



**Humboldt
Redwood™**

Peregrine Falcon Annual Report 2021

February 1, 2022



Cover photo: Scotia Bluffs eyrie (HRC Forest Sciences 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 2021 peregrine falcon breeding season we conducted surveys for peregrine falcon activity at nine total sites, including eight known eyries (nests) at Scotia Bluffs, Holmes Bluff, Tom Gulch, Shively Bluff, South and West Runenburg, Clapp Ridge, McCready Ridge, and a potential new cliff nest within the Stitz Creek watershed.

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, Holmes Bluff, and Clapp Ridge nests were occupied in 2021. The South and West Runenburg, and Stitz Creek territories had peregrine presence, but no observations of nesting activity. No peregrine activity was observed at the McCready Ridge, Tom Gulch, and Shively Bluff territories. There was audio contact only at McCready Ridge. There were peregrine fledglings produced at the Scotia Bluffs, Holmes Bluff, and Clapp Ridge 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 only 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 and West Runenburg were surveyed to determine nesting status and to seasonally restrict any timber operations within the buffers as required. McCready Ridge was surveyed concurrent with operations per HCP requirements. Survey locations, dates, associated THPs, and status results for 2021 surveys are shown in Table 1.

Table 1. 2021 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	5/7/21	NC	6/10/21	NC	-	-
Scotia Bluffs	Monitor only	4/27/21	F	6/4/21	PN2J	-	-
Holmes Bluff	Monitor only	5/3/21	PN1J	6/4/21	PN1J	-	-
Shively Bluff	Monitor only	4/23/21	NC	5/18/21	NC	-	-
South Runenburg	Corbett East (17-125), LVD 17 (17-107)	5/14/21	U	6/10/21	PU	7/7/21	NC
West Runenburg	Corbett East (17-125), LVD 17 (17-107)	5/14/21	PU	6/9/21	PU	7/6/21	PNN
McCready Ridge	Mid McCready 2018 (18-00165)	1/24/20	NC	2/19/20	U	3/16/20	U
Clapp Ridge	Monitor only	5/4/21	PU	6/7/21	PN2J	-	-
Stitz Creek	Stitz in Time (20-00035)	4/16/21	PU	5/12/21	PNN	6/8/21	NC

NC = no contact, U = unknown status, F = Female, M = Male, 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, Holmes Bluff, and Clapp Ridge nests were occupied in 2021. Two fledglings were produced at both Scotia and Clapp, while one nestling was observed at Holmes (Table 2). The South and West Runenburg, and Stitz Creek territories had peregrine presence, with pairs observed at all three sites, but there were no observations of nesting activity. No peregrine activity was observed at the Tom Gulch, and Shively Bluff territories. There was audio contact only at McCready Ridge.

Table 2. Status of HRC peregrine falcon eyries 2010 - 2021 (if known).

Eyries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Scotia Bluffs	PN2J	PN2J	PN1J	PN1J	PN2J	PN3J	PNF	U	PU	PN2J	PN2J	PN2J
Holmes Bluff	PU	PN2J	PN2J	PN1J	PU	PN2J	PN3J	PU	PN3J	PU	PU	PN1J
Shively Bluff	PU	PN2J	PN3J	PN2J	PN3J	U	PU	NC	NC	NC	NC	NC
Tom Gulch Snag	NC	NC	NC	PU	NC	NC	NC	NC	NC	NC	NC	NC
S. Runenburg				PN2J	NC	PN2J	U	PN3J	PU	PNN	NC	PU
W. Runenburg											PN2J	PNN
McCready Ridge							PN	PU	NC	PN2J	U	U
Clapp Ridge									PN2J	PN2J	U	PN2J
Stitz Creek												PNN

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 = subadult.

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.

For past annual reports we have presented data from 1999 to the current year. In consideration of space, ease of reporting, and because we have found seven additional eyries since 1999, beginning this year we will report data collected from 2010 forward.

The percent of known territories occupied in 2021 was 87.5%, an increase over the 2020 season (71.4%), with a mean of 75% over the period 2010 - 2021 (Figure 1). The reproductive rate (measured as number of juveniles per occupied territory) was 0.7 in 2021, a decrease from the 0.8 in 2020, with a mean of 1.22 over the period 2010 - 2021 (Figure 2).

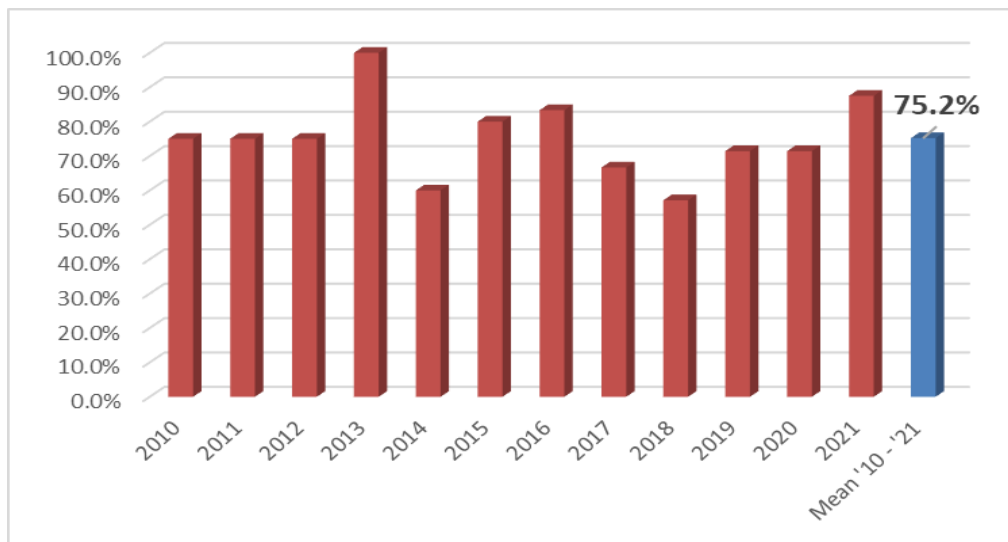


Figure 1. Percent of HRC territories occupied and mean 2010 - 2021.

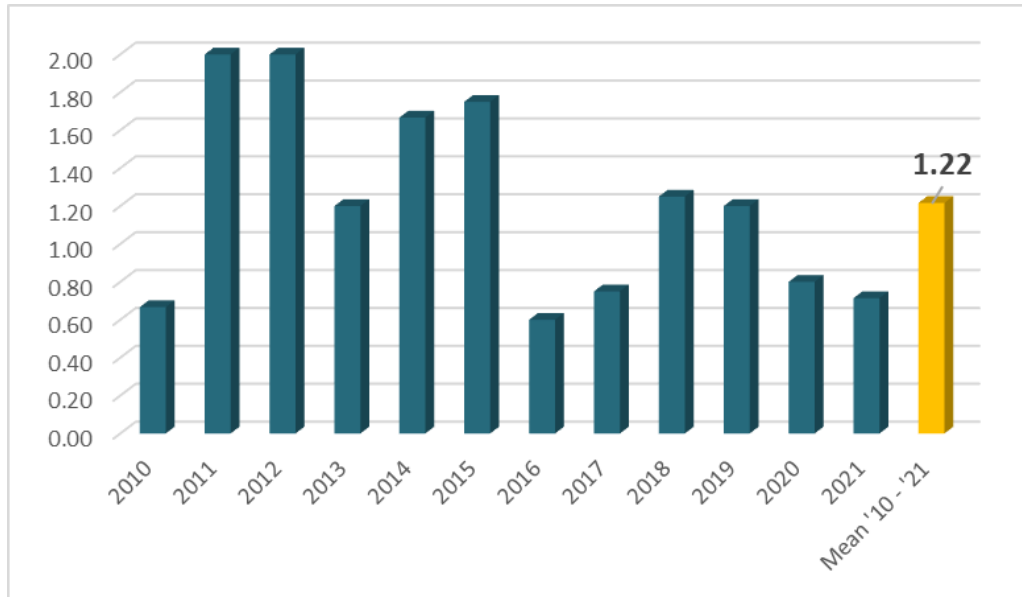


Figure 2. Reproductive rate for HRC occupied territories and mean 2010 - 2021.

DISCUSSION AND RECOMMENDATIONS

Occupancy and reproduction for the now eight known peregrine falcon territories on or adjacent to HRC lands continues to be relatively high over the past nine seasons. Of the known peregrine falcon territories monitored during the 2021 season, six sites were occupied (75% occupancy). Shively Bluff and Tom Gulch were not occupied, and there was audio contact only at McCready Gulch. At least five juvenile peregrines were produced (Scotia, Holmes and Clapp) for a reproductive rate of 0.7 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, Clapp Ridge, and Stitz Creek 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.

2022 SURVEYS

Surveys in 2022 will again include monitoring of traditional and known territories. 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

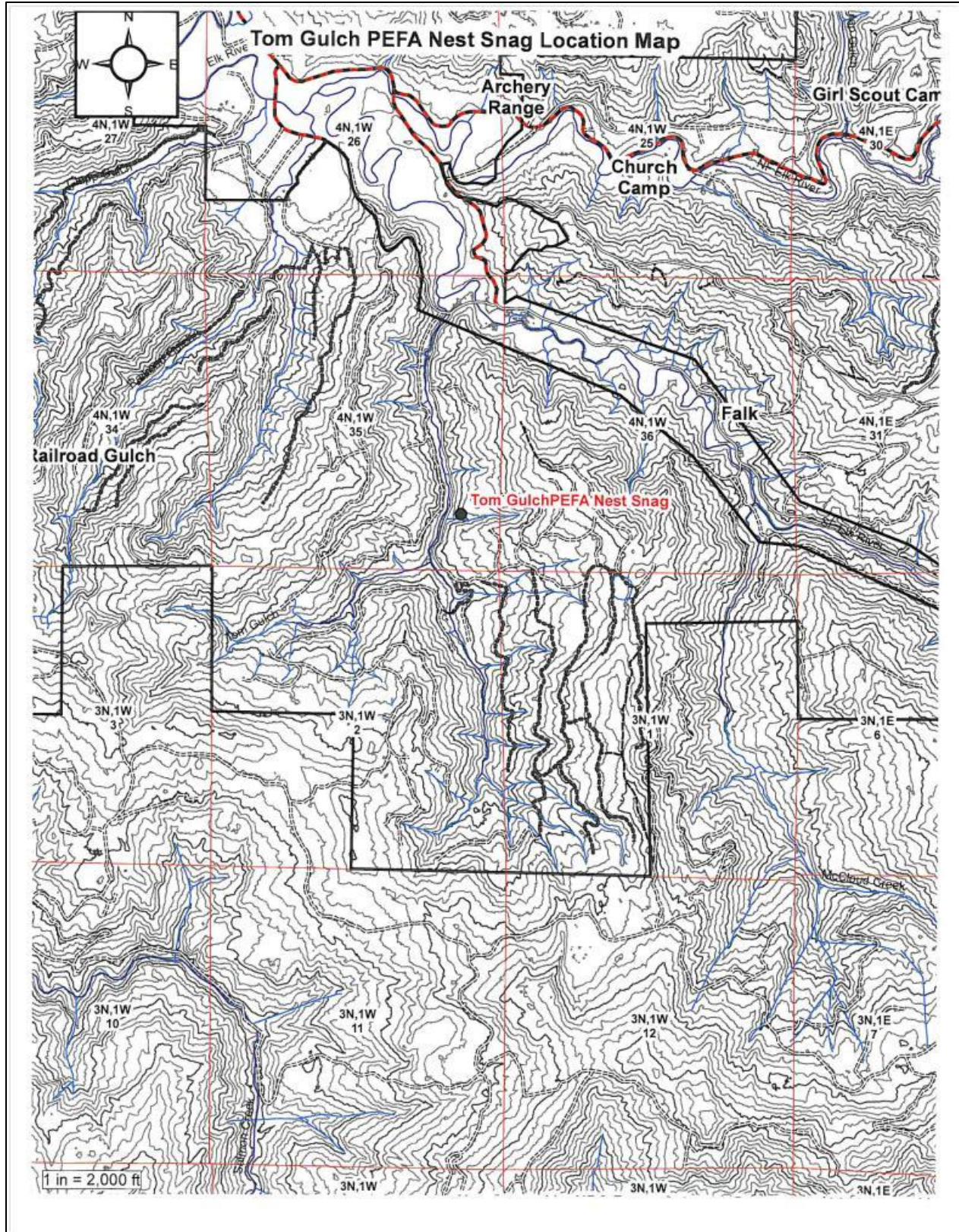


Figure 3. Tom Gulch Peregrine Falcon Nest Snag Location Map.

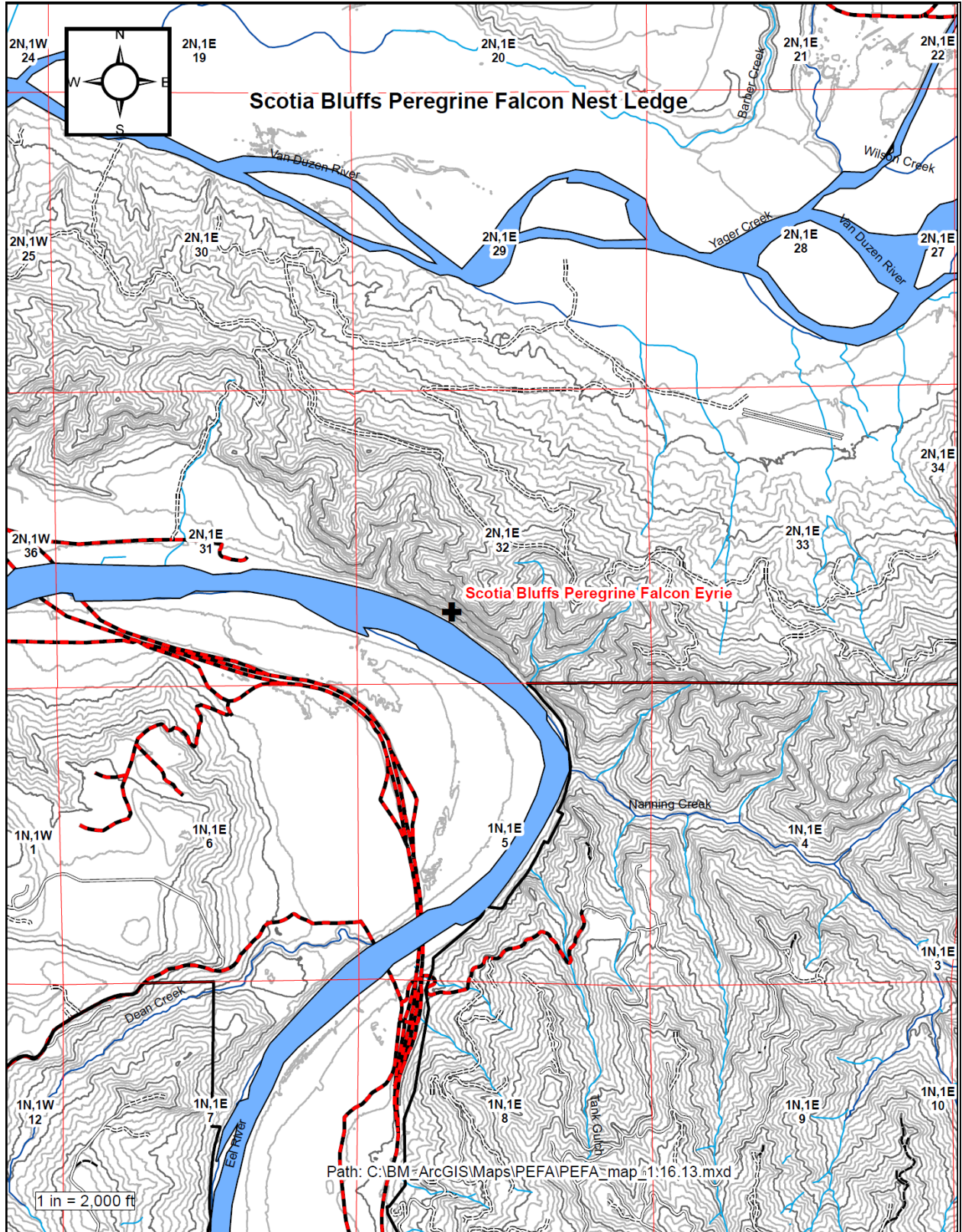


Figure 4. Scotia Bluffs Peregrine Falcon Nest Ledge.

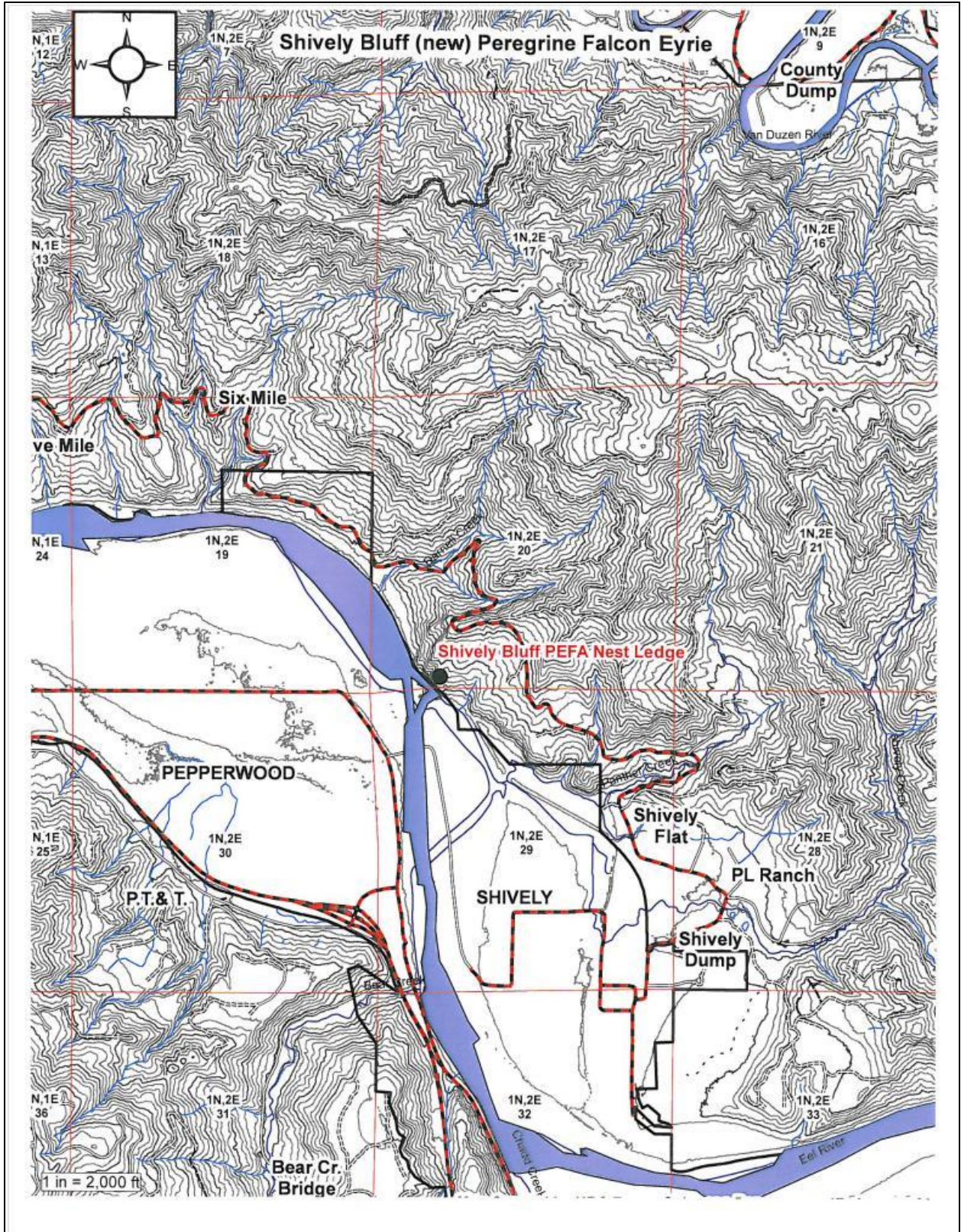


Figure 5. Shively Bluff Peregrine Falcon Eyrie.

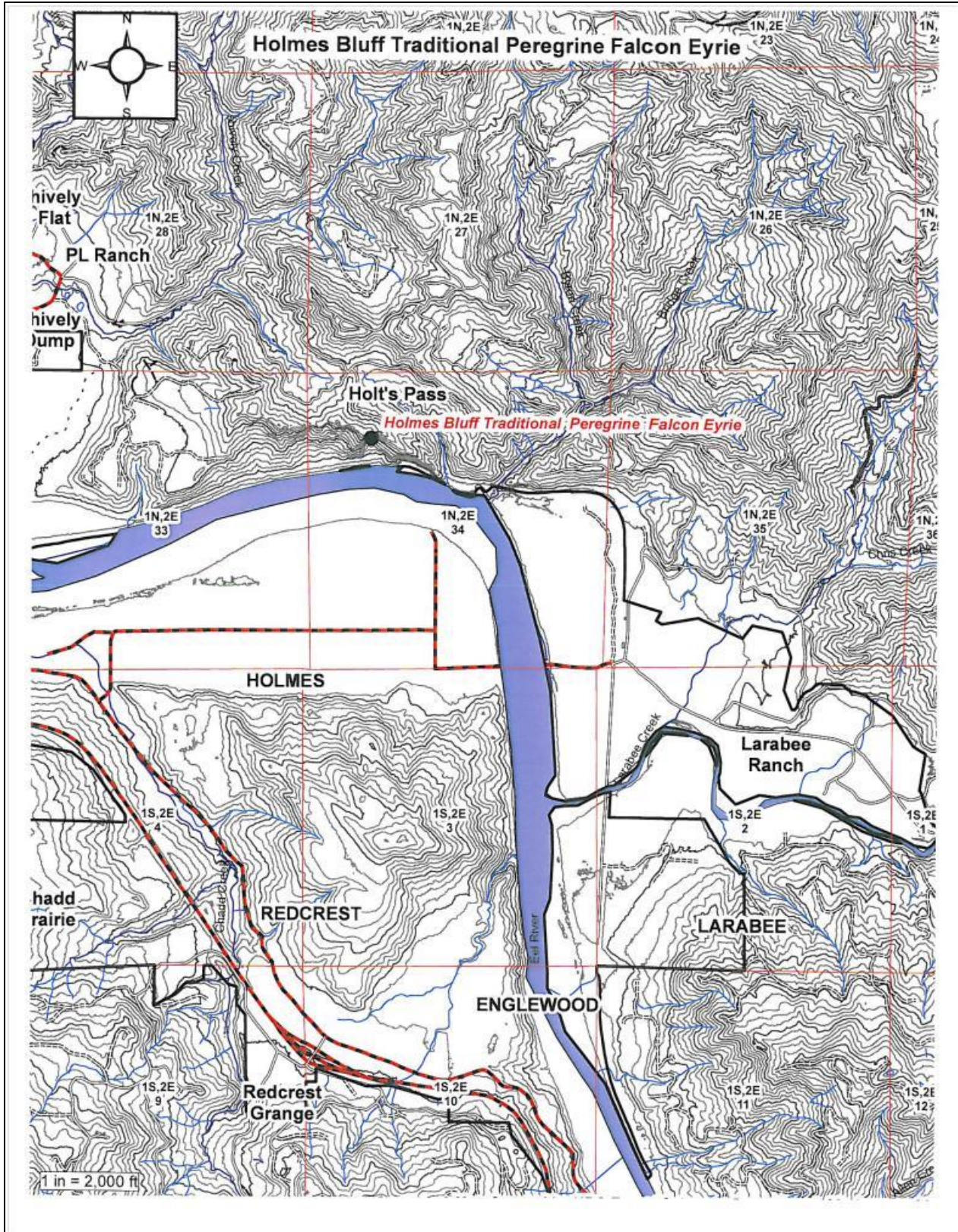


Figure 6. Holmes Bluff Traditional Peregrine Falcon Eyrrie.

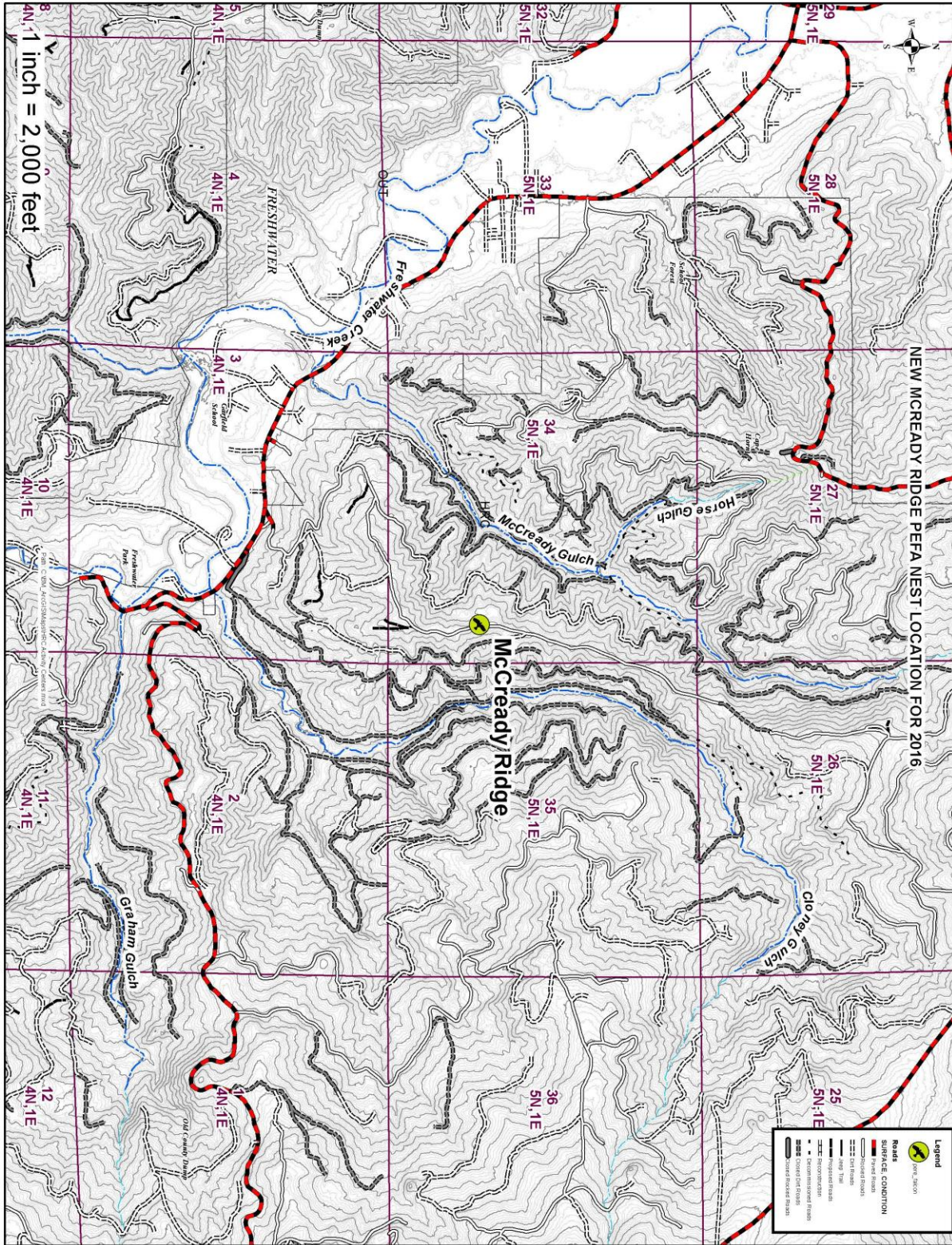


Figure 7. McCready Ridge 2016-2017 Peregrine Falcon Eyrie.

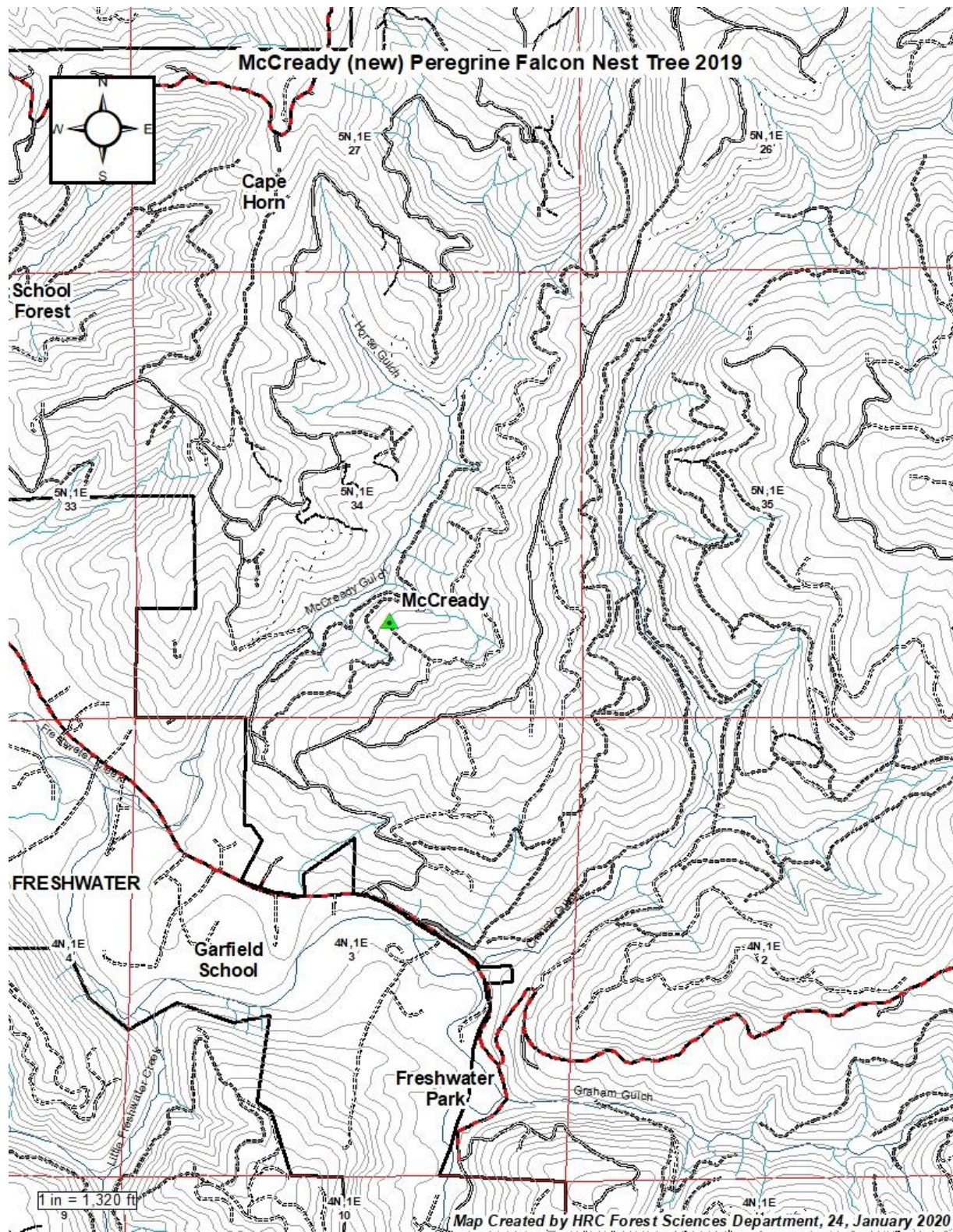


Figure 8. McCready Ridge 2019 Peregrine Falcon Eyrrie.

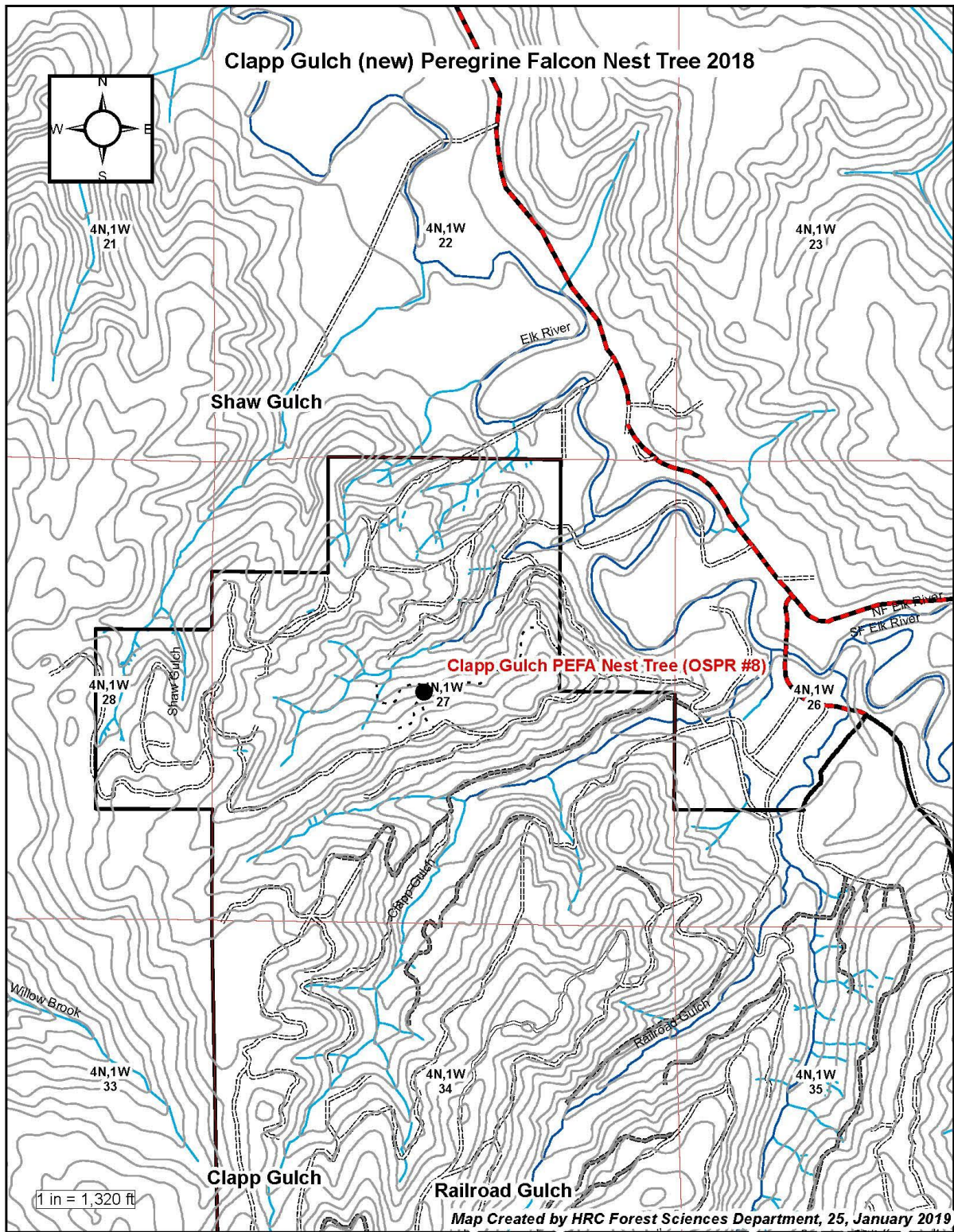


Figure 9. Clapp Ridge Peregrine Falcon Eyrie.

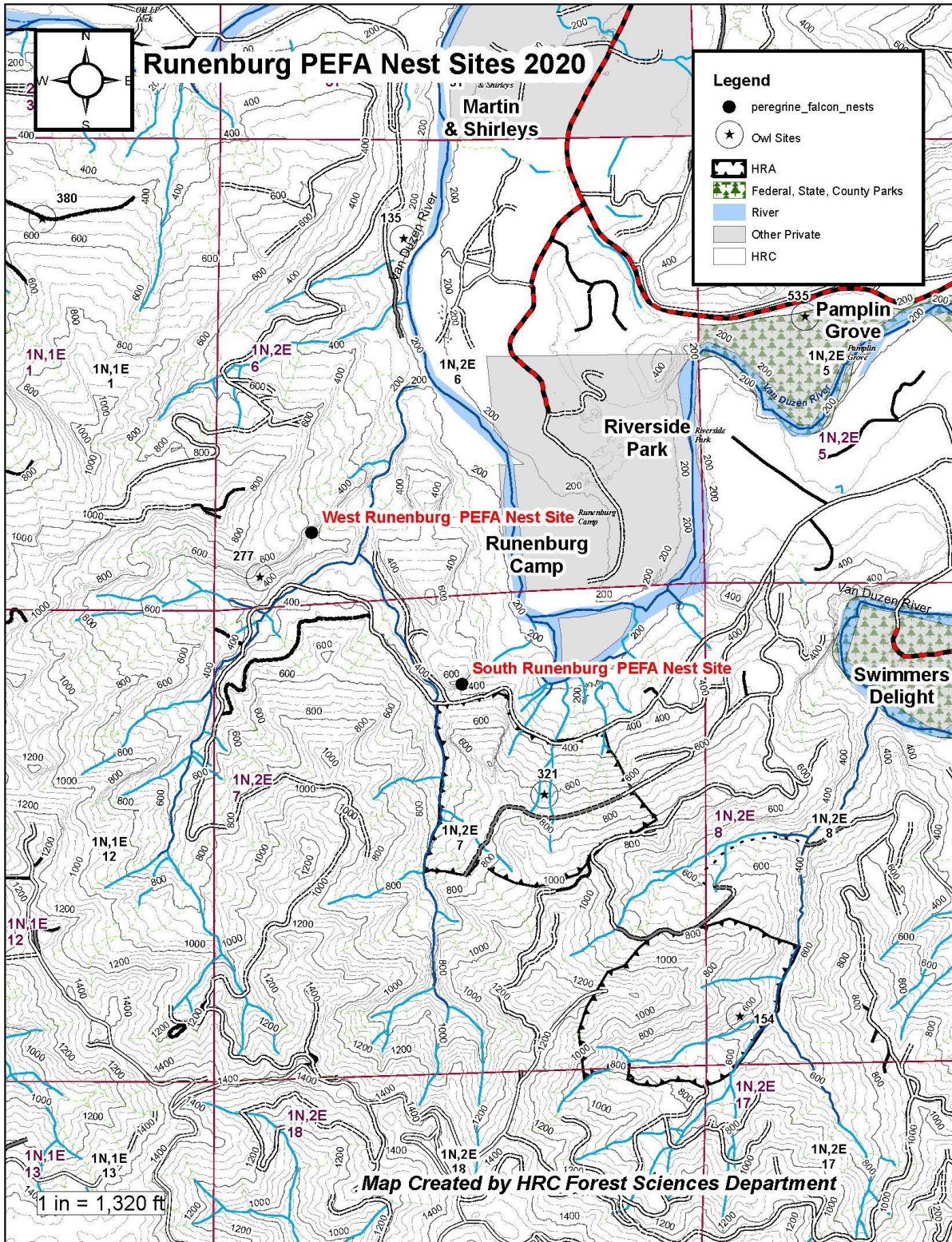


Figure 10. Runenburg Peregrine Falcon Eyries.

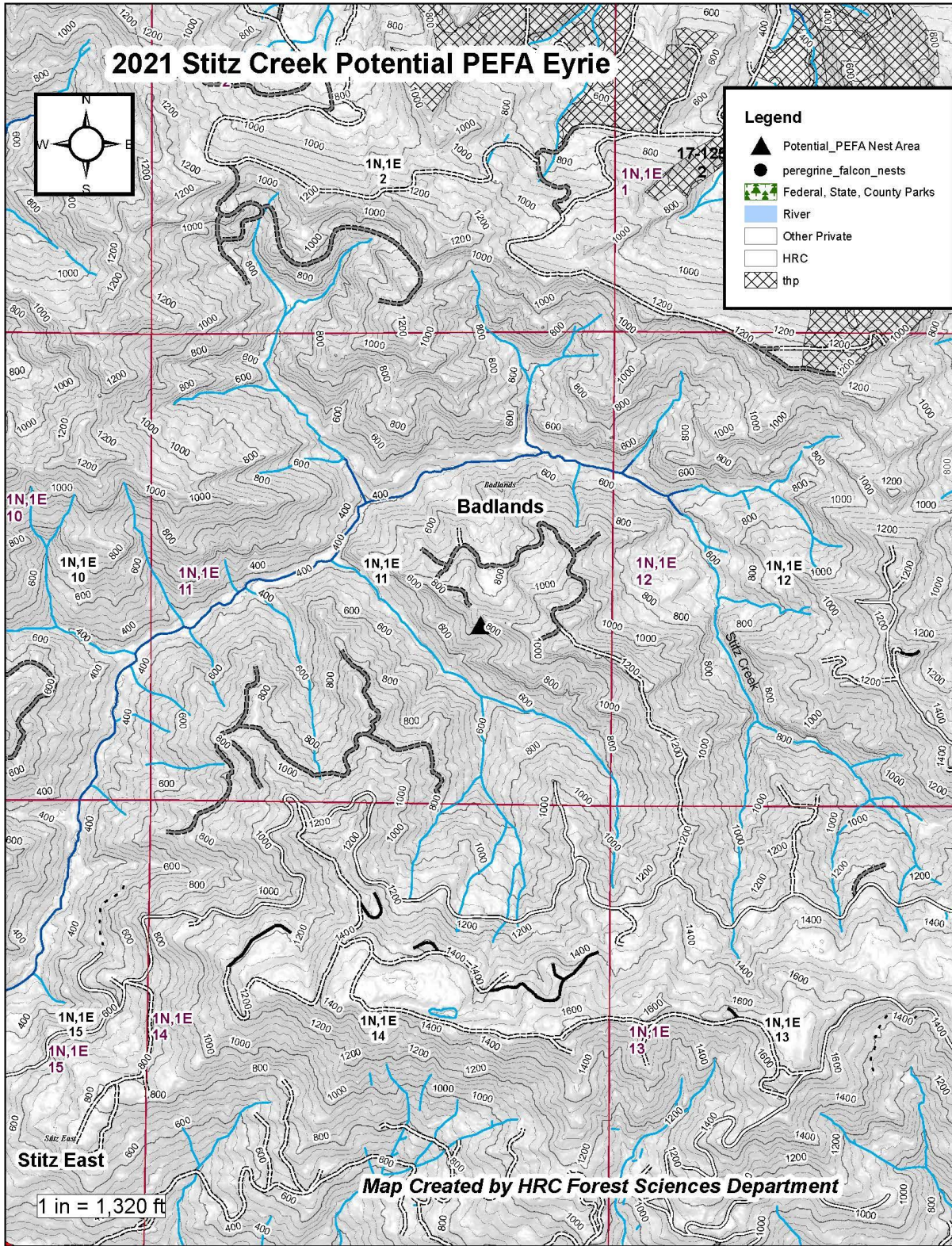


Figure 11. Stitz Creek Potential Peregrine Falcon Eyrie.