Verde MU	Camp Verde Yavapai Apache*	Impacts limited to administrative costs	None
Upper Gila MU	San Carlos Apache*	Surveying and monitoring for species (1998 – 2003)	\$75,000
<i>Rio Grande Recovery Unit</i>			
Upper Rio Grande MU	San Ildefonso*	Surveying for species	Unknown
	San Juan*	Surveying for species	Unknown
Middle Rio Grande MU	Isleta*	Surveying and monitoring for species	Unknown

Notes: Only Tribal lands for which information is available on past impacts related to flycatcher conservation are included in this exhibit.

*Administrative costs are not summarized in this table but are included in Section 3 of this analysis.

^aThis cost estimate includes USBR funding of species surveys. The Tribe also commits an unknown amount of its own funding to species surveys.

7.1.2 Future Impacts

441. Future impacts resulting from flycatcher conservation activities on Tribal lands include administrative costs of consultations, surveys and monitoring, development of management plans, modifications to development activities, and potential project modifications to restoration activities and water projects. While many of the Tribes do not expect to experience significant economic impact from flycatcher conservation, certain Tribes are more likely to experience economic impacts to activities on their lands. A summary of these forecast future impacts is presented in Exhibit 7-3.
442. Tribal activities in all 15 Tribal land areas are anticipated to result in some economic impact associated with flycatcher conservation. In many cases, these impacts are administrative costs related to consultation, as described in Section 3 of this report. The primary issue concerning the estimation of future economic impacts on Tribal lands is that little information is available regarding potential development projects. Where development of the Tribal lands in the proposed flycatcher CHD is likely, particular project plans are generally not available to determine the potential need for flycatcher conservation activities. Exhibit 7-3 highlights Tribal lands where some type of development within the flycatcher proposed CHD is likely; however, specific costs are not determinable at this time.
443. Data on future impacts to Tribal activities are included for four Tribal land areas, Pala, Hualapai, Colorado River Indian Tribes, and San Carlos Apache. Of these, future economic impacts as estimated are greatest for the San Carlos Apache activities. This is primarily due to Tribal spending of \$1.6 million (\$1.5 million applying a seven percent discount rate) on water deliveries. The Tribe has expressed concern that after committing funds to these Central Arizona Project water deliveries, restrictions on water withdrawals may be imposed for the flycatcher. While there is uncertainty surrounding the likelihood of these restrictions, this cost is included as an estimate of potential impact. Impacts to grazing activities on the San Carlos Apache Tribal lands are also uncertain. The exact number of acres available for grazing that overlap proposed flycatcher habitat is unknown. It is further unknown what modifications or mitigation measures may be recommended to grazing activities that are related to flycatcher concerns.
444. For the remaining Tribes in Exhibit 7-3, costs of flycatcher conservation activities were either entirely administrative costs of consultation or were not available for inclusion in this analysis. Details on the cost estimates provided in Exhibit 7-3 are included in Sections 7.4 through 7.7 of this analysis.

Exhibit 7-3

SUMMARY OF FUTURE IMPACTS ON TRIBAL ACTIVITIES

CHD Unit	Tribal Lands	Description of Impact (year(s) to be incurred)	Cost Impact (2004\$)
<i>Coastal California Recovery Unit</i>			
San Diego MU	La Jolla	Development and implementation of habitat conservation plan (unknown)	Unknown
		Development along the San Luis Rey River (unknown)	Unknown
	Pala	Environmental Assessments associated with development of residential allotments (assumed in 2004)	\$245,000
		Project modifications associated with development of residential allotments (unknown)	Unknown
	Rincon	Development and implementation of habitat conservation plan (unknown)	Unknown
		Development along the San Luis Rey River (unknown)	Unknown
Santa Ysabel	Species survey associated with road maintenance project (unknown)	Unknown	
<i>Lower Colorado Recovery Unit</i>			
Middle Colorado MU	Hualapai	Development of flycatcher management plan (2004)	\$5,000
		Species surveying and monitoring (2004 – 2024)	\$636,000 ^{1,2}
		Development along river corridor (unknown)	Unknown
Hoover to Parker MU	Fort Mohave	Project modifications related to casino development project may include: - Species surveys, - Project timing restrictions, - Conservation of replacement habitat, and - Development and implementation of a wetlands enhancement plan	Unknown
		Other economic development along the Colorado River (unknown)	Unknown
	Chemehuevi	Project modifications associated with development of tourist facilities along Lake Havasu including, marina, hotel, and casino construction (unknown)	Unknown
	Colorado River Indian Tribes	Species surveys and monitoring (2004 – 2024)	\$64,000 ²
		Development of flycatcher management plan (2004)	\$6,000
		Implementation of flycatcher management plan (2004 – 2024)	Unknown

Exhibit 7-3

SUMMARY OF FUTURE IMPACTS ON TRIBAL ACTIVITIES

CHD Unit	Tribal Lands	Description of Impact (year(s) to be incurred)	Cost Impact (2004\$)
Parker to Southerly Border MU	Fort Yuma (Quechan)	Delays to restoration and clean-up projects, including increased costs for operating equipment in wet season and reduced employment for Tribal members (unknown)	Unknown
		Project modifications associated with development projects (unknown)	Unknown
<i>Gila Recovery Unit</i>			
Verde MU	Camp Verde Yavapai Apache	Potential administrative costs associated with consultations on development; project modifications are not anticipated	None
Upper Gila MU	San Carlos Apache	Species surveys (2004 – 2024)	\$159,000 ²
		Cowbird trapping (2004 - 2024)	\$11,000 ²
		Development of flycatcher management plan (2004)	\$5,000
		Cost of Central Arizona Project (CAP) water to be delivered to Tribal lands (2005)	\$1.5 million ²
		Impacts to recreation and agriculture associated with potential restrictions on future water delivery projects (unknown)	Unknown
		Modifications to Tribal lands grazing activities (unknown)	Unknown
<i>Rio Grande Recovery Unit</i>			
Upper Rio Grande MU	San Ildefonso	Species surveys (unknown)	Unknown
		Bosque restoration projects (unknown)	Unknown
	San Juan	Species surveys (unknown)	Unknown
		Bosque restoration projects (unknown)	Unknown
Santa Clara	Unknown	Unknown	
Middle Rio Grande MU	Isleta	Species surveys (2004 – 2024)	Unknown
		Implementation of Bosque management plan (2004 – 2024)	Unknown

Notes: All Tribes may incur future administrative costs related to consultation efforts. These costs are not summarized in this table but are included in Section 3 of this analysis.

¹This cost estimate includes the USBR funding of species surveys. The Tribe also commits an unknown amount of its own funding.

²Cost estimate is translated to present value using a seven percent discount rate.

7.2 Limitations and Caveats

445. The following uncertainties and caveats pertain to the analysis of economic impacts to Tribal activities:

- Development projects on these Tribal lands are either being considered or are only in the early planning stages. As such, information was not available detailing the likely future effect on development projects and potential of flycatcher conservation activities.
- The estimate of future economic impacts includes \$1.6 million (\$1.5 million applying a seven percent discount rate) of Tribal spending on the part of the San Carlos Apache Tribe for Central Arizona Project (CAP) water deliveries. The Tribe has expressed concern that they will spend this amount for the water deliveries and subsequent consultation with the Service will result in restrictions to the actual deliveries. While the potential for this to happen is uncertain, the cost is included as an upper bound estimate of potential economic impact.
- Costs to grazing activities on San Carlos Apache lands are not included. This is because the acres available for grazing are unknown and potential project modifications or mitigation measures that may be recommended are uncertain.
- Where information is not available on the time frame of future projects, those projects are assumed to occur in year 2004. This lack of discounting results in a conservative (i.e., high) estimation of project costs.
- In many cases, information was not available for costs of minor flycatcher conservation activities, such as species surveys. These instances are noted in Exhibits 7-2 and 7-3. Comments are invited on the potential impacts of these activities, and it is anticipated that these costs will be included in the final version of this report.

7.3 Background and Socioeconomic Status of Potentially Affected Tribes

446. Each of the potentially impacted Tribes is a sovereign nation. Secretarial Order 3206 recognizes that Tribes have governmental authority and the desire to protect and manage their resources in the manner that is most beneficial to them. Flycatcher conservation and riparian restoration activities have been ongoing on various Tribal lands included in the proposed CHD. Many of the affected Tribes have their own natural resource programs and staff, and several are developing flycatcher management plans. In addition, as trustee for land held in trust by the United States for Indian Tribes, the BIA oversees a variety of programs on Tribal lands. The Recovery Plan provides an overview of how flycatcher conservation fits into Tribal goals for restoring riparian systems:

“Given the tentative nature with which Tribal leaders and land managers have approached endangered species issues, there were several reasons why the southwestern willow flycatcher recovery [sic] gives us cause for optimism. The goal for the recovery process, of course, is not only higher populations of this particular bird, but improved riparian areas in general. For many Tribes in the Southwest, the rivers and streams that cross their land provide critical areas for plant and animal collection, recreation, and cultural and religious use. Tribes see riparian protection as an excellent long-term goal. In only a few generations Tribes have seen these areas severely degraded, mainly from human induced changes, some of these changes have unquestionable provided benefits to Tribes, but many of which Tribes had no say in implementing. To restore riparian and wetland habitat and to improve these critical ecosystems is a goal that all Tribes in the region can support.”²⁵⁵

447. Given the unique characteristics of Tribal economies, the approach used to analyze potentially affected activities on Tribal lands is different than that for other types of activities. This section first provides a discussion of the current economic status of the affected Tribal communities, and second, highlights potential impacts to Tribal activities occurring in proposed flycatcher critical habitat. In order to gather information, meetings were held with several Tribes that had high potential for impacts, either because of the size of the proposed designation on their lands or because of projects planned within the proposed CHD. In addition, each Tribe was contacted individually as part of the research conducted for this analysis.

448. For each of the Tribes, this analysis provides current socioeconomic data underscoring the conditions on each of the Tribal land areas. Available data demonstrate the economic conditions on each of the Tribal land areas analyzed; often these Tribal economies exhibit higher unemployment, lower income levels, and higher poverty rates than State averages. In addition, re-employment opportunities on some Tribal lands may be limited. For example, Tribal members who lose jobs may be less likely to move off the Tribal lands to find work elsewhere. Thus, if flycatcher conservation activities impact job availability on the Tribal lands, those impacts may be compounded by poor baseline economic conditions. Table 7-1 presents an overview of socioeconomic statistics for the affected Tribes, as well as national and State averages for comparative purposes. Population, unemployment, and income statistics are from the U.S. Census. In general, these data illustrate the vulnerability of the Tribes to economic impact or regulatory burden.

²⁵⁵ U.S. Fish and Wildlife Service. 2002. Recovery Plan for the Southwestern willow flycatcher. August 2002. Appendix N, page N-8.

Exhibit 7-4				
2000 SOCIOECONOMIC INFORMATION – AFFECTED TRIBES				
Area/Tribal Lands	Population	Unemployment Rate	Per Capita Income	Poverty Rate ⁽¹⁾
<i>National Level Information</i>				
USA	281,421,906	4.2%	\$21,587	12.4%
<i>State Level Information</i>				
Arizona	5,130,632	5.6%	\$20,275	13.9%
California	33,871,648	7.0%	\$22,711	14.2%
New Mexico	1,819,046	7.3%	\$17,261	18.4%
<i>Tribal Level Information</i>				
La Jolla	390	13.9%	\$11,960	16.3%
Pala	1,573	9.9%	\$10,955	40.6%
Rincon	1,495	8.8%	\$9,848	29.5%
Santa Ysabel	250	14.6%	\$14,332	23.3%
Hualapai	1,353	18.2%	\$8,147	35.8%
Fort Mohave	1,043	7.2%	\$12,766	22.6%
Chemehuevi	345	8.5%	\$13,130	30.7%
Colorado River Indian Tribes	9,201	9.6%	\$12,621	21.8%
Fort Yuma (Quechan)	2,376	19.8%	\$8,402	34.1%
Camp Verde Yavapai Apache	743	12.7%	\$8,347	33.4%
San Carlos Apache	9,385	35.4% ⁽²⁾	\$5,200	48.2%
San Ildefonso	1,524	6.4%	\$14,848	12.5%
San Juan	6,748	7.6%	\$12,083	22.7%
Santa Clara	10,658	7.8%	\$15,336	20.0%
Isleta	3,166	9.6%	\$11,438	18.3%
Notes:				
(1) Poverty rate represents the percent of individuals below the applicable poverty threshold level. Poverty thresholds are the same for all parts of the country, but vary depending on the applicable family size, age of householder, and number of related children under 18. Poverty thresholds are shown at http://www.Census.gov/hhes/poverty/threshld/thresh99.html .				
(2) A recent study by the San Carlos Apache Tribe found that the unemployment rate is 76 percent. Letter from Joe Sparks, Sparks, Tehan & Ryley, P.C. re: Request for Information Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher, dated September 7, 2004.				
Source: U.S. Census Bureau, Census 2000, http://censtats.census.gov/pub/Profiles.shtml .				

449. The remainder of this section is organized by Recovery Unit and discusses each potentially affected Tribe individually. Data on geographic size of each Tribal land area are from Tiller's Guide to Indian Country, unless otherwise noted.²⁵⁶ Further, where information is available, this section contemplates the overall contribution of potentially affected activities to provide an upper bound estimate of potential economic impacts that may result from implementing flycatcher conservation activities. For example, various Tribes have

²⁵⁶ Tiller, V., 1993. Tillers Guide to Indian Country, Economic Profiles of American Indian Reservations.

plans for development along riverfront property that may overlap with the proposed CHD. To the extent that the Tribes had specific information on these development plans, the information is presented in this section.

7.4 Coastal California Recovery Unit

7.4.1 San Diego Management Unit

La Jolla

450. The La Jolla Reservation encompasses 8,541 acres in Southern California. Approximately 221 acres on the La Jolla Reservation along the San Luis Rey River are included in the proposed flycatcher critical habitat designation.

La Jolla Socioeconomic Status

451. The 2000 population on the La Jolla Reservation was 390. The unemployment rate was 13.9 percent in 2000, approximately double the average of that for the State of California. Per capita income was \$11,960 in 2000, approximately half the average for California. In addition, approximately 16.3 percent of the Tribe's population lives below the poverty line.

La Jolla Potentially Affected Activities

452. The La Jolla Tribe has not experienced past economic impacts related to flycatcher conservation activities. The Tribe has not been involved in any survey efforts or consultations specifically for the flycatcher. Currently, the Tribe is considering preparing a habitat conservation plan. Because this effort is still in initial planning stages, costs associated with development and implementation of the plan are unknown.²⁵⁷
453. Future impacts on the La Jolla Tribe, however, may result from the proposed CHD. The Tribe has indicated that future development along the San Luis Rey River could potentially be affected by flycatcher conservation activities.²⁵⁸ Economic impacts associated with the new development may stem from, for example, additional administrative effort in the planning stages and modifications to projects to incorporate flycatcher and habitat conservation measures. Information regarding potential future development was not available for inclusion in this analysis. It is anticipated that the final economic analysis will incorporate comments and additional information regarding impacts on the La Jolla Reservation, if available.

²⁵⁷ Personal communication with Rob Roy, Environmental Department, La Jolla Tribe, September 20, 2004.

²⁵⁸ *Ibid.*

Pala

454. The Pala Reservation encompasses 11,893 acres in Southern California. Approximately 286 acres on the Pala Reservation along the San Luis Rey River are included in the proposed flycatcher critical habitat designation.

Pala Socioeconomic Status

455. The 2000 population on the Pala Reservation was 1,573. The unemployment rate was 9.9 percent in 2000. Per capita income was \$10,955 in 2000, approximately half the average for the State of California. In addition, approximately 40.6 percent of the Tribe's population lives below the poverty line, more than three times the State average.

Pala Potentially Affected Activities

456. Past economic impacts related to flycatcher conservation activities have been limited on the Pala Reservation. The Tribe has not had to consult for the flycatcher in the past, and has not undertaken any surveying or monitoring efforts to date.
457. Based on discussion with the Pala Environmental Department, development of residential allotments (granted to individual Tribe members) along the San Luis Rey River could potentially be affected by flycatcher conservation activities in the future. These impacts would include administrative efforts related to completing an Environmental Assessment (EA) as part of consultation efforts for each home lease granted by BIA. While some of these costs may relate to other species, such as the Arroyo Toad, the proposed flycatcher CHD will be a factor necessitating these consultations efforts. To date, because the flycatcher has not established any nesting sites on the Reservation, an EA is not required for the flycatcher when an allotment is developed along the river. However, an EA may be required if the allotment falls in proposed Arroyo toad CHD, which overlaps with much of the proposed flycatcher CHD on the Pala Reservation.
458. Preparing an EA could result in costs of approximately \$5,000 per allotment, paid for by individual Tribal members.²⁵⁹ There are 49 undeveloped allotments along the river that overlap with the proposed flycatcher CHD.²⁶⁰ Thus, while the timing of development of each of these allotments is unknown, the total impact on Pala Tribal members could be \$245,000 if all 49 allotments were developed. *These costs relate only to administrative efforts associated with consultation, and do not include implementing any potential mitigation measures.* Costs related to any project modifications resulting from flycatcher conservation activities are unknown at this time.²⁶¹

²⁵⁹ Personal communication with Lenore Volturno, Environmental Director, Pala Tribe, September 9, 2004.

²⁶⁰ Email communication from Chris Nieto, GIS Technician, Pala Tribe, September 15, 2004.

²⁶¹ Personal communication with Lenore Volturno, Environmental Director, Pala Tribe, September 9, 2004.

Rincon

459. The Rincon Reservation encompasses 4,276 acres in Southern California. Approximately 80 acres on the Rincon Reservation located on the San Luis Rey River are included in the proposed flycatcher critical habitat designation.

Rincon Socioeconomic Status

460. The 2000 population on the Rincon Reservation was 1,495. The unemployment rate was 8.8 percent in 2000. Per capita income was \$9,848 in 2000, less than half the average for California. In addition, approximately 29.5 percent of the Tribe's population lives below the poverty line, more than double the State average for California.

Rincon Potentially Affected Activities

461. The Rincon Tribe has not experienced past economic impacts related to flycatcher conservation activities. The Rincon Tribe is currently working on an HCP that would cover the area included in the proposed flycatcher CHD, primarily driven by Arroyo toad habitat on the Reservation. Nearly all proposed flycatcher CHD on the Rincon Reservation overlaps with proposed Arroyo toad CHD. Because the HCP is still in initial planning stages, administrative costs associated with development of this plan and future implementation costs related to the plan are unknown.²⁶²
462. Future impacts, however, could result from the proposed CHD. A Tribal representative indicated that future development along the San Luis Rey River could potentially be affected by flycatcher conservation activities.²⁶³ Economic impacts associated with the new development may stem from, for example, additional administrative effort in the planning stages and modifications to projects to incorporate flycatcher and habitat conservation measures. Information regarding potential future development and development-related impacts resulting from flycatcher conservation was not available for inclusion in this draft economic analysis; it is anticipated that the final economic analysis will incorporate comments and additional information regarding impacts on the Rincon Reservation, if available.

Santa Ysabel

463. The Santa Ysabel Reservation encompasses 15,527 acres in Southern California. Approximately 27 acres on the Santa Ysabel Reservation along the San Felipe Creek are included in the proposed flycatcher critical habitat designation.

²⁶² Personal communication with Sean Skaggs, Attorney representing Rincon Tribe, August 18, 2004.

²⁶³ *Ibid.*

Santa Ysabel Socioeconomic Status

464. The 2000 population on the Santa Ysabel Reservation was 250. The unemployment rate was 14.6 percent in 2000, approximately double the average for California. Per capita income was \$14,332 in 2000, approximately two-thirds the average for California. In addition, approximately 23.3 percent of the population on the Santa Ysabel Reservation lives below the poverty line.

Santa Ysabel Potentially Affected Activities

465. Based on conversations with the Tribal representatives, activities on Santa Ysabel Reservation lands included in the proposed CHD are likely to be limited. Currently, there are two residences in that area; one residence was damaged in a recent wildfire and the other was recently condemned. Both of these residences will be rebuilt outside of the floodplain, using Federal funds. Any other future residential development in the area would also likely occur outside of the floodplain. The Tribe plans to designate the riparian/floodplain area as a protected area for cultural reasons and for habitat management purposes. The San Felipe Creek area is used for cultural activities including gathering grasses and willows for basketmaking. Because development is not expected to fall within the proposed CHD, and because the floodplain/riparian area is likely to be set aside from development, development activity on the Santa Ysabel Reservation is not expected to be affected by flycatcher conservation.²⁶⁴
466. The only activity occurring in the proposed CHD on the Santa Ysabel Reservation that is likely to be affected by flycatcher conservation in the future is maintenance to an existing road in the area. If the proposed CHD is in place, the Tribe may incur some costs related to consultation and surveying efforts related to road maintenance.²⁶⁵ While the specific amount of these costs is unknown, these costs will likely have a small impact on the Tribe.

7.5 Lower Colorado Recovery Unit

7.5.1 Middle Colorado Management Unit

Hualapai

467. The Hualapai Reservation encompasses nearly one million acres in northern Arizona; flycatcher habitat on this reservation is located on the southern shore of the Colorado River, across from Grand Canyon NP. Approximately 30 river miles and 1,721 acres on the Hualapai Reservation are included in the proposed flycatcher critical habitat designation.

²⁶⁴ Personal communication with Rodney Kephart, Councilman, Santa Ysabel, September 21, 2004.

²⁶⁵ *Ibid.*

Hualapai Socioeconomic Status

468. The 2000 population on the Hualapai Reservation was 1,353. The unemployment rate reached 27 percent in 2003 (versus 18.2 percent shown in the 2000 Census), more than four times the average for Arizona.²⁶⁶ The 2000 Census identifies a per capita income was \$8,147 in 2000, less than half the average for Arizona. In addition, approximately 35.8 percent of the Tribe's population lives below the poverty line.

Hualapai Potentially Affected Activities

469. Based on discussion at a meeting with representatives of the Hualapai Tribe, activities on Hualapai Reservation lands have not been greatly impacted by flycatcher conservation activities to date, and expected future impacts are limited to administrative costs. These administrative costs are related to surveying and monitoring efforts, section 7 consultations, and preparation of a flycatcher management plan. Flycatcher surveys on Hualapai lands in the Grand Canyon have been funded by USBR since 1997. USBR funds approximately \$60,000 annually to cover six flycatcher surveys per year (6 trips/year, 3-4 days/trip, 5-6 people/day). In addition, the Tribe expends its own resources for flycatcher surveys, which are estimated to be less than the \$60,000/annually spent by USBR. USBR funding is renewed annually, and the Tribe expects that this funding will likely continue into the future.²⁶⁷ In addition, the Hualapai are preparing a management plan, which the Tribe estimates will result in administrative efforts totaling approximately \$5,000 in 2004.²⁶⁸
470. The Hualapai operate a rafting enterprise and lease lands to a helicopter tour operation along the Colorado River. Neither of these activities is expected to be impacted by designation of critical habitat or flycatcher conservation activities. Additional consultation efforts are not expected as a result of critical habitat; however, consultations for flycatcher will continue to occur for projects with a Federal nexus. The types of projects affected in the past have included: prescribed burns (timing restrictions), construction of restroom facilities, and habitat conservation projects. The impacts related to these projects have been primarily limited to the administrative costs resulting from consultation efforts. While future economic development along the Colorado River is a possibility, the Tribe is still in the very early planning stages and it is unclear what development might occur along the river corridor, and whether this future development would be impacted by flycatcher conservation activities.

²⁶⁶ Arizona Department of Commerce, Hualapai Indian Reservation Community Profile, prepared on 6/2004. Available at <http://www.azcommerce.com/Communities/indian%20profile.asp>.

²⁶⁷ Personal communication with Hualapai Tribe, July 6, 2004.

²⁶⁸ Personal communication with Don Bay, Hualapai Natural Resources Department, September 2, 2004.

7.5.2 Hoover to Parker Management Unit

Fort Mohave

471. The Fort Mohave Reservation encompasses 41,884 acres in Arizona, California, and Nevada. Approximately 4,204 acres on the Fort Mohave Reservation along the Colorado River are included in the proposed flycatcher critical habitat designation.

Fort Mohave Socioeconomic Status

472. The 2000 population on the Fort Mohave Reservation was 1,043. The unemployment rate was 7.2 percent in 2000. Per capita income was \$12,766 in 2000, approximately two-thirds of the averages for the surrounding States. In addition, approximately 22.6 percent of the Tribe's population lives below the poverty line, while Arizona, California and Nevada State average poverty rates range from 10.5 to 14.2 percent.

Fort Mohave Potentially Affected Activities

473. Past consultations for the flycatcher included one formal consultation for a development project (Gold Properties) on the Fort Mohave Reservation. BIA indicated that this project was never undertaken. Based on conversations with BIA and Tribal staff, activities on Fort Mohave Reservation lands likely to be impacted by flycatcher conservation activities include development and building new irrigation ditches. The Fort Mohave Tribe is considering development of a new casino under a 25-year lease to a private company. The Tribe states that, if it proceeds in this manner, this project will likely not have to be approved by BIA. Future development projects with a Federal nexus, however, may result in costs to the Tribe related to the following potential project modifications (assuming similar requirements to those associated with the Gold Properties development consultation):²⁶⁹

- Surveys to determine the presence/absence of flycatchers on or adjacent to the project site;
- Limitations on surface disturbing activity within 250 feet of occupied habitat, until after flycatchers have migrated out of the area;
- Conservation of replacement habitat if flycatchers are nesting on or adjacent to the project site; and
- Development and implementation of a wetland enhancement plan.

²⁶⁹ U.S. Fish and Wildlife Service. Biological Opinion on the Potential Effects of the Proposed Gold Properties Limited, Inc., Development on the Endangered Southwestern Willow Flycatcher. June 5, 1995. File #1-5-95-F-197.

474. While further future development along the Colorado River is likely, the Fort Mohave Tribe's specific development plans are still uncertain. Information regarding specific future development and development-related impacts resulting from flycatcher conservation was therefore not available for inclusion in this analysis. It is anticipated that the final economic analysis will incorporate comments and additional information regarding impacts on the Fort Mohave Reservation, if available.

475. In addition, future farming activities on the Fort Mohave Reservation that could be impacted include expansion of irrigation ditches. While consultation efforts may occur related to expanding irrigation ditches, no project modifications are expected.

Chemehuevi

476. The Chemehuevi Reservation encompasses 30,653 acres in California; flycatcher habitat on this reservation is located on the Colorado River and Lake Havasu. Approximately 55 acres on the Chemehuevi Reservation are included in the proposed flycatcher critical habitat designation.

Chemehuevi Socioeconomic Status

477. The 2000 population on the Chemehuevi Reservation was 345. The unemployment rate was 8.5 percent in 2000. Per capita income was \$13,130 in 2000, less than two-thirds the average for California. In addition, approximately 30.7 percent of the Tribe's population lives below the poverty line, more than double the California State average.

Chemehuevi Potentially Affected Activities

478. In the past, Chemehuevi have not been greatly impacted by flycatcher conservation activities. While they have timed exotic plant removal activities to avoid migratory bird breeding season, the Tribe has not consulted on any projects specifically for the flycatcher. The Chemehuevi Tribe is currently planning to develop additional tourist facilities along Lake Havasu. The planned large upscale development includes a marina, several hotels, housing/condos, and a new casino. The Chemehuevi economy is largely based on tourism, and this project will bring significant job opportunities and revenue. The Tribe will consult on this project for a variety of endangered species. The outcome of this consultation is unclear, but any limitations on the project scope or size could reduce the number of jobs and amount of revenues to the Tribe.²⁷⁰

²⁷⁰ Personal communication with David Todd, Environmental Director, Chemehuevi Tribe, August 24, 2004.

Colorado River Indian Tribes

479. The Colorado River Indian Tribes (CRIT) Reservation encompasses approximately 270,000 acres in Arizona and California. Approximately 481 acres on the CRIT Reservation along the Colorado River are included in the proposed flycatcher critical habitat designation.

Colorado River Indian Tribes Socioeconomic Status

480. The 2000 population on the CRIT Reservation was 9,201. The unemployment rate was 9.6 percent in 2000. Per capita income was \$12,621 in 2000, less than two-thirds the average for Arizona or California. In addition, 21.8 percent of CRIT's population lives below the poverty line.

Colorado River Indian Tribes Potentially Affected Activities

481. In the past, CRIT has undertaken various conservation activities for the flycatcher, including surveys, monitoring and restoration of a large riparian area. These efforts have resulted in the following costs to the Tribe:²⁷¹

- Southwestern willow flycatcher surveys have been performed periodically by the CRIT Department of Fish and Game. In particular, surveys were performed on CRIT lands during 1998, 1999, 2000, and 2002. Each year's survey had an estimated cost of about \$4,000. These costs include field surveys, data entry, and report preparation and represent CRIT's in kind contribution to these projects. The projected cost of future annual flycatcher monitoring under the proposed draft CRIT Southwestern Willow Flycatcher Management Plan is expected to average about \$6,000 annually.
- The CRIT Department of Fish and Game is currently preparing a flycatcher management plan. Estimated costs in developing the CRIT Southwestern Willow Flycatcher Management Plan are currently about \$6,000; however, because the Plan is still in draft form additional costs may be incurred. The costs associated with implementing this plan cannot be forecast at this time and will depend on the conservation measures included in the plan.
- Riparian habitat conservation/restoration activities are primarily undertaken on the Colorado River Indian Reservation by the Ahakhav Tribal Preserve. These activities are directed toward benefiting all riparian wildlife species including the southwestern willow flycatcher. The Preserve's annual operating budget is directed toward these activities and the budget averages approximately \$150,000/year since 1995.

482. A variety of activities occur on CRIT lands either on or adjacent to the proposed CHD. This includes agriculture, Casino and resort operations (including a marina and movie

²⁷¹ Email communication from Charley Land, CRIT Wildlife Manager, September 13, 2004 and September 20, 2004.

theater), and other tourism related enterprises. Based on available information, these ongoing operations are unlikely to be affected by flycatcher conservation activities. However, any future expansion of these enterprises would likely require consultation for the flycatcher under the proposed CHD. Economic impacts associated with the potential expansion of these activities could result in administrative efforts for consultation, and potential mitigation measures. At this time, because expansion plans are uncertain, no impacts have been estimated related to these Tribal enterprises.

7.5.3 Parker to Southerly International Border Management Unit

Fort Yuma (Quechan)

483. The Fort Yuma Reservation encompasses 43,942 acres in southern Arizona and California. Approximately 641 acres on the Fort Yuma Reservation along the Colorado River are included in the proposed flycatcher critical habitat designation.

Fort Yuma Socioeconomic Status

484. The 2000 population on the Fort Yuma Reservation was 2,376. The unemployment rate was 19.8 percent in 2000, more than three times the average for Arizona. Per capita income was \$8,402 in 2000, less than half the averages for Arizona and California. In addition, approximately 34.1 percent of the Tribe's population lives below the poverty line.

Fort Yuma Potentially Affected Activities

485. The Tribe has conducted some surveys for threatened and endangered species including the flycatcher. These survey efforts are part of a three-year clean-up project funded by BIA. The BIA is also funding salt cedar removal projects on the reservation; approximately 100 acres are cleared each year. These projects are funded under BIA's fire management and noxious weeds programs. The timing of these vegetation removal projects has been limited to outside of the breeding season for the flycatcher.²⁷² Limiting treatments to outside of flycatcher breeding season results in having to clear vegetation from marshy areas in the wet season, rather than during the summer when the water table drops and there is less precipitation. This results in making projects more difficult and costly. For example, in the past, the presence of the mud has caused equipment to become stuck, resulting in costs of \$26,000 to the Tribe. In addition, various crewmembers that would have been employed during the five-month flycatcher breeding season may be unable to find other work to fill in this time period. For example, of 20 crewmembers, approximately 10 did not have other work during the 2004 breeding season.²⁷³
486. In addition, the Quechan Tribe is involved in a restoration project along the Colorado River. The restoration project is a part of a larger development, the East Wetlands project, undertaken by the City of Yuma, Arizona along with various partners. As part of this

²⁷² Personal communication with Arlene Kingery, Environmental Department, Quechan Tribe, August 18, 2004.

²⁷³ Personal communication with Arlene Kingery, Environmental Department, Quechan Tribe, November 3, 2004.

development project, the Tribe is developing a small area for recreational use.²⁷⁴ In addition, the Tribe is considering another site for recreational development along the river; however, this project is in the early discussion stages.²⁷⁵ Potential recreational development could include RV/Trailer parks, a marina, restaurants, and stores, similar to an RV park on BLM lands upriver.²⁷⁶ Information regarding potential future development and development-related impacts resulting from flycatcher conservation was not available for inclusion in this draft economic analysis. It is anticipated that the final economic analysis will incorporate comments and additional information regarding impacts on the Fort Yuma Reservation, if available.

7.6 Gila Recovery Unit

7.6.1 Verde Management Unit

Camp Verde Yavapai Apache

487. The Camp Verde Reservation encompasses 652 acres in Arizona. Approximately 147 acres on the Camp Verde Reservation along the Verde River are included in the proposed flycatcher critical habitat designation.

Camp Verde Socioeconomic Status

488. The 2000 population on the Camp Verde Reservation was 743. The unemployment rate was 12.7 percent in 2000, approximately double the average for Arizona. Per capita income was \$8,347 in 2000, less than half the average for Arizona. In addition, approximately 33.4 percent of the Tribe's population lives below the poverty line.

Camp Verde Potentially Affected Activities

489. Based on available information, past impacts of flycatcher conservation on the Camp Verde Reservation have been limited to administrative efforts. Based on conversations with the Service, BIA and Tribal staff, activities on Camp Verde Reservation lands likely to be impacted by flycatcher conservation activities in the future are related to future development projects associated with the transfer of title of 1,211 acres of fee lands to trust lands. The Supplemental EA for this land transfer States, "If future development activities involve a Federal nexus, then additional consultation on impacts to critical habitat and threatened or endangered species will be conducted with USFWS."²⁷⁷

²⁷⁴ Personal communication with Bill Pyott, Bureau of Indian Affairs Fort Yuma, July 15, 2004.

²⁷⁵ Personal communication with Brian Golding, Economic Development Dept., Quechan Tribe, September 27, 2004.

²⁷⁶ Personal communication with Arlene Kingerly, Environmental Department, Quechan Tribe, August 18, 2004.

²⁷⁷ SAGE Landscape Architecture & Environmental, Inc. 2004. Supplemental Environmental Assessment for the Transfer of title of 1,211 Acres of fee lands owned by the Yavapai Apache Nation to the United States of America in trust for the beneficial use of the Yavapai Apache Nation. Submitted to Bureau of Indian Affairs and Yavapai-Apache Nation, Revised by SAGE Lands Landscape Architecture & Environmental, Inc. May 2004.

490. The Supplemental EA for the land transfer identifies intended uses of the land along the Verde River including residential development and reclamation of lands for agriculture use. The area identified by the Tribe as an economic development area for commercial development is not within the proposed CHD. As trust lands, commercial and residential development of these lands will likely be subject to lease approval by BIA; thus, if a project falls within the proposed CHD it will require individual consultation. Discussion with the Tribe's Environmental Department, however, indicates that planned development will not be impacted by the flycatcher and the proposed CHD because the Tribe is working on a zoning ordinance that would set aside all of the floodplain area as conservation districts (e.g., open space). The zoning ordinance is currently in draft form but it should be final within a year. Thus, development is unlikely to occur in the proposed CHD. In addition, areas in the floodplain are not seen as conducive to development because of other Verde Valley local and State ordinances and the proposed CHD.²⁷⁸ Given the proposed zoning ordinance, future impacts to activities on the Camp Verde Reservation related to flycatcher conservation are expected to be minimal.

7.6.2 Upper Gila Management Unit

San Carlos Apache

491. The San Carlos Apache Reservation encompasses over 1.8 million acres in southeast Arizona. Approximately 8,888 acres along the Gila River and a portion of the San Carlos Reservoir on the San Carlos Apache Reservation are included in the proposed flycatcher CHD. The following discussion provides background information on the San Carlos Apache and estimates impacts on the San Carlos Apache due to flycatcher conservation activities.

San Carlos Apache Socioeconomic Status

492. Based on U.S. Census data, the San Carlos Apache population was 9,385 in 2000; current population is estimated at more than 12,000.²⁷⁹ Based on the 2000 Census, the unemployment rate was 35.4 percent. However, a recent study by the Tribe found that the unemployment rate is much higher, at 76 percent, indicating that at least seven out of ten people in the Tribe's labor force was unemployed.²⁸⁰ San Carlos Apache per capita income was \$5,200 in 2000, or about one-fifth of the Arizona average. In addition, the poverty rate on the San Carlos Apache Reservation is 48 percent.

²⁷⁸ Personal communication with Bob Lau, Environment Department, Camp Verde Yavapai Apache, September 1, 2004.

²⁷⁹ Letter from Susan B. Montgomery, Sparks, Tehan & Ryley, P.C. re: Comments to Draft Economic Analysis Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher on the San Carlos Apache Reservation, dated October 6, 2004.

²⁸⁰ Letter from Joe Sparks, Sparks, Tehan & Ryley, P.C. re: Request for Information Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher, dated September 7, 2004.

San Carlos Apache Potentially Affected Activities

493. Several activities on San Carlos Apache Reservation lands have been or may be impacted by flycatcher conservation. Past economic impacts related to flycatcher conservation include administrative efforts, surveying and monitoring, and cowbird trapping. Future potential impacts may include costs of continued administrative and conservation activities as well as potential economic impacts from modifications to water delivery projects.
494. Based on conversations with the Service, BIA, USBR, and Tribal representatives, impacts stemming from potential restrictions on water delivery projects, such as impacts on agriculture and recreation, are difficult to forecast. Additional activities occurring in the proposed CHD area include gathering of willows for staves used in shade structures, and grazing. Because cultural gathering activities lack a Federal nexus, these activities are not expected to be impacted by flycatcher conservation activities. Tribal representatives have indicated, however, that the Tribe's ability to graze cattle could be affected by the proposed CHD; these impacts are discussed below.

Administrative and Conservation-Related Activities

495. Consulting with the Service, surveying for flycatchers, and preparing a flycatcher management plan utilizes the Tribe's limited resources. The San Carlos Apache have consulted on twenty projects in the past for which the Service considered effects to the flycatcher.²⁸¹ Costs associated with consultation efforts are discussed in Section 3. The San Carlos Apache Tribe has conducted flycatcher surveys since 1998. The Tribe spends approximately \$15,000 annually on flycatcher surveys. In addition the San Carlos Apache spent approximately \$1,000 for cowbird trapping in 2004, the first year in which the Tribe set cowbird traps. These flycatcher surveying and cowbird trapping costs of approximately \$16,000/year are expected to continue into the future. In addition, the San Carlos Apache are currently preparing a flycatcher management plan. The cost of developing the management plan is estimated to be \$5,000, though the exact cost is unclear at this time. The costs associated with the actual implementation of the plan are also not known at this time.²⁸²

Water Exchange Project

496. In addition to continued administrative and conservation activities, this analysis considers potential future impacts related to two proposed projects that would provide additional water to the San Carlos Apache Tribe. The first project involves a water exchange. Under this proposed project, as discussed in Section 4, the USBR oversee the sake of up to 20,000 acre feet of Central Arizona Project (CAP) water to the San Carlos Apache

²⁸¹ Faxed information from Mary Jo Stegman dated August 5, 2004. "U.S. Fish and Wildlife Service Section 7 Consultations with the San Carlos Apache Tribe (1995 – 2004) that Involve the Southwestern Willow Flycatcher."

²⁸² Personal communication with Stefanie White, San Carlos Apache Recreation and Wildlife Department, August 24, August 26 and September 8, 2004.

Tribe to be supplied downstream of San Carlos Reservoir and Coolidge Dam. The purchase of CAP water would allow the San Carlos Apache to maintain a minimum pool in the San Carlos Reservoir in lieu of releasing water out of the San Carlos Reservoir; the Tribe will likely seek to implement this water exchange water annually in perpetuity. A March 2004 Biological Opinion (BO) addressed this proposed water exchange; however, the project did not take place in 2004. This BO recommended that USBR undertake a variety of activities, including additional research and monitoring, cowbird trapping, installation of meters, and reporting.²⁸³ The costs associated with these activities are reported in the water management section of this report (Section 4). While these or similar measures would be expected if a similar project is proposed in the future, this project would be reevaluated before an exchange could occur in 2005 or any future year; thus, future impacts are uncertain.

497. The March 2004 BO requires the USBR to investigate flow regimes appropriate to support southwestern willow flycatcher habitat from Coolidge Dam to Kelvin. The Service did not, however, establish any minimum flow requirements in this BO. Rather, the BO states, “at this time, we cannot articulate a minimum flow (cfs) that is needed to maintain flycatcher sites and to provide for adequate forage base for reproduction.”²⁸⁴ Because the science needed to determine minimum flows is not currently available, it is unlikely that the Service would require minimum flows to protect the flycatcher over the 20-year period of this analysis.²⁸⁵
498. However, as the reasonable and prudent measures that the Service will require if this project proceeds in the future are not currently known, this section provides information on Tribal activities that could be affected were reservoir levels to be restricted. In particular, restrictions on reservoir levels could affect recreation activities on the San Carlos Apache Reservation. The San Carlos Apache derive income from a variety of recreational activities at San Carlos Reservoir, including: fishing license fees, camping fees, marina and store revenues. In the past, revenues from these sources has exceeded \$2 million a year. This recreational activity also supports a number of jobs on the Reservation, as well as supporting the management and law enforcement at the Reservoir and in the Tribal Recreation and Wildlife Department.²⁸⁶ If any restrictions related to flycatcher were to affect reservoir levels at the San Carlos Reservoir, these revenues and jobs could be at risk.
499. Another potential impact related to the water exchange project stems from the fact that the San Carlos Apache may have to order and pay for the delivery of CAP water well in advance, even before section 7 consultation is complete. If flycatcher conservation were to affect the Tribe’s ability to complete an exchange after the Tribe has already paid, the Tribe could lose the money it has paid for CAP water and never receive the benefit of stored water in the Reservoir. In 2005, the Tribe’s cost for CAP water will be \$79 per acre-foot;

²⁸³ U.S. Fish and Wildlife Albuquerque Regional Office. 2004. Biological opinion on the Bureau of Reclamation’s Approval of Water Exchange by the San Carlos Apache Tribe for Retention in San Carlos Reservoir, March 8.

²⁸⁴ Ibid.

²⁸⁵ Personal communication with Service personnel, Region 2, August 9, 2004.

²⁸⁶ Letter from Joe Sparks, Sparks, Tehan & Ryley, P.C. re: Request for Information Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher, dated September 7, 2004.

this equates to \$1.6 million for 20,000 acre-feet.²⁸⁷ While it is not clear at this time whether this cost will be lost (that is, that the Tribe will pay for the delivery and, due to flycatcher concerns, not receive the benefit of the water delivery), the Tribe anticipates that this is a potential high-end cost of flycatcher conservation.

500. In addition, Tribal representatives believe that conditions set forth in future BOs could have an adverse economic impact on the Tribe “through curtailing of development, unexpected administrative or compliance costs, or by requiring costly mitigation measures.”²⁸⁸ Based on the reasonable and prudent measures in the March 2004 BO, these types of impacts are not expected. However, the reasonable and prudent measures that the Service will require if this project proceeds in the future are not currently known; thus, impacts related to this project are uncertain. It is anticipated that the final economic analysis will incorporate additional information regarding impacts on the San Carlos Apache Reservation, if available.

Water Delivery System Project

501. The second water project being discussed involves buildout of a system to deliver CAP water to the San Carlos Apache Tribe. This water would primarily be used for agricultural irrigation, although other uses may include municipal, commercial, and industrial purposes, and to provide recreational, cultural, and biological amenities. At this point, the scope of the project and delivery method have not been decided. Given the uncertainty associated with this project, it is not possible to anticipate future impacts related to flycatcher conservation measures that could be required for this project.²⁸⁹ As with the water exchange project, USBR would likely bear the costs associated with flycatcher conservation for this project.²⁹⁰
502. Because the reasonable and prudent measures that the Service may require when this project proceeds in the future are not currently known, this section provides information on activity that could be affected if the amount of water available to the San Carlos Apache Tribe from this project were to be limited for the flycatcher. Specifically, limits on water available for irrigation would affect the Tribe’s agriculture activities. The San Carlos Apache Tribe has been farming for hundreds of years in the Gila Valley, with over 9,000 acres of land under cultivation in the late 1800s. According to Tribal representatives, “the Tribe now struggles to farm a fraction of these lands due to the lack of a reliable water supply.”²⁹¹ The San Carlos Apache Tribe currently farms 500 acres, generating \$135,000 in

²⁸⁷ *Ibid.*

²⁸⁸ Letter from Susan B. Montgomery, Sparks, Tehan & Ryley, P.C. re: Comments to Draft Economic Analysis Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher on the San Carlos Apache Reservation, dated October 6, 2004.

²⁸⁹ Personal communication with John McGlothlen, USBR, August 24, 2004. Also, Letter from Joe Sparks, Sparks, Tehan & Ryley, P.C. re: Request for Information Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher, dated September 7, 2004.

²⁹⁰ Personal communication with Service personnel, August 9, 2004.

²⁹¹ Letter from Susan B. Montgomery, Sparks, Tehan & Ryley, P.C. re: Comments to Draft Economic Analysis Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher on the San Carlos Apache Reservation, dated October 6, 2004.

revenues (for the period from October 2003 through July 2004) and supporting six jobs with \$165,000 in payroll. The Tribe has recently invested heavily in equipment for its agricultural operations. This was the first year of operation for the farm, a Tribal enterprise that has not reached profitability yet. The Tribe is looking into expanding farming, possibly beginning with adding approximately 1,000 acres.²⁹² While expansion plans are still uncertain, there are thousands of acres of irrigable lands on the Reservation.²⁹³ If restrictions related to flycatcher conservation measures impact the Tribe's ability to continue or expand farming on the Reservation, these jobs and revenues may be affected.

Livestock Grazing

503. Livestock grazing is an important source of income for the San Carlos Apache Tribe. Tribal representatives have expressed concerns that grazing could be impacted.²⁹⁴ While there is no history of section 7 consultation efforts in relation to grazing activity on the Reservation, the Tribe believes that if the proposed CHD were in place requiring section 7 consultation, the Service could recommend modifications to grazing activities which could result in economic impacts for the Tribe. As the grazing areas overlap with the riparian area included in the 8,888 acres of CHD on the Reservation, impacts to this activity are possible.²⁹⁵ Information regarding potential grazing-related impacts resulting from flycatcher conservation was not available for inclusion in this draft economic analysis. It is anticipated that the final economic analysis will incorporate comments and additional information regarding impacts on the San Carlos Apache Reservation, if available.

7.7 **Rio Grande Recovery Unit**

7.7.1 **Upper Rio Grande Management Unit**

San Ildefonso

504. The San Ildefonso Pueblo encompasses 26,198 acres in New Mexico north of Santa Fe. Approximately 1,073 acres on the San Ildefonso Pueblo along the Rio Grande River are included in the proposed flycatcher critical habitat designation.

²⁹² Personal communication with Victoria Wesley, Forest Resource Program, San Carlos Apache Tribe, August 30, 2004.

²⁹³ Letter from Joe Sparks, Sparks, Tehan & Ryley, P.C. re: Request for Information Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher, dated September 7, 2004.

²⁹⁴ Personal communication with Service personnel, August 9, 2004; and Letter from Susan B. Montgomery, Sparks, Tehan & Ryley, P.C. re: Comments to Draft Economic Analysis Regarding Possible Designation of Critical Habitat for the Southwestern Willow Flycatcher on the San Carlos Apache Reservation, dated October 6, 2004.

²⁹⁵ Personal communication with Clark Richens, BIA San Carlos Agency, October 27, 2004. Acreage estimated based on GIS analysis. This acreage overstates area available for grazing because it includes areas in the Reservoir and Gila River bed.

San Ildefonso Socioeconomic Status

505. The 2000 population on the San Ildefonso Pueblo was 1,524. The unemployment rate was 6.4 percent in 2000, less than the average for New Mexico. Per capita income was \$14,848 in 2000. In addition, approximately 12.5 percent of the Pueblo's population lives below the poverty line, similar to average for New Mexico. These statistics indicate that economic situation on the San Ildefonso Pueblo is similar to that of the region; however, economic conditions in the region significantly lag national conditions.

San Ildefonso Potentially Affected Activities

506. Activities on San Ildefonso Pueblo lands likely impacted by flycatcher conservation activities are primarily limited to administrative costs related to consultation and surveying efforts. In 2003, the San Ildefonso Pueblo did a flycatcher survey of an area along the Rio Grande as part of the Environmental Assessment for their Bosque Restoration project. While the surveys and the restoration work were funded through BIA forestry and USFS grants, the Tribe likely expended some efforts in the form of staff time to participate in this project and develop an EA. To date there have not been any other projects on this Pueblo that have dealt with flycatcher issues. The San Ildefonso are planning another Bosque restoration project in the future; this will cover approximately 350 acres and will be a collaboration with funding from the Corps. The Tribe expects to undertake additional flycatcher survey efforts as part of this project.²⁹⁶ Because impacts will likely be limited to administrative and surveying efforts, future economic impacts to the San Ildefonso are expected to be minimal.

San Juan

507. The San Juan Pueblo encompasses 26,198 acres in New Mexico north of Santa Fe. Approximately 1,744 acres on the San Juan Pueblo along the Rio Grande River are included in the proposed flycatcher critical habitat designation.

San Juan Socioeconomic Status

508. The 2000 population on the San Juan Pueblo was 1,524. The unemployment rate was 6.4 percent in 2000, less than the average for New Mexico. Per capita income was \$14,848 in 2000. In addition, approximately 12.5 percent of the Pueblo's population lives below the poverty line, similar to average for New Mexico. These statistics indicate that economic situation on the San Juan Pueblo is similar to that of the region; however, economic conditions in the region significantly lag national conditions.

²⁹⁶ Personal communication with James Pena, Natural Resources Department, San Ildefonso Pueblo, September 3, 2004.

San Juan Potentially Affected Activities

509. Activities on the San Juan Pueblo likely to be impacted by flycatcher conservation activities are limited to administrative and surveying efforts conducted as part of riparian and wetlands restoration projects. There is no economic development currently planned in the riparian area along the Rio Grande other than Bosque restoration activities. The restoration projects began as early as 1994 and have been funded by various agencies under various collaborative programs. Currently, the San Juan Pueblo Environmental Affairs department employs nine Tribal members who all work on habitat restoration in a holistic manner. Habitat restoration activities include removal of non-native species, flycatcher surveys, and restoration of wetlands.²⁹⁷ In addition, the Pueblo of San Juan recently received a grant for \$237,146 from the Service for habitat restoration for the flycatcher and other riparian species. This project will restore 40 acres of riparian and wetland habitat to benefit the flycatcher on Tribal lands. Invasive non-native vegetation will be removed in favor of re-establishment of native species.²⁹⁸ Because impacts will likely be limited to administrative and surveying efforts included in habitat restoration projects funded by outside sources, future economic impacts to the San Juan Pueblo from flycatcher conservation are expected to be minimal.

Santa Clara

510. The Santa Clara Pueblo encompasses 45,969 acres in New Mexico north of Santa Fe. Approximately 1,609 acres on the Santa Clara Pueblo along the Rio Grande River are included in the proposed flycatcher critical habitat designation.

Santa Clara Socioeconomic Status

511. The 2000 population on the Santa Clara Pueblo was 10,658. The unemployment rate was 7.8 percent; per capita income was \$15,336, and 20 percent of the Pueblo's population lives below the poverty line. These statistics are similar to the averages for the State of New Mexico; however, economic conditions in the region significantly lag national conditions.

Santa Clara Potentially Affected Activities

512. The Santa Clara Pueblo has not experienced past economic impacts related to flycatcher conservation activities.
513. Information regarding potential future impacts resulting from flycatcher conservation was not available for inclusion in this draft economic analysis; it is anticipated that the final economic analysis will incorporate comments and additional information regarding impacts on the Santa Clara Pueblo, if available.

²⁹⁷ Email communication from Charles Lujan, Environmental Affairs, San Juan Pueblo, September 7, 2004.

²⁹⁸ U.S. Fish and Wildlife Service. 2004. News Release titled "Secretary Norton Announces \$9 Million in Grants to Tribes to Help Fund Fish and Wildlife Conservation Projects", August 26, 2004. Available at <http://news.fws.gov/NewsReleases/R9/9C040661-65B7-D693-7E629E4D8335644C.html>.

7.7.2 Middle Rio Grande Management Unit

Isleta

514. The Isleta Pueblo encompasses 211,045 acres in New Mexico south of Albuquerque. Approximately 2,018 acres on the Isleta Pueblo along the Rio Grande River are included in the proposed flycatcher critical habitat designation.

Isleta Pueblo Socioeconomic Status

515. The 2000 population on the Isleta Pueblo was 3,166. The unemployment rate was 9.6 percent, slightly higher than the State average. While per capita income was significantly lower than the State average at \$11,438, the poverty rate of 18.3 percent was approximately equal to the State average.

Isleta Pueblo Potentially Affected Activities

516. Based on discussion with Pueblo staff, past impacts of flycatcher conservation have been limited to providing assistance with surveying and monitoring. Surveying and monitoring has occurred on the Isleta Pueblo for the past five years, with funding provided by BIA. Surveys have been performed by the Natural Heritage Department of University of New Mexico, in coordination with Pueblo. The Isleta Pueblo expends its own resources for flycatcher conservation activities including costs for labor to escort survey crews and to coordinate and review results of the studies. In addition, the Pueblo has a Bosque management plan in place that covers the area proposed for CHD; this plan was created primarily for the silvery minnow. Future impacts related to flycatcher conservation are expected to be limited because the CHD area is already set aside from development and left in natural state.²⁹⁹

²⁹⁹ Personal communication with John Sorrell, Water Resources Department, Isleta Pueblo, August 16, 2004.