



**Humboldt
Redwood™**

Peregrine Falcon Annual Report

2020

February 1, 2021



Cover photo: Scotia Bluffs eyrie (HRC Staff).

Project Description

Title: Peregrine Falcon HCP Monitoring

Purpose: Habitat Conservation Plan (HCP) monitoring

Date Initiated: March 1999

Projected End Date: Ongoing

Manager: Sal Chinnici, Director, Forest Sciences

Executive Summary:

During the 2020 peregrine falcon breeding season we conducted surveys for peregrine falcon activity at eight total sites, including seven known eyries (nests) at Scotia Bluffs, Holmes Bluff, Tom Gulch, Shively Bluff, South Runenburg, Clapp Ridge, and McCready Ridge; and a new nest within the Runenburg territory (West Runenburg).

Surveys were to monitor the eyries for possible nesting activity, monitor the nests during timber operations, or to confirm fledging of juveniles prior to commencement of timber operations or road work within 0.5-mile of a nesting area. The Tom Gulch snag has also been used by ospreys and northern spotted owls for nesting in the past, and so the snag was monitored for potential nesting activity by those species as well. The Scotia Bluffs and West Runenburg nests were occupied in 2020. The McCready Ridge, Clapp Ridge and Holmes Bluff territories had peregrine presence, but no observations of nesting activity. No peregrine activity was observed at the Tom Gulch, Shively Bluff, or South Runenburg territories. There were peregrine fledglings produced at the Scotia Bluffs and West Runenburg eyries.

No changes in the HCP peregrine falcon monitoring strategy are recommended at this time.

Project Manager / Primary Author



Sal Chinnici

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INTRODUCTION

The American peregrine falcon (*Falco peregrinus anatum*) is a covered species under the HRC HCP. The species was formerly listed as endangered under the California State Endangered Species Act and also under the Federal Act but has been found to be recovered and delisted pursuant to both the State and Federal Acts. It is also a Board of Forestry Sensitive Species, and a California Fully Protected Species. The objective of surveying for peregrine falcons on HRC lands is to survey traditional (known) and potential nest sites and adjacent habitat if timber operations are to occur within 0.5 mile (conventional operations), or 1.0 mile (e.g., helicopter operations), and to apply HCP nest site protection measures when necessary to ensure a high probability of successful nesting.

METHODS

Surveys were conducted according to section 6.5.2.1 of HRC's HCP, the Mutually Agreed Upon Peregrine Falcon Survey Language (as modified, Appendix I) and followed guidelines in both the Protocol for Observing Known and Potential Peregrine Falcon Eyries in the Pacific Northwest (Pagel 1992), and the U.S. Fish and Wildlife Monitoring Protocol (USFWS 2003). Additional nest spot checks or additional surveys may be done to establish whether a site is active, occupied, or to assess nesting success if applicable. These spot checks or additional surveys are assigned by the Lead Biologist as necessary.

Monitoring of nesting status was conducted at the Tom Gulch, Scotia Bluffs, Holmes Bluff, Shively Bluff, and Clapp Ridge sites as no timber operations were planned within the appropriate disturbance minimization buffers. South Runenburg was surveyed to determine nesting status and to seasonally restrict any timber operations within the buffers as required. During those surveys, a new nest in the territory (West Runenburg) was located by surveying the area for potential new nest ledges. McCready Ridge was surveyed concurrent with operations per HCP requirements. Survey locations, dates, associated THPs, and status results for 2020 surveys are shown in Table 1.

Table 1. 2020 Peregrine falcon survey schedule.

Known Eyrie Location	Associated THP (name, #)	Visit 1 Date	PEFA activity?	Visit 2 Date	PEFA activity?	Visit 3 Date	PEFA activity?
Tom Gulch	Monitor only	5/4/20	NC	6/4/20	NC	-	-
Scotia Bluffs	Monitor only	6/5/20	PN2J	6/30/20	PN2J	-	-
Holmes Bluff	Monitor only	4/21/20	PU	6/5/20	PU	-	-
Shively Bluff	Monitor only	6/4/20	NC	6/29/20	NC	-	-
South Runenburg	Corbett East (17-125), LVD 17 (17-107)	5/21/20	NC	6/8/20	NC	-	-
West Runenburg	Corbett East (17-125), LVD 17 (17-107)	6/8/20	PN2J	6/29/20	PN2J	-	-
McCready Ridge	Mid McCready 2018 (18-00165)	1/24/20	NC	2/19/20	U	3/16/20	U
Clapp Ridge	Monitor only	5/4/20	NC	6/4/20	U	-	-

NC = no contact, U = unknown status, PN = pair nesting, PNJ = pair with juvenile(s), PNN = pair not nesting, PU = pair unknown, PF = pair failed, SA = sub adult, NA = Not applicable.

RESULTS

The Scotia Bluffs and West Runenburg nests were occupied in 2020 by pairs of peregrines and each produced two fledglings (Table 2). The McCready Ridge, Clapp Ridge and Holmes Bluff territories had peregrine presence, but no observations of nesting activity. A pair was observed at Holmes Bluff. No peregrine activity was observed at the Tom Gulch, Shively Bluff, or South Runenburg territories. There were peregrine nestlings produced at the Scotia Bluffs and West Runenburg eyries.

Surveys at the South Runenburg nest revealed that the historic nest ledge may have been compromised or become unusable due to collapse of the rock face. On subsequent surveys of the

area a new nest ledge was located northwest of the historic site (“West Runenburg”). This West Runenburg eyrie had a nesting pair that produced two fledglings. Observations indicate that it is likely that this is the same territorial pair.

No operations were conducted within the 0.5-mile buffer of occupied nests during the breeding season, with the exception of the McCready Ridge historic nest tree, which had surveys concurrent with operations as per HCP language. Operations were greater than 0.25-mile from the historic nest trees. There was one observation of a foraging peregrine, but no activity at either historic nest tree.

The percent of known territories occupied in 2020 was 71.4%, which was the same as the 2019 proportion, with a mean of 83% over the period 1999-2020 (Figure 1). The reproductive rate (measured as number of juveniles per occupied territory) was 0.8 in 2020, a decrease from the 1.2 result in 2019, with a mean of 0.81 over the period 1999 - 2020 (Figure 2). Reproductive rate decreased in 2020 after showing an increase over the previous three years.

Table 2. Status of HRC peregrine falcon eyries 2006 - 2020 (if known).

Eyries	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Scotia Bluffs	PN4J	PN	PNN	PU	PN2J	PN2J	PN1J	PN1J	PN2J	PN3J	PNF?	U	PU	PN2J	PN2J
Holmes Bluff	PU	M	U + SA	PU	PU	PN2J	PN2J	PN1J	PU	PN2J	PN3J	PU	PN3J	PU	PU
Shively Bluff					PU	PN2J	PN3J	PN2J	PN3J	U	PU	NC	NC	NC	NC
Tom Gulch		PN1J	PN2J	NC	NC	NC	NC	PU	NC	NC	NC	NC	NC	NC	NC
South Runenburg								PN2J	NC	PN2J	U	PN3J	PU	PNN	NC
West Runenburg															PN2J
McCready Ridge											PN	PU	NC	PN2J	U
Clapp Ridge													PN2J	PN2J	U

NC = no contact, U = unknown status, PN = pair nesting, PNJ = pair with juvenile(s), PNN = pair not nesting, PU = pair unknown, PNF = pair failed, SA = subadult.

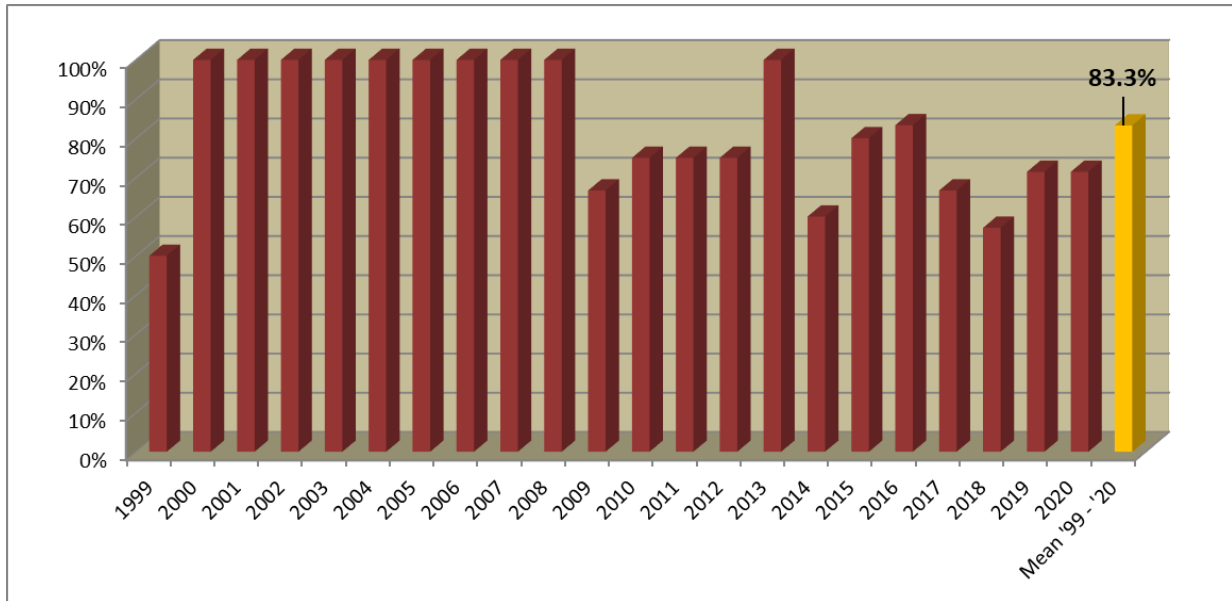


Figure 1. Percent of HRC territories occupied and mean 1999 - 2020.

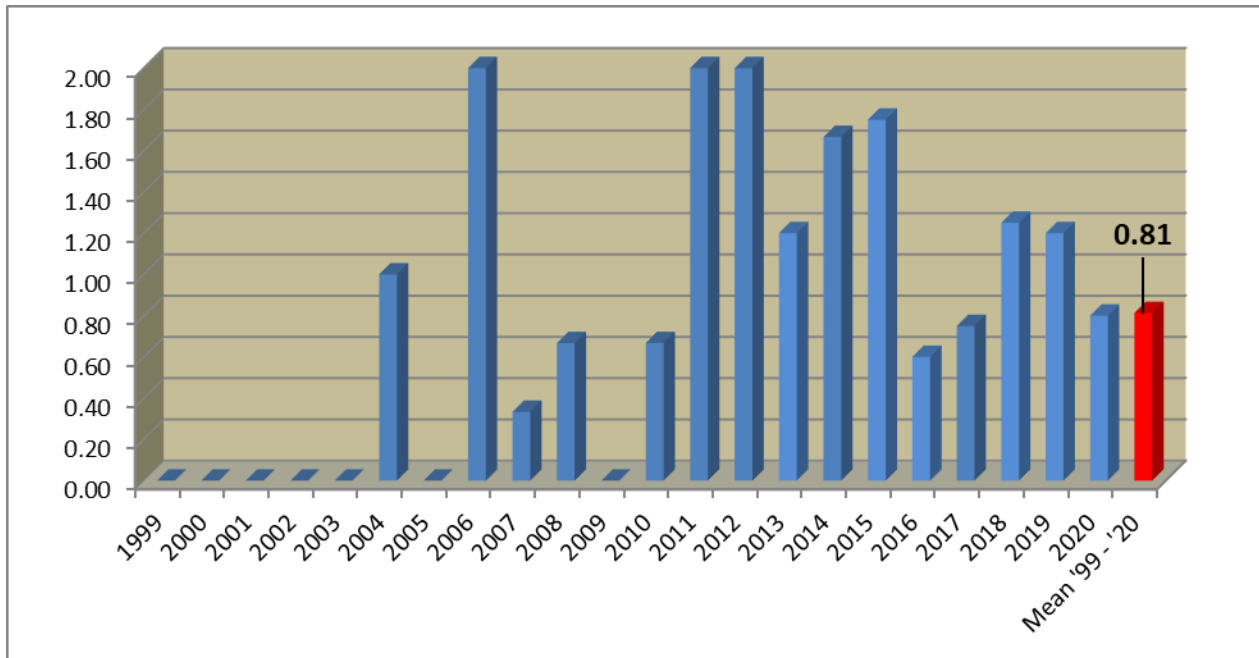


Figure 2. Reproductive rate for HRC occupied territories and mean 1999 - 2020.

DISCUSSION AND RECOMMENDATIONS

Occupancy and reproduction for the now seven known peregrine falcon territories on or adjacent to HRC lands continues to be relatively high over the past nine seasons. Of the seven known peregrine falcon territories monitored during the 2020 season, five sites were occupied (71% occupancy). Shively Bluff and Tom Gulch were not occupied, and no nesting occurred there. At least four juvenile peregrines were produced (Scotia Bluffs and West Runenburg) for a reproductive rate of 0.8 young per occupied territory.

There were no operations within 0.5 mile of any of the occupied eyries, with the exception of use of the Shively Road, as discussed in the CDFW property-wide consultation language. The property-wide language was revised to account for the new eyrie at Shively Bluff on 14 July 2011, with the concurrence of the Wildlife Agencies on 26 July (Appendix I). There were no HRC operations within 1.0 mile such as helicopter yarding, blasting, or pile driving at any eyrie location during the breeding season.

With the exception of the Tom Gulch, McCready Ridge, and Clapp Ridge sites, all of the other sites (Scotia, Holmes, Shively, and S. Runenburg) are on bluff faces above either the Eel or Van Duzen Rivers at what are very popular recreation sites in the spring and summer months. The S. and W. Runenburg nest cliff is more obscured than the others and occurs south of the river and the Highway 36 corridor. At the Eel River sites, HRC personnel commonly observe swimmers, boaters, recreational vehicle riders, and even rock climbers near the falcon eyries.

2021 SURVEYS

Surveys in 2021 will again include monitoring of traditional and known territories (i.e., Tom Gulch, Scotia Bluffs, Holmes Bluffs, Shively Bluff, Runenburg, McCready Ridge, and Clapp Ridge). All forestry and science staff will continue to report incidental peregrine sightings to the wildlife staff, and follow-up surveys will be conducted when necessary.

No change in the HCP monitoring strategy for peregrine falcons is recommended at this time.

REFERENCES

- Buchanan, J.B., K.A. Hamm, L.J. Salzer, L.V. Diller, and S.J. Chinnici. 2014. Tree-nesting by Peregrine Falcons in North America: Historical and Additional Records. *J. Raptor Res.* 48(1): 61-67.
- Pagel, J.E. 1992. Protocol for observing known and potential peregrine falcon eyries the Pacific Northwest. Pp. 83-96 *In* Proceedings: Symposium on peregrine falcons in the Pacific Northwest. J.E. Pagel, ed. Rogue River National Forest, Medford, OR 97501.
- U.S. Fish and Wildlife Service. 2003. Monitoring Plan for the American Peregrine Falcon, A Species Recovered Under the Endangered Species Act. U.S. Fish and Wildlife Service, Divisions of Endangered Species and Migratory Birds and State Programs, Pacific Region, Portland, OR. 53 pp.

APPENDIX 1

PEREGRINE FALCON SURVEY LANGUAGE

Final DFG, USFWS and HRC Mutually Agreed Upon Peregrine Falcon Survey Language (3/30/00) as modified (1/8/07) and 7/14/11.

Surveys shall be conducted at traditional and potential nest sites if operations occur between January 15 and August 15. If operations occur after August 15 and before January 15, no surveys are required. Survey visits shall be scheduled based on the estimated duration of operations. The area of influence will be 0.5 mile for conventional operations and 1.0 mile for helicopter operations. All surveys shall follow Pagel (1992), *Protocol for Observing Known and Potential Peregrine Falcon Eyries in the Pacific Northwest*, with respect to placement of observation posts, duration of surveys, time of day of surveys, observer preparation and equipment, and weather conditions. Helicopter surveys for peregrine falcon should not be conducted without prior consultation and concurrence with both the USFWS and DFG.

1. Surveys at traditional sites shall be conducted according to the following guidelines:
 - a. If operations commence after January 14:
 - i. One survey shall be conducted prior to operations, but no more than five days prior to operations.
 - ii. Conduct two additional surveys spaced at least 25 days apart but no more than 30 days. If due to the estimated duration of operations, two additional surveys cannot be spaced by at least 25 days, conduct two additional surveys well distributed throughout the operational period of the project prior to June 30 and prior to completion of operations.
 - b. If timber operations commence before January 15 (beginning at least two weeks prior to January 15), those survey requirements as specified above for operations that commence after January 14 shall be applied, except that all three surveys would occur concurrently with operations.
 - c. Surveys shall not be required for hauling on the Shively Road within the 0.5 mile disturbance minimization buffer for the Holmes and Shively eyries as per the 8 January 2007 and 14 July 2011 consultations.
2. Surveys of potential sites shall be conducted according to the following:
 - a. If timber operations commence after January 14:
 - i. One survey shall be conducted prior to operations, but no more than five days prior to operations.
 - ii. In addition, if the estimated duration of operations allows, conduct one survey prior to the completion of operations spaced at least 25 days after the first survey but no more than 30 days. If the operational period is estimated to end in less than 25 days, conduct the additional survey half-way through the estimated operational period.

APPENDIX 2

MAPS OF PEREGRINE FALCON EYRIES

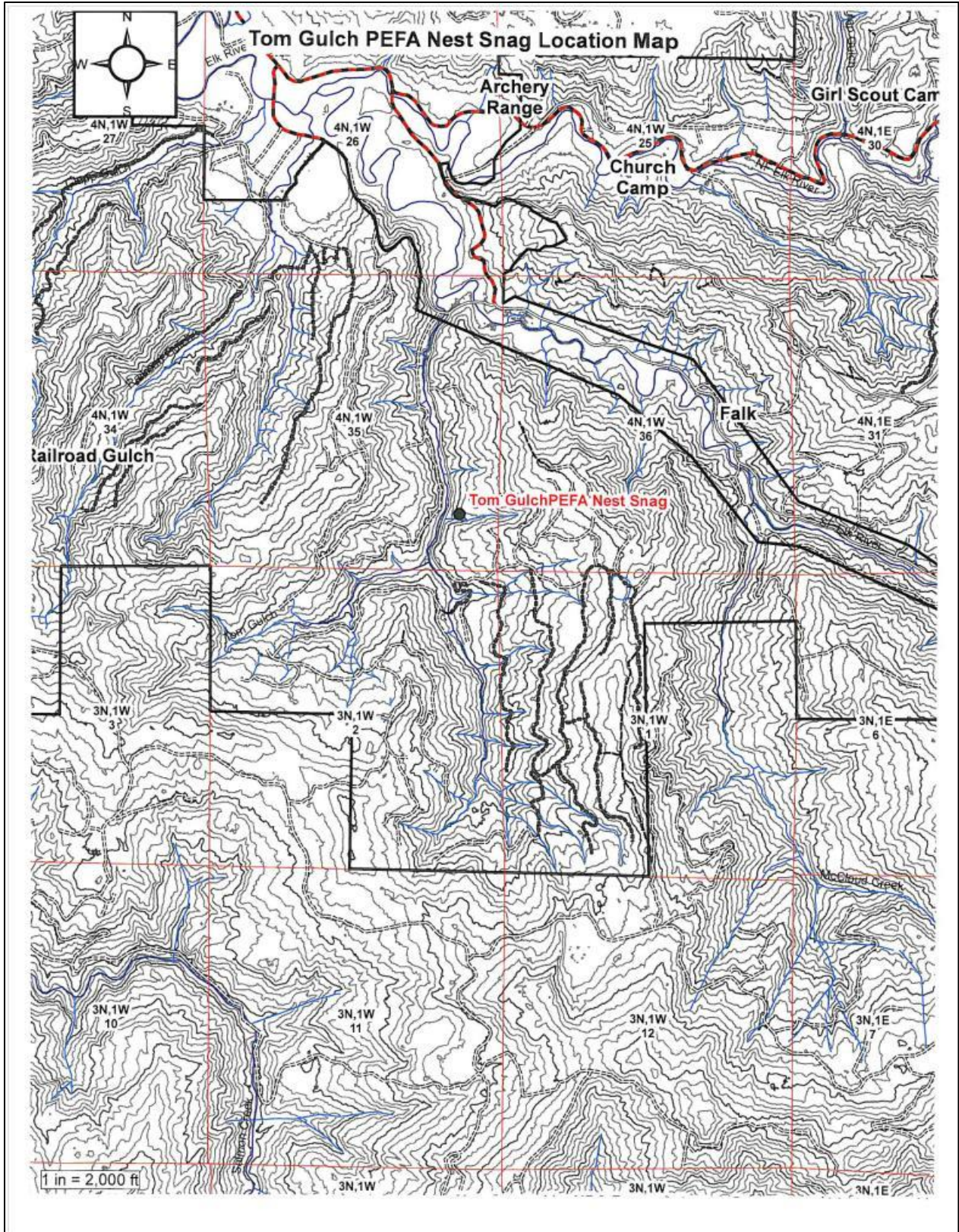


Figure 3. Tom Gulch Peregrine Falcon Nest Snag Location Map.

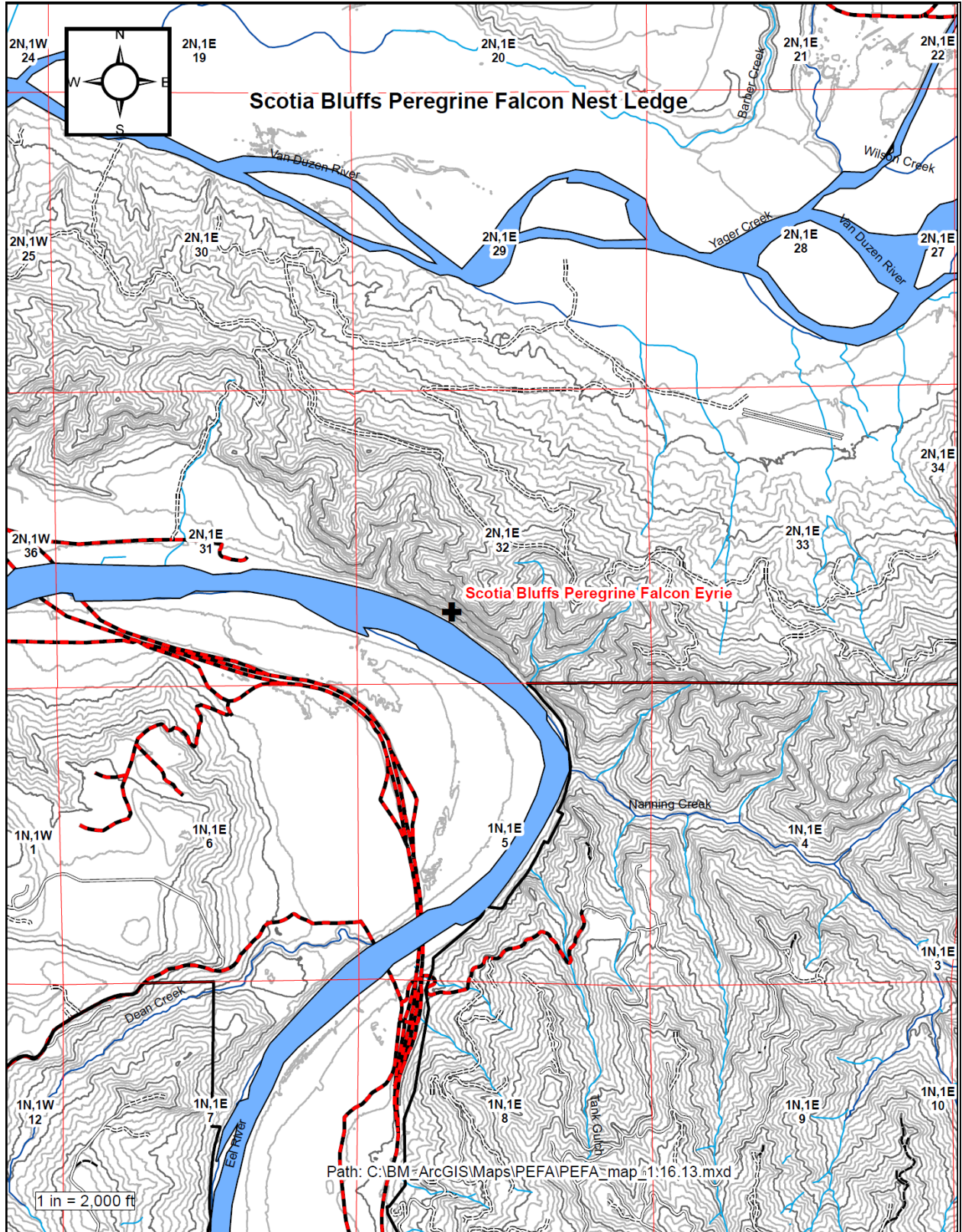


Figure 4. Scotia Bluffs Peregrine Falcon Nest Ledge.

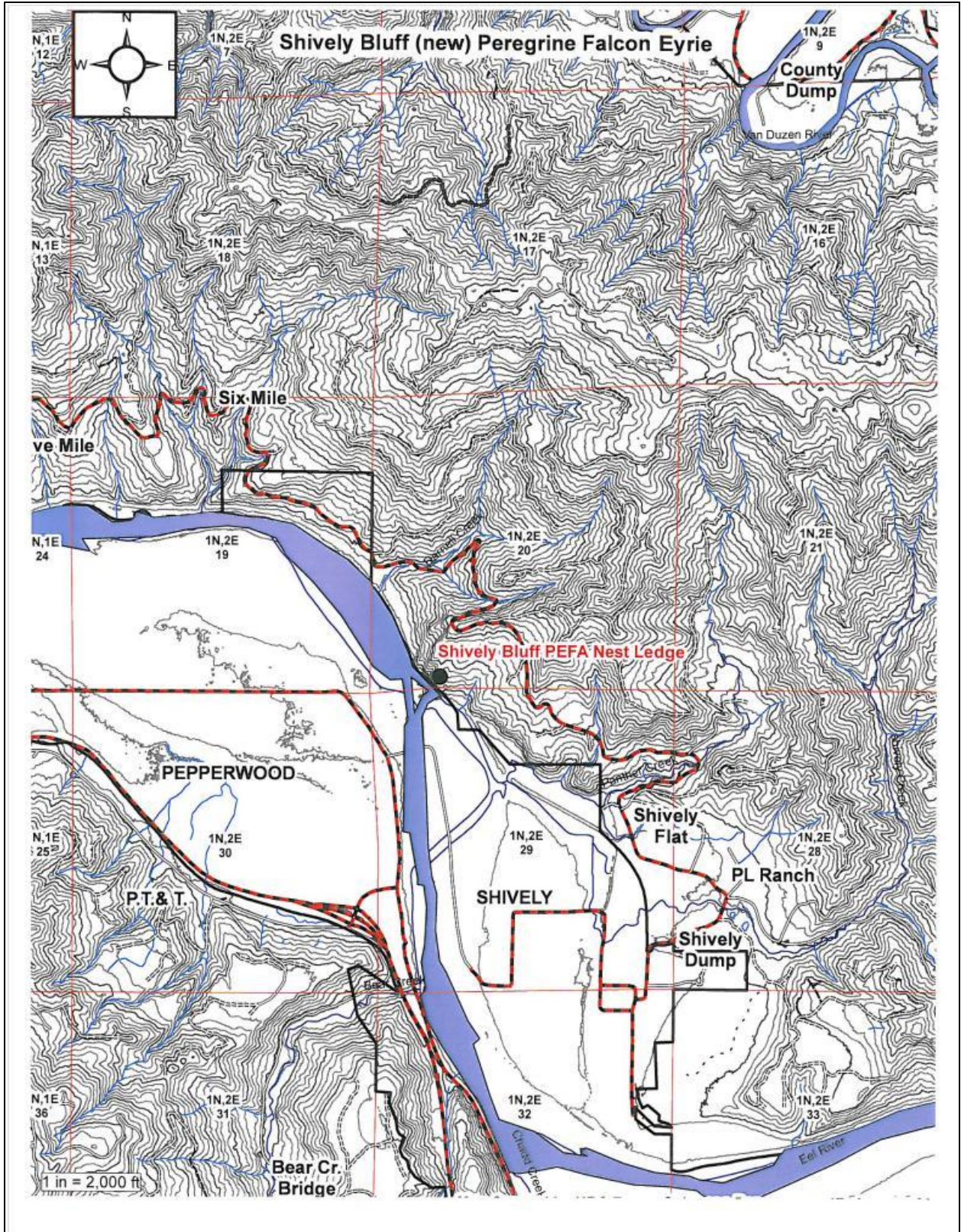


Figure 5. Shively Bluff Peregrine Falcon Eyrie.

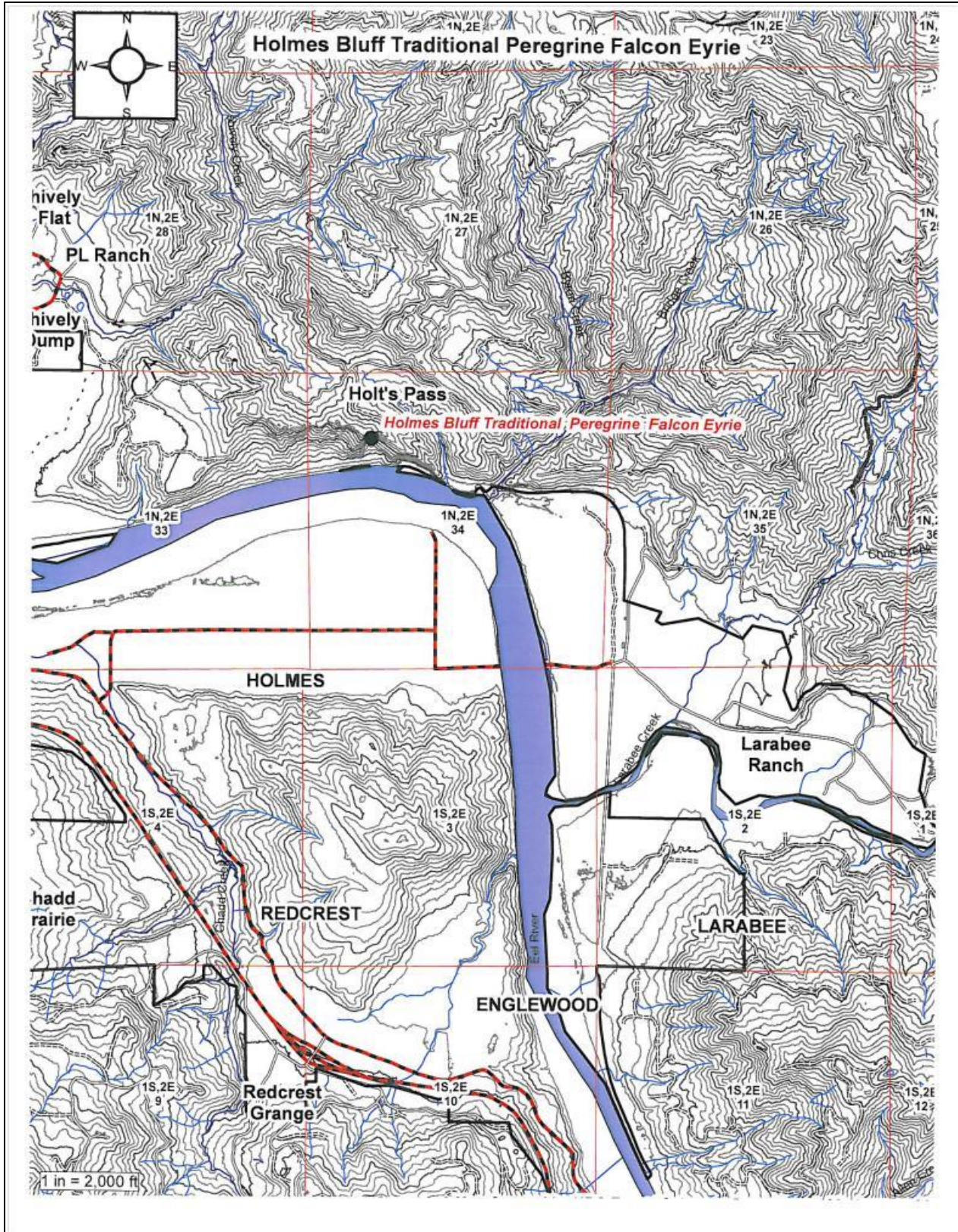


Figure 6. Holmes Bluff Traditional Peregrine Falcon Eyrrie.

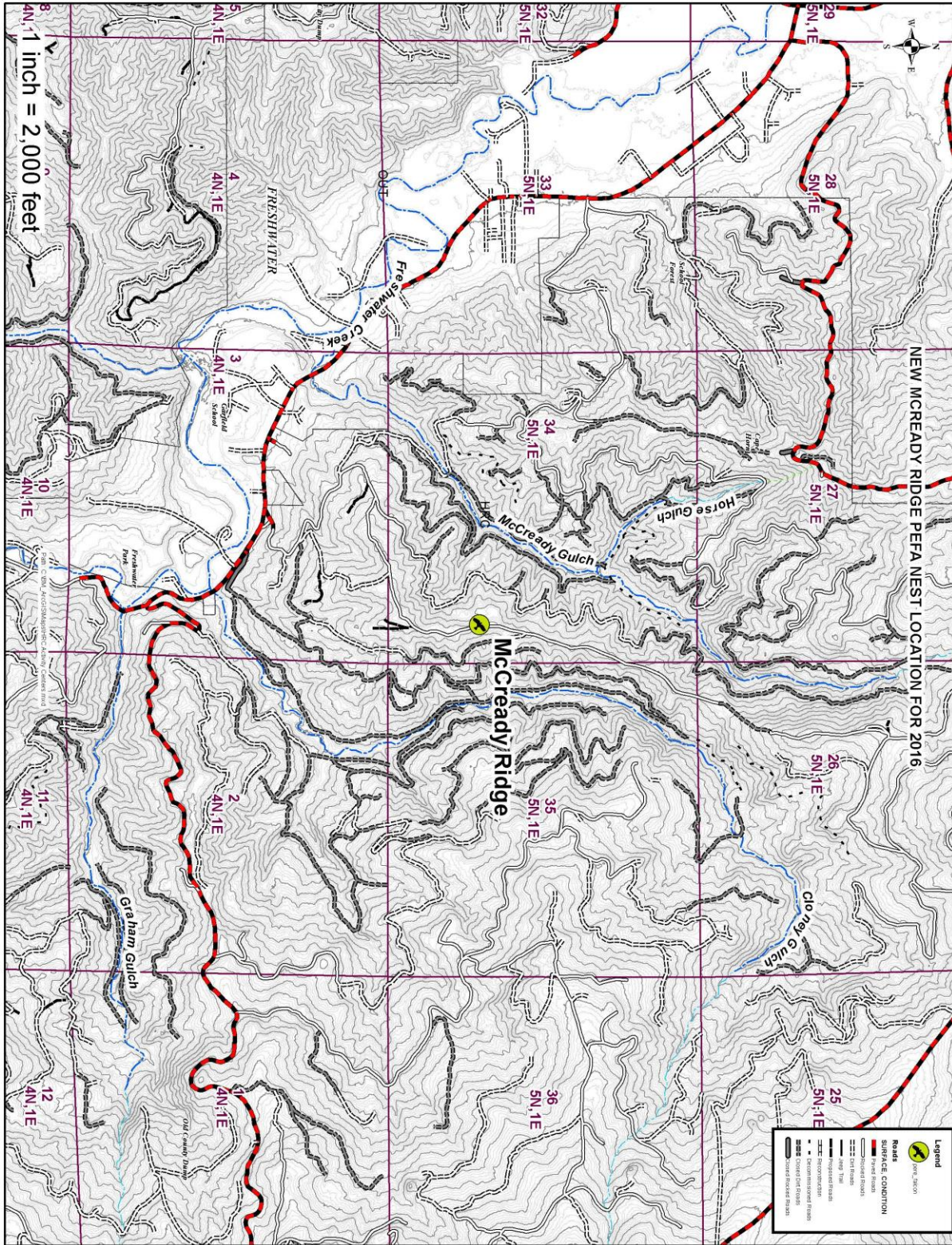


Figure 7. McCready Ridge 2016-2017 Peregrine Falcon Eyrie.

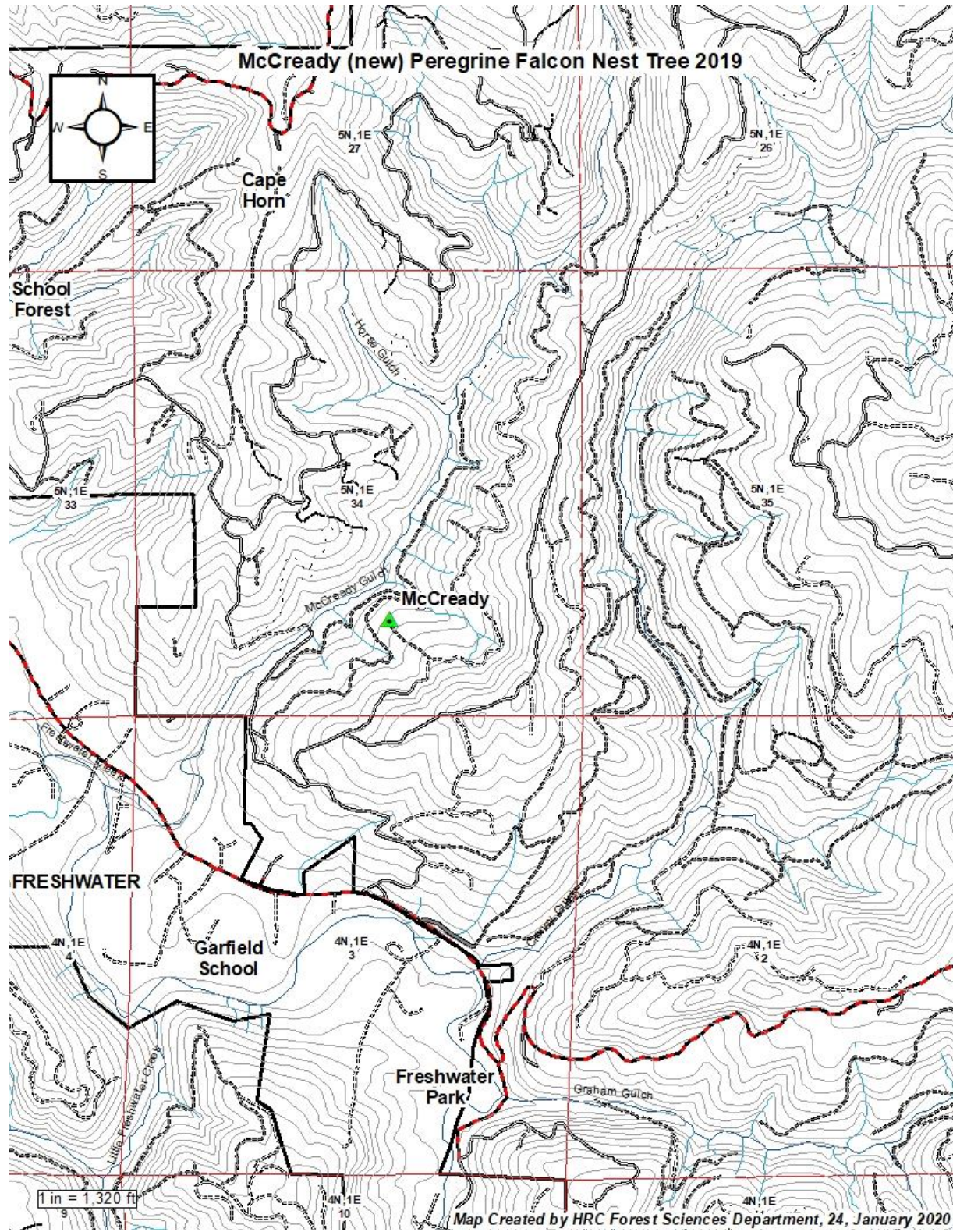


Figure 8. McCready Ridge 2019 Peregrine Falcon Eyrrie.

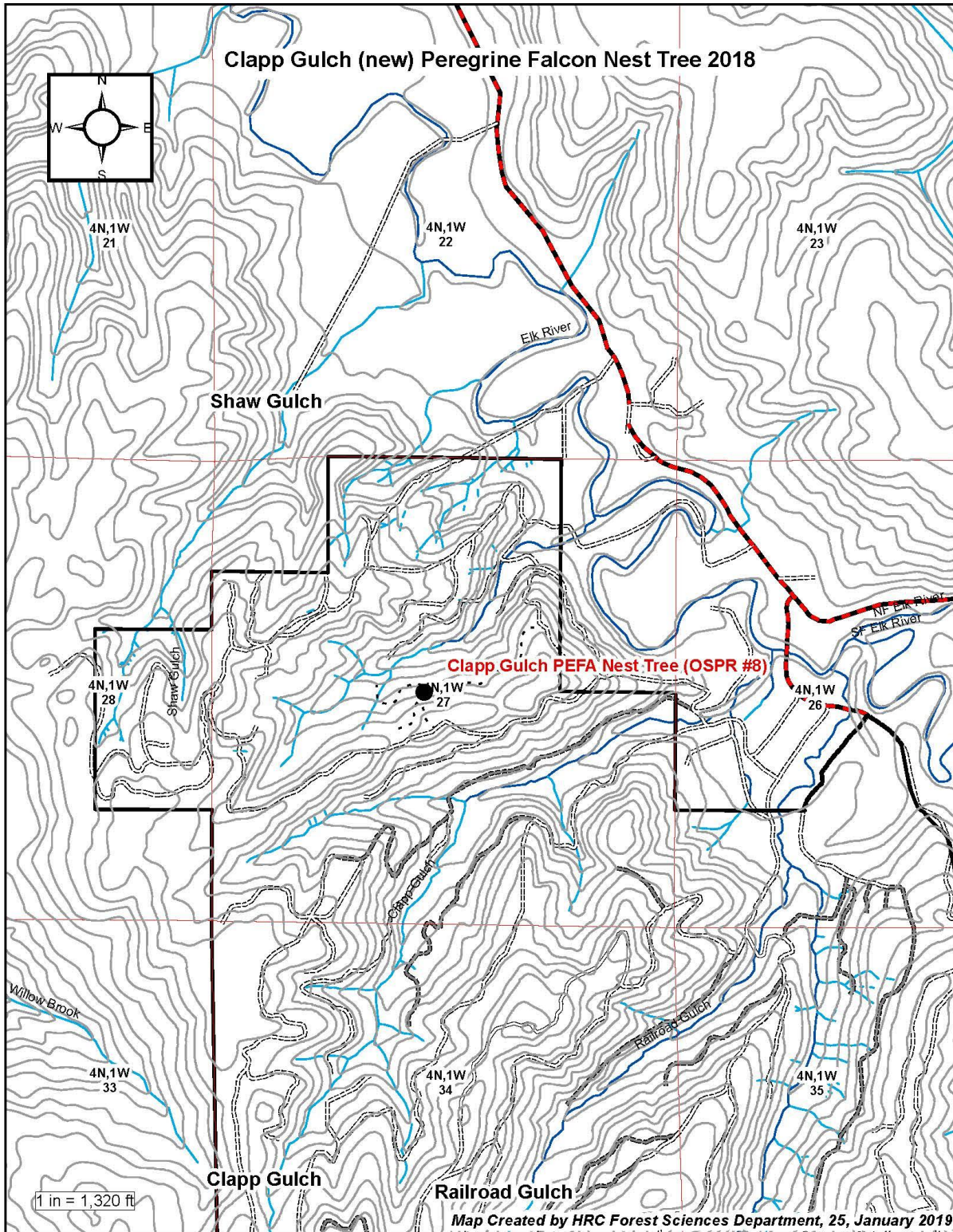


Figure 9. Clapp Ridge Peregrine Falcon Eyrie.

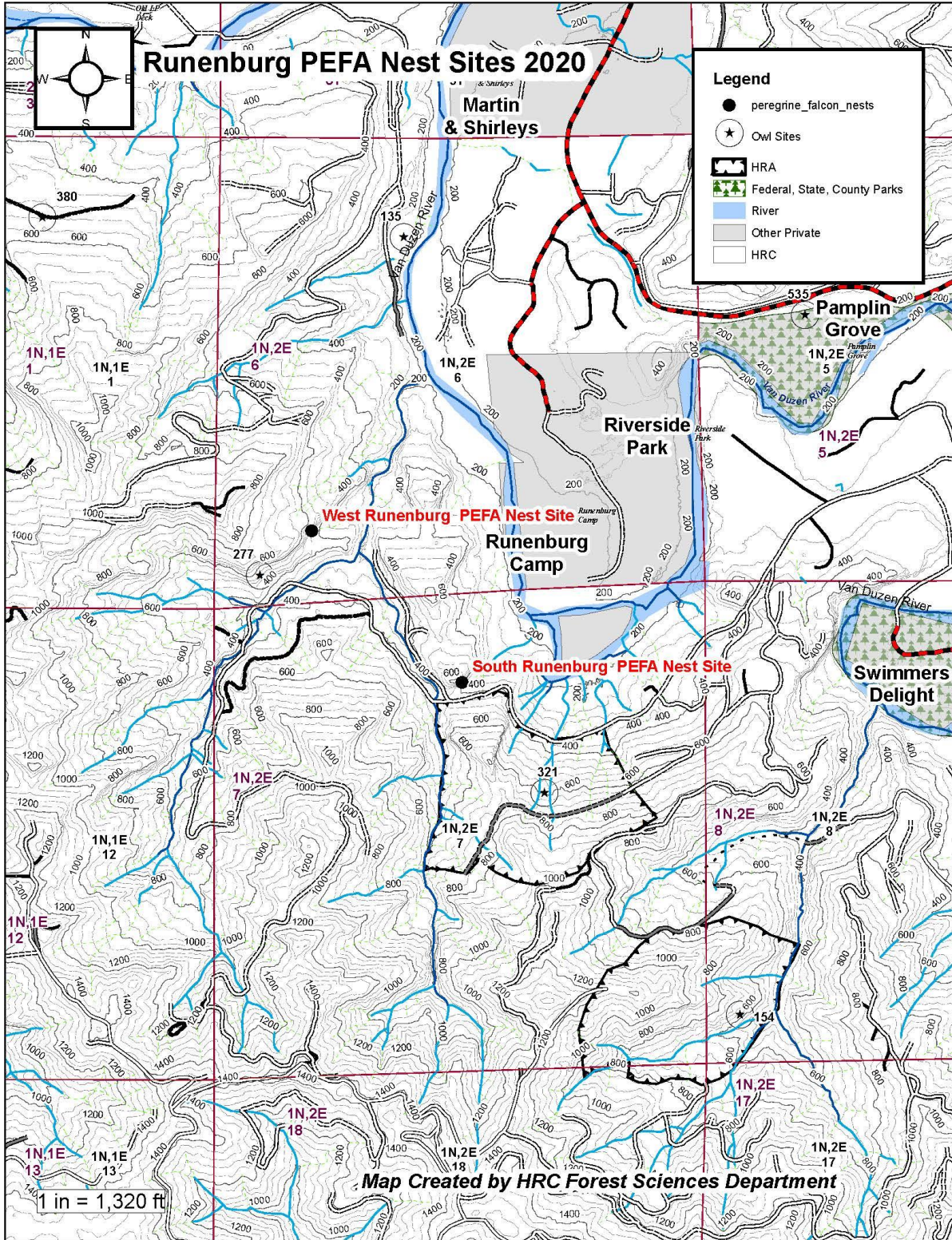


Figure 10. Runenburg Peregrine Falcon Eyries.