



Planning and Resource Management for Our Communities and the Environment

2 April 2002

Scott E. Shewbridge
Senior Engineer - Hydroelectric
El Dorado Irrigation District
2890 Mosquito Road
Placerville, California 95667

Subject: Technical Memorandum Number 1 – Summary Report for Northern
Goshawk, California Spotted Owl, Peregrin Falcon, Bald Eagle and Willow
Flycatcher Surveys

Dear Mr. Shewbridge:

Attached please find the final results for the above-referenced report prepared by EIP Associates and KDH Biological Resources Consultants as requested by the Forest Service for the El Dorado Irrigation District project license application, FERC No. 184. This is a final draft for distribution. The primary preparers of this report are listed below:

EIP Associates

Roy Leidy
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KDH Biological Resources

Dennis Hood

Maps of the specific survey locations and datasheets of special status species have been suppressed from the report. Because of the sensitivity of the species, location information should not be posted on the EID website and available to the public. If you would like copies of the datasheets and maps for purposes of EID files I can provide hardcopies. Should you have any questions or wish to discuss this report please contact me.

Sincerely,

A handwritten signature in cursive script that reads 'Roy Leidy'.

Roy Leidy
Director, Fisheries and Aquatic Resources

Attachment



Planning and Resource Management for Our Communities and the Environment

EL DORADO IRRIGATION DISTRICT FEDERAL ENERGY REGULATORY COMMISSION PROJECT NUMBER 184

SUMMARY REPORT FOR NORTHERN GOSHAWK, CALIFORNIA SPOTTED OWL, PEREGRIN FALCON, BALD EAGLE AND WILLOW FLYCATCHER SURVEYS

This report summarizes the survey results from 2000 and 2001 for the El Dorado Irrigation District (EID) no. 184 FERC Relicensing Project. The following narratives describe survey results for northern goshawks, California spotted owls, peregrine falcons, bald eagles, and willow flycatchers. Maps of the specific survey locations and datasheets of special status species have been suppressed. For additional information regarding specific species locations please contact EID.

I. Northern Goshawk Surveys

In early 2000, six distinct patches of potential northern goshawk habitat in the vicinity of Silver Lake, Caples Lake, and Echo Lake were identified and mapped by USFS personnel. During the summer of 2000, survey visits were conducted at these six sites in accordance with the United States Forest Service (USFS) *Survey Protocol for Northern Goshawk on National Forest Lands in the Pacific Southwest Region 5: June 1992*. In 2001, survey visits were conducted using the revised USFS protocol entitled: *Survey Methodology for Northern Goshawks in the Pacific Southwest Region, USFS, 9 August 2000*. Calling stations were established using a belt-transect methodology and adult and juvenile calls were broadcast from each station (see attached maps and Appendix A). Site specific results are presented below and summarized in Table 1.

Silver Lake Southeast

Northern goshawk surveys were conducted on the southeast side of Silver Lake at approximately 7400-7600 feet in elevation in Amador County (Sections 4, 8 & 9, Township 9N, Range 17E). In each survey year, two survey visits were conducted. In 2001, an initial stand search visit was also conducted (Table 1). Twenty calling stations were established (Map #1, Appendix A).

On visit 1 in 2000, an adult goshawk responded with a kecking call between points 10 and 11. No visual detection occurred and a nest was not located. On the second visit, a juvenile goshawk responded to the tape broadcast with repeated begging calls. The juvenile goshawk was then located visually, and the nest was found approximately 50 yards away (Table 1, Map #1, Appendix A). No adults were observed.

No northern goshawks were detected during the course of visits 1 and 2 in 2001. During the preliminary stand search visit and subsequent survey visits, the 2000 nest did not appear active, and was in a state of disrepair. Nonetheless, several areas with recent sign of goshawk activity were located, including: two plucking posts, fresh white wash, recently shed goshawk feathers, and a regurgitated pellet. These signs were scattered over a relatively wide area (40 acres) located primarily within Township 9N, Range 7E, Section 8, SE ¼, NE & SW 1/16ths (Table 1).

A two-year, four-visit survey protocol is now complete for this site, with successful nesting confirmed in 2000. In 2001, occupancy was confirmed, but nesting could not be confirmed.

Silver Lake Northeast

Northern goshawk surveys were conducted on the northeast side of Silver Lake at approximately 7300-7600 feet in elevation in Amador County (Sections 32 & 33, Township 10N, Range 17E, and section 4, Township 9N, Range 17E). Two survey visits were conducted during each survey year (Table 1). Twenty-five calling stations were established (Map #2, Appendix A).

A two-year, four-visit survey protocol is now complete for this site. No northern goshawks were detected.

Caples Lake Southeast

Northern goshawk surveys were conducted on the southeast side of Caples Lake at approximately 7800-8200 feet in elevation in Alpine County (Sections 19, 20, 29 & 30, Township 10N, Range 18E). Two survey visits were conducted during each survey year (Table 1). Sixteen calling stations were established (Map #3, Appendix A).

A two-year, four-visit survey protocol is now complete for this site. No northern goshawks were detected.

An immature (2 year old) bald eagle was detected during goshawk surveys within this site in 2000. During the 2001 goshawk surveys, an adult bald eagle (and waterfowl remains) and an osprey were detected within the site. All of these additional raptor detections occurred within 200 yards of the lake margin in sections 19 (SE ¼) and 20 (SW ¼), Township 10N, Range 18E.

Caples Lake Southwest

Northern goshawk surveys were conducted on the southwest side of Caples Lake at approximately 7800-8600 feet in elevation in Alpine County (Sections 19 & 30, Township 10N, Range 18E, and sections 23 & 26, Township 10N, Range 17E). Two survey visits were conducted during each survey year (Table 1). Thirty-four calling stations were established (Map #4, Appendix A).

A two-year, four-visit survey protocol is now complete for this site. No northern goshawks were detected.

In both 2000 and 2001, an active great horned owl roost area was found at approximately 8360 feet along the boundaries of sections 26 and 30, near calling station 26.

Caples Creek

Northern goshawk surveys were conducted along Caples Creek and its tributaries to the northwest and downstream of the Caples Lake spillway at approximately 7600-7700 feet in elevation in Alpine and El Dorado Counties (Sections 15 & 22, Township 10N, Range 17E). Two survey visits were conducted during each survey year (Table 1). Eleven calling stations were established (map #5, Appendix A).

A two-year, four-visit survey protocol is now complete for this site. No northern goshawks were detected.

Echo Lake

Northern goshawk surveys were conducted along the north-facing slope of the ridge paralleling Upper and Lower Echo Lakes to the south at approximately 7500-8000 feet in elevation in El Dorado County (Sections 1 & 2, Township 11N, Range 17E, and Section 35, Township 12N, Range 17E). In 2000, US Forest Service personnel conducted survey visits 1 and 2. In 2001, KDH staff conducted an additional two visits (Table 1). The number of calling stations used in 2000 is unknown; twenty-five calling stations were established in 2001 (Map #6, Appendix A).

A two-year, four-visit survey protocol is now complete for this site. No northern goshawks were detected.

In 2000, an osprey was observed hunting during goshawk survey visit 2, and in 2001 a pair of ospreys were observed at an active nest during visits 1 and 2. The osprey nest was located in section 1 (NE ¼ of NW ¼).

II. California Spotted Owl SurveysEcho Lake

In early 2000, one patch of suitable California spotted owl habitat in the vicinity of Lower Echo Lake was identified and mapped by USFS personnel. This survey area consisted of Protected Activity Center (P.A.C.) ED177 on the Eldorado National Forest, and the area directly north of the PAC up to the southern shore of Lower Echo Lake at an elevation of approximately 7200 – 8000 feet (Section 1, Township 11N, Range 17E, and Section 6, Township 11N, Range 18E). During the summers of 2000 and 2001 survey visits were conducted at this site in accordance with the USFS *Protocol for Surveying for Spotted Owls in Proposed Management Activity Areas and Habitat Conservation Areas, March 12, 1991 (Revised February 1993)*.

In 2000, survey visits were completed by USFS personnel at 4 walk-in call points established approximately ¼ mile apart along the unmarked trail that travels from the Echo Lake Marina west along the southern shore of Lower Echo Lake. Three nighttime survey visits and one follow-up visit were conducted during June, July, and August 2001 (Table 2). California spotted owls were not detected during visit 1, but on visit 2 a female spotted owl responded with barking and contact calls from the ridgeline along the northern border of PAC ED177, near the middle of section 1. The follow-up visit again located a female who responded with barking. This time the female was located at approximately 7600 feet in elevation on the south side of the ridge, and inside PAC ED 177 (section 1, SE 1/4). The surveyors were unable to get close enough to the female to offer mice.

No further follow-up visits were conducted, and no spotted owls were detected on the third nighttime survey visit in 2001 (Table 2, Map #7, Appendix A).

In 2001, survey visits were completed by KDH staff at 4 walk-in call points established approximately ¼ mile apart along the ridge that forms the northern boundary of PAC ED 177. The call points were moved from their 2000 locations along the lakeshore to the ridgeline after consultation with USFS biologists on the Lake Tahoe Basin Management Unit. It was agreed that by placing the call points along the ridge, surveys would more effectively cover the entire habitat patch. The first visit in 2001 was a historical visit to the 2000 roost area. During this visit a recently shed spotted owl feather was found in the vicinity of the roost area, but no spotted owls responded or were visually detected. No California spotted owls were detected during nighttime survey visit 2. On visit 3, a male spotted owl responded with 4-note hoots from an area just south of the ridgeline near call point 3 (Map #7). During the follow-up visit no spotted owls were detected, but a roosting great horned owl was located. Survey visit 4 did not result in a spotted owl detection, however a great horned owl responded along the ridge near call point 3.

A two-year, six-visit survey protocol is now complete for this site. The site was confirmed occupied in both 2000 and 2001.

III. Peregrine Falcon Surveys

Thunder Mountain / Silver Lake

In early 2000, one patch of suitable peregrine falcon nesting habitat in the vicinity of Silver Lake was identified and mapped by USFS personnel. This habitat area consisted of the western-most cliff faces of Thunder Mountain, northeast of Silver Lake at an elevation of approximately 8000 - 9000 feet (Section 33, Township 10N, Range 17E). During the summers of 2000 and 2001 eight survey visits were conducted at this site following the USFS *Draft Peregrine Falcon Nesting Survey Protocol* provided by the USFS Amador Ranger District Office on March 13, 2000.

Four survey visits were conducted in each survey year and were spread over a two-month period, with each visit separated by at least one week (Table 3, Map #8, Appendix A). Each survey visit consisted of observing the cliff faces for a four-hour period.

A two-year, eight-visit survey protocol is now complete for this site. No peregrine falcons were detected. During visit 2 in survey year 2000, and visits 1, 2, and 3 in survey year 2001, at least one golden eagle was observed soaring above the cliff face.

IV. Bald Eagle Surveys

In an effort to determine bald eagle presence in the vicinity of Caples and Silver Lakes, bald eagle surveys were conducted in the summers of 2000 and 2001. Survey methodology followed the USFS *Draft Bald Eagle Summer Survey Protocol* provided by the USFS Amador Ranger District Office on March 13, 2000.

Six visits were conducted at each lake in each year and were spread over a two month period (Table 4, Appendix A). For each survey year, three of the six visits occurred during morning hours

(completed prior to 11:00 a.m.) and three occurred during late afternoon (initiated after 2:00 p.m.). No more than two surveys at a given lake were conducted within a single weeks time. Each survey visit consisted of observing the lake and surrounding shoreline for a four-hour period.

Silver Lake

On the first morning visit in 2000, one immature (2 year old) bald eagle was observed fishing briefly near the dam at the northern end of Silver Lake. During the last three visits in 2001 (both morning and afternoon), multiple bald eagles were observed fishing and roosting in various locations around the lake. On one occasion two adults and one immature were seen soaring together over the lake. Additionally, two adults were seen perched together in the same roost tree on more than one occasion (Table 4, Map #9, Appendix A).

Two years of bald eagle surveys have been completed to protocol, with bald eagle presence confirmed at Silver Lake in both 2000 and 2001. Bald eagle use appeared to increase markedly during late summer and early fall 2001.

Incidental to the bald eagle surveys, ospreys were observed at Silver Lake during visits 1, 2, 5 of survey year 2000 and during each visit in survey year 2001.

Caples Lake

On visit 2 in 2000, one immature (2 year old) bald eagle was observed flying from the east across Caples Lake and out of sight over the dam. In 2001 during visit 6 an adult bald eagle flew from the west and perched in a large red fir on the east side of the lake where it roosted for approximately one hour.

Bald eagles were observed at Caples Lake on four additional occasions in 2000 and 2001 during surveys for other species. On 07/28/00 an immature bald eagle was observed roosting at first light in a snag east of the spillway. On the same morning an immature alighted in a snag on the east side of the lake, presumably in response to our broadcast of juvenile goshawk calls. On the morning of 06/25/01 a juvenile bald eagle was observed flying along the north boundary of the lake, and on 07/10/01 an adult bald eagle flew overhead on the east shore of the lake, again presumably in response to broadcast goshawk calls (Table 4, Map #10, Appendix A).

Two years of bald eagle surveys have been completed to protocol, with bald eagle presence at Caples Lake confirmed in both 2000 and 2001.

Incidental to the bald eagle surveys, ospreys were observed at Caples Lake during visit 4 (survey year 2000) and 3 (survey year 2001).

V. Willow Flycatcher Surveys

In early 2000, four distinct patches of potential willow flycatcher habitat in the vicinity of Silver Lake and Caples Lake were identified and mapped by USFS personnel. During the summer of 2001, survey visits were conducted at these four sites in accordance with the United States Forest Service (USFS) *A Willow Flycatcher Survey Protocol for California, June 6, 2000*. Survey points were established every 50 m and the “fitz-bew” song was broadcast from each point (see attached maps and data sheets). Two visits were conducted at each site. Site-specific results are presented below and summarized in Table 5.

Caples Maintenance Station

In 2001 two surveys for willow flycatchers were conducted at the unnamed meadow west of the Cal Trans Caples Lake Maintenance station at approximately 7900 feet in elevation (Section 18, Township 10N, Range 18E). Eighteen survey points were established (Map #11, Appendix A).

A one-year survey protocol is complete for this site, with willow flycatchers absent during 2001.

Caples Creek

In 2001, two surveys for willow flycatchers were conducted at the unnamed meadow north of highway 88 and the Kirkwood Inn at the confluence of Caples Creek and Kirkwood Creek at approximately 7600 feet in elevation (Sections 15 & 22, Township 10N, Range 17E). Twenty-three survey points were established (Map #12, Appendix A).

A one-year survey protocol is complete for this site, with willow flycatchers absent during 2001.

Plasses Meadow

In 2001, two surveys for willow flycatchers were conducted at Plasses meadow along the south shore of Silver Lake at approximately 7300 feet in elevation (Section 8, Township 9N, Range 17E). Fifteen survey points were established (Map #13, Appendix A).

A one-year survey protocol is complete for this site, with willow flycatchers absent during 2001.

Kirkwood Inn

In 2001, two surveys for willow flycatchers were conducted at the unnamed meadow directly east of Kirkwood Inn and north of Highway 88 along Kirkwood Creek at approximately 7700 feet in elevation (Section 22, Township 10N, Range 17E). Five survey points were established (Map #14, Appendix A).

A one-year survey protocol is complete for this site, with willow flycatchers absent during 2001.

Table 1. Summary of northern goshawk survey results for FERC 184 reservoirs, 2000 & 2001.

Site Name	Survey Year	Visit #	Date	Results
Silver Lake SE	2000	1	6/29/00 6/30/00	Adult goshawk kecking response – no visual
		2	7/27/00	Found juvenile goshawk and nest
	2001	Preliminary stand search	6/26/01	No response - fresh goshawk sign
		1	6/28/01 7/05/01	No response - fresh goshawk sign
		2	7/30/01 7/31/01	No response - fresh goshawk sign
Silver Lake NE	2000	1	6/22/00 6/28/00	No response
		2	7/20/00 7/21/00	No response
	2001	1	6/19/01 6/22/01	No response
		2	7/23/01	No response
Caples Lake SE	2000	1	6/30/00	No response
		2	7/28/00	No response – immature bald eagle flies in and perches.
	2001	1	6/14/01	No response
		2	7/10/01	No response - osprey and adult bald eagle respond to broadcast calls.
Caples Lake SW	2000	1	6/21/00 6/22/00	No response
		2	7/18/00 7/19/00	No response
	2001	1	6/12/01 6/13/01 6/14/01	No response
		2	7/11/01 7/17/01	No response
Caples Creek	2000	1	6/28/00	No response
		2	7/21/00 7/25/00	No response
	2001	1	6/15/01	No response
		2	7/20/01	No response
Echo Lake	2000	1	6/28/00	No response – osprey detected
		2	8/22/00	No response
	2001	1	7/06/01	No response – active osprey nest
		2	7/25/01	No response – active osprey nest

Table 2. Summary of California spotted owl survey results for FERC 184 reservoirs, 2000 & 2001.

Site Name	Survey Year	Visit #	Date	Results
Echo Lake – PAC ED177	2000	1	6/20/00	No response
		2	7/19/00	Female spotted owl detected
		Follow-up	7/20/00	Female spotted owl located at roost
		3	8/02/00	No response
	2001	1 (Historical visit)	6/06/01	No response - fresh spotted owl & great horned owl sign
		2	6/14/01	No response
		3	6/21/01	Male spotted owl detected
		Follow-up	6/22/01	No response – great horned owl located at roost
		4	8/08/01	No response – great horned owl detected

Table 3. Summary of peregrine falcon survey results for FERC 184 reservoirs, 2000 & 2001.

Site Name	Survey Year	Visit #	Date	Results
Thunder Mountain – Silver Lake	2000	1	05/31/00	No peregrine falcons observed
		2	06/06/00	No peregrine falcons observed – golden eagle present
		3	07/06/00	No peregrine falcons observed
		4	07/13/00	No peregrine falcons observed
	2001	1	06/07/01	No peregrine falcons observed – golden eagle present
		2	06/30/01	No peregrine falcons observed – golden eagle present
		3	07/12/01	No peregrine falcons observed – golden eagle present
		4		No peregrine falcons observed

Table 4. Summary of bald eagle survey results for FERC 184 reservoirs, 2000 & 2001.

Site	Survey Year	Visit #	Date	a.m./p.m.	Results
Silver Lake	2000	1	7/06/00	a.m.	1 immature (2 yr) bald eagle observed – ospreys present
		2	7/11/00	p.m.	No bald eagles observed – ospreys present
		3	7/14/00	p.m.	No bald eagles observed
		4	8/12/00	a.m.	No bald eagles observed
		5	8/27/00	p.m.	No bald eagles observed – ospreys present
		6	8/28/00	p.m.	No bald eagles observed
	2001	1	8/02/01	p.m.	No bald eagles observed – ospreys present
		2	8/07/01	a.m.	No bald eagles observed – ospreys present
		3	8/13/01	p.m.	No bald eagles observed – ospreys present
		4	8/24/01	a.m.	2 adult bald eagles observed – ospreys present
		5	9/13/01	p.m.	2 adult & 1 immature (2 yr) bald eagles observed – ospreys present
		6	9/21/01	a.m.	2 adult bald eagles observed – ospreys present
Caples Lake	2000	1	8/12/00	p.m.	No bald eagles observed
		2	8/27/00	a.m.	1 immature (2 yr) bald eagle observed
		3	8/28/00	a.m.	No bald eagles observed
		4	9/17/00	p.m.	No bald eagles observed – ospreys present
		5	9/22/00	a.m.	No bald eagles observed
		6	9/27/00	a.m.	No bald eagles observed
	2001	1	8/02/01	a.m.	No bald eagles observed
		2	8/07/01	p.m.	No bald eagles observed
		3	8/13/01	a.m.	No bald eagles observed – ospreys present
		4	9/04/01	p.m.	No bald eagles observed
		5	9/14/01	a.m.	No bald eagles observed
		6	9/20/01	p.m.	1 adult bald eagle observed

Table 5. Summary of willow flycatcher survey results for FERC 184 reservoirs, 2001.

Site Name	Visit #	Date	Results
Caples Maintenance Station	1	6/25/01	No willow flycatchers detected – bald eagle observed
	2	7/10/01	No willow flycatchers detected
Caples Creek	1	6/19/01	No willow flycatchers detected
	2	7/09/01	No willow flycatchers detected
Plasses Meadow	1	6/13/01	No willow flycatchers detected
	2	6/19/01	No willow flycatchers detected
Kirkwood Inn	1	6/15/01	No willow flycatchers detected
	2	7/09/01	No willow flycatchers detected