

DOCKET

11-AFC-4

DATE MAR 20 2012

RECD. MAR 23 2012

>>> "McKernan, Robert" <rmckernan@sbcm.sbcounty.gov> 3/20/2012 3:33 PM >>>
Good Afternoon,

Although I could not stay on the phone for the entire hearing yesterday because of scheduling issues (only 2:00-3:45PM), I did want to clarify one point that was stated in the hearing. The statement that no Elf Owl's have been observed along the lower Colorado River Valley for >25 years was in inaccurate.

The San Bernardino County Museum conducted focused Southwestern Willow Flycatcher (SWWF) surveys between 1996 and 2003 under contract for the Bureau of Reclamation. Our study areas were located from the southern portion of the Grand Canyon to the Mexico border of the Lower Colorado River and its tributaries. During this life-history study we recorded other riparian bird obligates utilizing and/or nesting at our >150 study sites for SWWF. I have attached one of the report appendices which provide the span of dates and locations of ELF Owl observations along the LCR.

McKernan, R. L. and G. T. Braden. 2001. Status, distribution, and habitat affinities of the Southwestern Willow Flycatcher along the lower Colorado River, Year 5 - 2000. Report submitted to the U. S. Bureau of Reclamation, U. S. Fish and Wildlife Service and U. S. Bureau of Land Management. May 2002.

McKernan, R. L. and G. T. Braden. 2001. Status, distribution, and habitat affinities of the Southwestern Willow Flycatcher along the lower Colorado River, Year 4 - 1999. Report submitted to the U. S. Bureau of Reclamation, U. S. Fish and Wildlife Service and U. S. Bureau of Land Management. February 2001.

McKernan, R. L. and G. T. Braden. 1999. Status, distribution, and habitat affinities of the Southwestern Willow Flycatcher along the lower Colorado River, Year 3 - 1998. Report submitted to the U. S. Bureau of Reclamation, U. S. Fish and Wildlife Service and U. S. Bureau of Land Management. March 1999.

McKernan, R. L. and G. T. Braden. 1998. Status, distribution, and habitat affinities of the Southwestern Willow Flycatcher along the lower Colorado River, Year 2 - 1997. Report submitted to the U. S. Bureau of Reclamation, U. S. Fish and Wildlife Service and U. S. Bureau of Land Management.

McKernan, R. L. 1997. Status, distribution, and habitat affinities of the Southwestern Willow Flycatcher along the lower Colorado River, Year 1 - 1996. Report submitted to the U. S. Bureau of Reclamation, U. S. Fish and Wildlife Service and U. S. Bureau of Land Management. November 1997.

McKernan, R. L. and G. T. Braden. 2002. Status, distribution, and habitat affinities of the Southwestern Willow Flycatcher along the lower Colorado River, Year 6 - 2001. Report submitted to the U. S. Bureau of Reclamation, U. S. Fish and Wildlife Service and U. S. Bureau of Land Management. May 2002.

All the best,

Robert L. McKernan
Director
San Bernardino County Museum
2024 Orange Tree Lane
Redlands, CA 92374
909.307.8427
909.307.0539 fax
rmckernan@sbcm.sbcounty.gov

web: www.sbcountymuseum.org

From: Scott White [mailto:Swhite@aspeneg.com]
Sent: Tuesday, March 20, 2012 12:49 PM
To: McKernan, Robert; Jody_Fraser@fws.gov; j. pagel (jpapel@rocketmail.com); Nisa Marks (nisa_marks@fws.gov); Erin Chandler (erin_chandler@fws.gov); Shankar Sharma; Kim Marsden (kmarsden@blm.gov); llapre@blm.gov
Cc: Heather Blair; Rick York (Ryork@energy.ca.gov)
Subject: RE: Yesterday's status conference

All – This msg bounced from some servers because of the large attachment (BSE's reply brief with risk assessment appendix). I'm sending it again without that attachment. It has not yet been posed on the project web page, but it should be avail. there soon. -SW

From: Scott White
Sent: Tuesday, March 20, 2012 12:38 PM
To: 'McKernan, Robert'; 'Jody_Fraser@fws.gov'; j. pagel (jpapel@rocketmail.com); Nisa Marks

(nisa_marks@fws.gov); Erin Chandler (erin_chandler@fws.gov); Shankar Sharma; Kim Marsden (kmarsden@blm.gov); llapre@blm.gov
Cc: Heather Blair; Rick York (Ryork@energy.ca.gov)
Subject: Yesterday's status conference

Thank you all for calling in to the Status Conference. I think your participation made it clear to the Committee that the agency biologists are in agreement about the project-specific need for the baseline data we have asked for. The committee will issue a project schedule in a week or so – that's when we will learn whether they accept our argument that the bird work is needed for our analysis.

Shankar – I'm sorry the WebEx system worked so poorly. Thanks for sending your follow-up email. For the future, I guess it will be best to use the phone, or different online microphone.

At CEC, I think our next steps for Rio Mesa will be the following. We will appreciate all the help and participation you can offer throughout the process.

1. Working with BSE and our engineering staff to better understand the hazard of the power tower technology. We are talking about holding a joint workshop with the Hidden Hills project, since both are BSE projects and both use similar technology.
2. Review the applicant's data responses. They are now available to download from the CEC web site. I have skimmed through some of the responses, and I suspect we'll need more detail on many of them.
3. BSE provides a Risk Analysis for migratory birds and golden eagles as an appendix to its Reply Brief (see attachment). We will need to review it and probably coordinate a response. Does this analysis provide sufficient background for us to evaluate impacts to these birds, per. CEQA, NEPA, MBTA, or BGEPA? In addition to baseline data, what further analysis will we need?
4. 2nd round of data requests. We will need to re-ask some of our 1st round DRs, and probably add some new ones. Desert kit fox is likely to be important. I'm also attaching CBD's data request reg kit fox fyi.

Thanks again, -SW

Scott D. White
ASPEN ENVIRONMENTAL GROUP
201 N. First Av., Suite 102
Upland, CA 91786
(909) 949-3686
c. (909) 234-8360
swhite@aspeneg.com

Appendix II. Riparian/wetland obligate bird species observed at Southwestern Willow Flycatcher study sites during 1996 through 2001. Observations include the duration of the specific species present, and if nesting was confirmed for each site. This list of bird species represents those which are considered rare or declining along the lower Colorado River (Rosenberg et al 1991). The dates of the below observations for these bird species generally reflect a portion of their breeding window along the lower Colorado River.

Study Site	Cooper=s Hawk <i>Accipiter cooperii</i>	Clapper Rail <i>Rallus longirostris yumanensis</i>	Yellow-billed Cuckoo <i>Coccyzus americanus occidentalis</i>	Elf Owl <i>Micrathene whitneyi</i>	Gilded Flicker <i>Colaptes mearnsi</i>	Brown-crested Flycatcher <i>Myiarchus tyrannulus</i>	Bell=s Vireo <i>Vireo bellii arizonae</i>	Yellow Warbler <i>Dendroica petechia sonorana</i>	Lucy=s Warbler <i>Vermivora luciae</i>	Yellow-breasted Chat <i>Icteria virens</i>	Summer Tanager <i>Piranga rubra cooperi</i>
	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed
Virgin River ©	05/14/97-07/10/97/yes 05/20/98-06/25/98/ yes 05/26/99-06/10/99/yes 05/24/00-06/15/00/yes 05/20/01-06/20/01/yes	05/25/97-07/20/97/no 05/20/98B07/10/98/no 05/01/99-08/03/99/yes 05/15/00-08/15/00/yes 05/17/01-07/23/01/yes	06/30/97-08/10/97/no 07/03/98-08/01/98/no 07/08/99-08/05/99/no 07/1/00-08/01/00/? 07/5/01-08/01/01/yes			06/03/98B8/03/98/yes 06/08/99-08/03/99/yes 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/10/98B8/10/98/yes 05/05/99-07/24/99/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/10/98B08/10/98/yes 05/04/99-07/16/99/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	5/10/98B8/10/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/10/98B08/10/98/yes 05/05/99-08/21/99/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/10/98B08/10/98/yes 05/08/99-08/15/99/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Pahranagat	06/03/98-07/10/98/no 05/28/99-06/26/99/? 05/26/00-06/11/00/? 05/15/01-06/15/01/?		07/02/98- ??/no 07/14/99-07/28/99/?? 07/1/00-08/01/00/? 07/1/01-08/01/01/yes					05/20/98-06/25/98/ yes € 05/10/99-07/26/25/99 yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes		05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Meadow Valley	6/01/98-06/29/98/no 05/26/99-06/10/99/yes 05/26/00-06/09/00/? 05/20/01-06/20/01/?						05/20/98-06/25/98/ yes 05/10/99-07/15/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/98-06/25/98/ yes € 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Grand Canyon	05/19/96-07/10/96/yes 05/12/97-06/14/97/no 05/25/98-07/25/98/no 05/21/99-07/15/99/no 05/20/01-07/20/01/?	05/26/96-06/30/96/yes 05/14/97-06/17/97no	6/29/96-8/10/96/yes 7/02/97-8/12/97/yes 6/30/98-8/16/98/no 7/12/99-7/30/99/?? 07/1/01-08/01/01/?			05/29/96-07/10/96/yes 06/01/97-07/14/97/no 06/04/98-07/06/98/no 06/08/99-07/12/99/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/14/97-07/10/97/yes 05/20/98-06/25/98/ yes 05/11/99-07/20/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/19/96-07/10/96/yes 05/12/97-06/14/97/yes 05/25/98-07/25/98/yes 05/20/99-06/25/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/19/96-07/10/96/yes 05/12/97-06/14/97/yes 05/25/98-07/25/98/yes 05/20/99-07/15/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/19/96-07/10/96/yes 05/12/97-06/14/97/yes 05/25/98-7/25/98/yes 05/21/99-07/19/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/19/96-07/10/96/yes 05/12/97-06/14/97/yes 05/25/98-07/25/98/yes 05/16/99-08/7/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Topock Marsh	05/20/96-07/05/96/yes 05/25/97-07/13/97/no 05/23/98-07/14/98/no 05/10/99-06/25/99/ no 05/20/01-06/17/01/?	05/20/96-07/05/96/no 05/18/97-06/27/97/no 05/23/98-05/25/98/no 05/05/99-06/29/99/yes 05/15/00-08/15/00/yes 05/17/01-08/30/01/yes	07/03/96-08/06/96/no 07/05/97-08/14/97/no 07/11/98-08/20/98/no 07/3/01-08/01/01/?		5/20/96-06/16/96/yes 5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/25/96-07/10/96/no 06/02/97-07/12/97/no 05/10/99-06/19/99yes 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/05/99-07/21/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/08/99-07/26/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/22/99-07/14/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//no 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/10/99-07/30/99/ yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/04/99-07/21/99/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes

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Topock Gorge		05/26/96-07/10/96/no 06/02/97-07/26/97/no 05/28/98-07/24/98/no 05/15/00-08/15/00/yes 05/17/01-07/23/01/?	07/1/00-08/01/00/?		5/15/00-07/15/00/? 5/15/01-07/15/01/?	06/01/00-08/15/00/yes	05/20/96-07/05/96/yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/05/96//yes 05/25/97-07/13/97//no 05/23/98-07/14/98//yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Lake Havasu	05/17/96-07/10/96/no 05/14/97-07/02/97/no 05/29/98-07/06/98/no 05/17/00-06/23/00/? 05/15/01-06/30/01/?	05/27/96-07/13/96/no 06/05/97-07/03/97/no 05/18/98-07/10/98/no 05/26/99-07/10/99/no 05/15/00-08/15/00/? 05/17/00-07/23/01/?	06/30/96-07/28/96/no 07/06/97-07/26/97/no 06/30/98-7/21/98/? 07/1/00-08/01/00/? 07/1/00-08/01/00/? 07/1/01-08/01/01/?	05/15/01-07/15/01	5/27/96-06/30/96/yes 6/01/97-06/25/97/yes 5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/27/96-07/03/96/yes 05/27/97-06/28/97/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/27/96-07/13/96//no 06/05/97-07/03/97//no 05/18/98-07/10/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/13/96//no 06/05/97-07/03/97//no 05/18/98-07/10/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/13/96//no 06/05/97-07/03/97//no 05/18/98-07/10/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/13/96//no 06/05/97-07/03/97//no 05/18/98-07/10/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/13/96//no 06/05/97-07/03/97//no 05/18/98-07/10/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Bill Williams	05/16/96-07/08/96/yes 05/21/97-06/30/97/yes 05/26/98-07/10/98/yes 05/20/99-07/20/99/yes 05/16/00-06/30/00/? 05/25/01-06/30/01/yes	05/24/97-07/05/97/no 05/08/98-07/21/98/no 05/15/00-08/15/00/yes 05/17/00-07/23/01/yes	07/02/96-8/10/96/yes 07/01/97-08/05/97/no 07/05/98-07/27/98/no 06/30/99-8/1/99/yes 07/1/00-08/01/00/? 07/1/01-08/01/01/?	05/29/96-06/15/96 05/21/97-06/01/97 06/02/98-07/02/98 05/15/00-07/15/00 05/15/01-07/15/01	5/17/96-07/03/96/yes 5/21/97-06/24/97/no 5/24/98-07/10/98/yes 5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/29/96-07/08/96/yes 05/21/97-08/02/97/yes 05/26/98-07/10/98/yes 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/29/96-07/08/96/yes 05/21/97-08/02/97/yes 05/26/98-07/10/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/96-07/08/96/yes 05/21/97-08/02/97/yes 05/26/98-07/10/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/96-07/08/96/yes 05/21/97-08/02/97/yes 05/26/98-07/10/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/96-07/08/96/yes 05/21/97-08/02/97/yes 05/26/98-07/10/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/96-07/08/96/yes 05/21/97-08/02/97/yes 05/26/98-07/10/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Headgate Dam		05/21/97-06/16/97/no 05/09/98-07/12/98/no 05/15/00-08/15/00/yes			5/15/00-07/15/00/?	05/29/98-07/12/98/no 06/01/00-08/15/00/yes	05/21/97-06/16/97//no 05/09/98-07/12/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/97-06/16/97//no 05/09/98-07/12/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/97-06/16/97//no 05/09/98-07/12/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/97-06/16/97//no 05/09/98-07/12/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/97-06/16/97//no 05/09/98-07/12/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Hall Island							05/24/97-07/02/97/no 06/01/98-07/01/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/97-07/02/97/no 06/01/98-07/01/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/97-07/02/97/no 06/01/98-07/01/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/97-07/02/97/no 06/01/98-07/01/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	
Ehrenberg			07/07/96-8/01/96/yes 07/12/97-?/?/no 07/01/98-8/02/98/yes	05/28/96-06/10/96/no 05/15/00-07/15/00	5/15/96-06/21/96/yes 5/10/97-06/29/97/no 5/21/98-07/12/98/yes	05/20/96-06/23/96/yes 05/20/97-06/29/97/no 05/21/98-07/12/98/no	05/15/96-06/21/96/yes 05/10/97-06/29/97/no 05/21/98-07/12/98/yes	05/15/96-06/21/96/yes 05/10/97-06/29/97/no 05/21/98-07/12/98/yes	05/15/96-06/21/96/yes 05/10/97-06/29/97/no 05/21/98-07/12/98/yes	05/15/96-06/21/96/yes 05/10/97-06/29/97/no 05/21/98-07/12/98/yes	05/15/96-06/21/96/yes 05/10/97-06/29/97/no 05/21/98-07/12/98/yes

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	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed
			07/02/98-08/10/98/? 07/1/00-08/01/00/yes 07/1/01-08/01/01/yes	05/15/01-07/15/01	5/15/00-07/15/00/? 5/15/01-07/15/01/?	06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Cibola Lake		05/26/96-07/01/96/no 06/01/97-07/10/97/no 05/26/99-07/11/99/no 05/15/00-08/15/00/yes 05/17/01-07/23/01/?					05/26/96-07/01/96/no 06/01/97-07/10/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/01/96/no 06/01/97-07/10/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/01/96/no 06/01/97-07/10/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/01/96/no 06/01/97-07/10/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/?
Cibola NWR		05/26/96-07/12/96/no 05/27/97-07/05/97/no 05/15/00-08/15/00/yes 05/17/01-07/23/01/?		06/01/96-06/28/96/no 05/25/97-06/16/97/no 05/15/00-07/15/00 05/15/01-07/15/01	05/26/96-07/01/96/no 05/23/97-06/20/97/no 5/15/00-07/15/00/? 5/15/01-07/15/01/?		05/26/96-07/12/96//no 05/27/97-07/05/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/27/97-07/05/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/27/97-07/05/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/27/97-07/05/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	
Walker Lake	05/18/96-07/02/96/no 05/26/97-07/08/97/no 05/28/98-06/30/98/no 05/26/98-7/05/98/no 05/26/00-06/25/00/yes 05/17/01-06/23/01/?	05/27/96-07/10/96/no 05/30/97-07/08/97/no 05/19/98-07/24/98/yes 05/15/00-08/15/00/yes 05/17/01-06/23/01/?	07/10/96-??/no 06/30/97-08/01/97/no 07/02/98-07/24/98/no 07/01/98-7/30/98/yes 07/1/00-08/01/00/? 07/1/01-08/01/01/?	05/15/01-07/15/01	5/16/96-07/08/96/yes 5/24/97-06/30/97/yes 5/30/98-06/21/98/no 5/15/00-07/15/00/yes 5/15/01-07/15/01/?	05/16/96-07/08/96/no 05/24/97-06/30/97/no 05/30/98-06/21/98/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/27/96-07/10/96//no 05/30/97-07/08/97//no 05/19/98-07/24/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/10/96//no 05/30/97-07/08/97//no 05/19/98-07/24/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/10/96//no 05/30/97-07/08/97//no 05/19/98-07/24/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/10/96//no 05/30/97-07/08/97//no 05/19/98-07/24/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/27/96-07/10/96//no 05/30/97-07/08/97//no 05/19/98-07/24/98/yes 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Draper Lake		05/26/96-07/12/96/no 05/28/97-07/01/97/no 05/19/98-07/24/98/no 05/26/99-07/10/99/yes 05/15/00-08/15/00/yes 05/17/01-06/18/01/?					05/26/96-07/12/96//no 05/28/97-07/01/97//no 05/19/98-07/24/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/28/97-07/01/97//no 05/19/98-07/24/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/28/97-07/01/97//no 05/19/98-07/24/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/28/97-07/01/97//no 05/19/98-07/24/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/12/96//no 05/28/97-07/01/97//no 05/19/98-07/24/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Paradise Valley	05/25/97-06/30/97/no 05/29/00-06/19/00/?	05/26/96-06/29/96/no 05/29/97-07/02/97/no 05/15/00-08/15/00/?	07/01/97-07/28/97/no 07/02/98-07/24/98/no		5/23/96-07/12/96/yes 06/01/97-06/28/97/no 5/15/00-07/15/00/?	05/23/96-07/12/96/no 06/01/97-06/28/97/no 05/29/98-07/02/98/no	05/26/96-06/29/96//no 05/29/97-07/02/97//no 05/15/00-07/30/00/yes	05/26/96-06/29/96//no 05/29/97-07/02/97//no 05/15/00-07/30/00/yes	05/26/96-06/29/96//no 05/29/97-07/02/97//no 05/15/00-07/30/00/yes	05/26/96-06/29/96//no 05/29/97-07/02/97//no 05/15/00-07/30/00/yes	05/26/96-06/29/96//no 05/29/97-07/02/97//no 05/15/00-07/30/00/yes

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Study Site	Cooper=s Hawk <i>Accipiter cooperii</i>	Clapper Rail <i>Rallus longirostris yumanensis</i>	Yellow-billed Cuckoo <i>Coccyzus americanus occidentalis</i>	Elf Owl <i>Micrathene whitneyi</i>	Gilded Flicker <i>Colaptes mearnsi</i>	Brown-crested Flycatcher <i>Myiarchus tyrannulus</i>	Bell=s Vireo <i>Vireo bellii arizonae</i>	Yellow Warbler <i>Dendroica petechia sonorana</i>	Lucy=s Warbler <i>Vermivora luciae</i>	Yellow-breasted Chat <i>Icteria virens</i>	Summer Tanager <i>Piranga rubra cooperi</i>
	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed
			07/1/00-08/01/00/?		5/15/01-07/15/01/?	06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes
Adobe Lake	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/26/99-06/10/99/yes 05/15/00-08/15/00/? 05/25/01-06/30/01/?		06/29/97-07/26/97/no 07/05/98-07/10/98/no	05/15/00-07/15/00 05/15/01-07/15/01	6/03/96-06/19/96/yes 5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 06/01/00-08/15/00/no 5/15/01-07/15/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Clear Lake							05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/20/96-07/12/96/no 05/30/97-07/10/97/no 05/30/98-06/28/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	
Taylor Lake			07/01/97-07/20/97/no 07/1/00-08/01/00/? 07/1/01-08/01/01/?	06/02/96-06/16/96/no 06/13/97-06/19/97/no 05/15/01-07/15/01	5/15/00-07/15/00/? 5/15/01-07/15/01/?	06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Camp Store, Picacho	05/25/97-07/08/97/no 05/20/98-06/25/98/no 05/25/99-06/30/99/no 05/15/00-08/15/00/? 05/20/01-06/30/01/?		06/21/96-07/16/96/no 07/01/97-7/22/97/yes 06/25/98-07/28/98/no 06/28/99-8/03/99/yes 07/1/00-08/01/00/? 07/1/01-08/01/01/?	06/03/96-06/10/96/no 06/13/97-06/19/97/yes 05/15/00-07/15/00/yes 05/15/01-07/15/01	05/21/97-06/28/97/no 5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Picacho west				06/13/97-06/19/97/yes 05/15/00-07/15/00/? 05/15/01-07/15/01	5/15/00-07/15/00/?		05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes	05/24/96-07/10/96/yes 05/25/97-07/08/97/yes 05/20/98-06/25/98/no 05/15/00-07/30/00/yes	05/15/00-07/30/00/yes 05/15/01-07/30/01/yes

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	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed
							05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	
Ferguson Lake	05/21/96-07/03/96/no 06/02/97-07/12/97/no 05/20/98-07/15/98/no	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-08/15/00/yes	06/20/96-07/14/96/no 07/02/97-07/24/97/no 06/25/98-07/25/98/no 07/1/01-08/01/01/?		05/21/96-07/03/96/no 05/28/97-07/12/97/no 5/15/00-07/15/00/?	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 06/01/00-08/15/00/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Imperial NWR				05/15/01-07/15/01	5/21/96-07/03/96/yes 5/15/00-07/15/00/? 5/15/01-07/15/01/?	06/01/00-08/15/00/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Below Laguna Dam			06/20/97-07/10/97/no 06/25/98-07/25/98/no 07/1/01-08/01/01/?	05/15/00-07/15/00/? 05/15/01-07/15/01	5/15/00-07/15/00/? 5/15/01-07/15/01/? 5/15/01-07/15/01/?	06/20/97-07/10/97/no 06/25/98-07/25/98/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Gila/Colorado River confluence		05/23/97-06/24/97/no 05/15/00-08/15/00/? 05/17/01-07/23/01/?	07/1/00-08/01/00/yes	05/15/00-07/15/00/? 05/15/01-07/15/01	5/15/00-07/15/00/? 5/15/01-07/15/01/? 5/15/01-07/15/01/?	06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/23/97-06/24/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/23/97-06/24/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/23/97-06/24/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/23/97-06/24/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/23/97-06/24/97//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Gila River	05/26/96-07/10/96/no 05/29/97-06/30/97/no 05/15/98-07/08/98/no 05/26/98-07/10/98/no 05/15/00-08/15/00/? 05/23/01-07/01/01/?	05/27/96-07/04/96/no 05/30/97-07/13/97/no 05/26/99-07/10/99/no 05/15/00-08/15/00/yes 05/17/01-07/23/01/?	06/20/96-07/20/96/no 06/30/97-07/10/97/no 07/01/98-07/20/98/no 07/1/00-08/01/00/? 07/1/01-08/01/01/?	05/15/01-07/15/01	5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/21/96-07/03/96/no 05/28/97-07/12/97/no 05/20/98-07/15/98/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/26/96-07/10/96//no 05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/10/96//no 05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/10/96//no 05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/10/96//no 05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/26/96-07/10/96//no 05/29/97-06/30/97//no 05/15/98-07/08/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes
Gadsden Bend	05/21/98-07/14/98/no	05/15/00-08/15/00/yes	07/1/00-08/01/00/yes	05/15/00-07/15/00/?	5/15/00-07/15/00/?	05/21/98-07/14/98/no 06/01/00-08/15/00/yes	05/21/98-07/14/98/no 05/15/00-07/30/00/yes	05/21/98-07/14/98/no 05/15/00-07/30/00/yes	05/21/98-07/14/98/no	05/21/98-07/14/98/no 05/15/00-07/30/00/yes	05/21/98-07/14/98/no 05/15/00-07/30/00/yes

Appendix II. Riparian/wetland obligate bird species observed at Southwestern Willow Flycatcher study sites during 1996 through 2001. Observations include the duration of the specific species present, and if nesting was confirmed for each site. This list of bird species represents those which are considered rare or declining along the lower Colorado River (Rosenberg et al 1991). The dates of the below observations for these bird species generally reflect a portion of their breeding window along the lower Colorado River.

Study Site	Cooper=s Hawk <i>Accipter cooperii</i>	Clapper Rail <i>Rallus longirostris yumanensis</i>	Yellow-billed Cuckoo <i>Coccyzus americanus occidentalis</i>	Elf Owl <i>Micrathene whitneyi</i>	Gilded Flicker <i>Colaptes mearnsi</i>	Brown-crested Flycatcher <i>Myiarchus tyrannulus</i>	Bell=s Vireo <i>Vireo bellii arizonae</i>	Yellow Warbler <i>Dendroica petechia sonorana</i>	Lucy=s Warbler <i>Vermivora luciae</i>	Yellow-breasted Chat <i>Icteria virens</i>	Summer Tanager <i>Piranga rubra cooperi</i>
	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed	period present/ breeding confirmed
	05/15/00-08/15/00/?	05/17/01-07/23/01/?	07/1/01-08/01/01/?	05/15/01-07/15/01	5/15/01-07/15/01/?	5/15/01-07/15/01/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes	05/15/00-07/30/00/yes	05/15/01-07/30/01/yes	05/15/01-07/30/01/yes
Hunter=s Hole	05/21/98-07/07/98/no		06/18/98-07/07/98/no 07/1/00-08/01/00/?		05/29/98-07/07/98/no 5/15/00-07/15/00/? 5/15/01-07/15/01/?	05/29/98-07/07/98/no 06/01/00-08/15/00/yes 5/15/01-07/15/01/yes	05/21/98-07/14/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/98-07/14/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/98-07/14/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/98-07/14/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes	05/21/98-07/14/98//no 05/15/00-07/30/00/yes 05/15/01-07/30/01/yes

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© includes Virgin River floodplain between Littlefield, AZ and the Virgin River Delta, NV.