



Sierra Forest Legacy

Protecting Sierra Nevada Forests and Communities



August 31, 2009

Ed Cole
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Re: Comments on Sugar Pine DEIS

Dear Ed:

These comments are submitted on behalf of Sierra Forest Legacy and the Sierra Club. We have reviewed the draft environmental impact statement, specialist reports, and reviewed marked units in the field for the Sugar Pine Project. Our comments focus largely on the potential impacts on fisher from the Proposed Action and alternatives. We offer the following comments for your consideration.

Background

The Sugar Pine Project is an adaptive management project that proposes among other things to conduct commercial timber harvest on approximately 850 acres in an area utilized by Pacific fisher for denning, resting, and foraging. The project is the focus of an intensive adaptive management study in which fisher are being radio collared and extensive field measurement and evaluation of the pre-harvest and post-harvest conditions are being conducted. The purposes of the project are to increase fire resiliency and forest health of the target stands while monitoring through the adaptive management study the effects of such treatments on fisher and assessing the ability of the treatments to achieve the objectives of the forest plan as amended by the 2004 Sierra Nevada Framework.

The Bass Lake Ranger District has undertaken numerous public briefings and field trips to review the project area and the actions proposed there. In addition, the District has fulfilled specific requests for information that we submitted throughout 2008. The District also recently posted the environmental documents for the project on the website and made available electronic copies of the specialist reports. We appreciate the efforts made by the District to provide information to us about the project in a variety of forms that have been convenient and very useful. Their contributions have been essential to our review and understanding of the project.

Summary of the Comments

In the comments below, we identify several areas where we think additional information would be helpful to clarify the description of the alternatives and the analysis of effects. We also ask that design criteria be added to the project to increase the conservation benefits from the project. In addition, we have some concerns about the use of a forest plan amendment for this project and identify additional information we believe would help to clarify the purpose and extent of such an amendment.

Specific Comments

I. Clarification of the Proposed Action and Alternatives

A. Hazard Tree and Snag Management

Snags have been identified as an important habitat attribute for fisher (DEIS, p. 6) and other species. Snag management is discussed in several places in the DEIS, but the stated approach appears to be inconsistently defined. In some cases, it appears that if not retained, they will be clumped (DEIS, p. 13: “Since the Sugar Pine project area is all within the WUI, where possible, snags and wildlife leave trees will be retained in untreated areas (such as riparian management zones), whereas, in other instances, there is an indication that it is not the intention to remove snags except for safety concerns (DEIS, p. 13: “Do not remove snags unless it is safety concern (project does not propose to remove snags). Retain largest logs to maximum allowed by fuel loading standards”; DEIS (p. 103): “No snags are proposed for removal by any of the Action alternatives in the Sugar Pine Adaptive Management Project, except where they constitute a safety concern.”). There is also reference to the removal of snags for other than safety concerns (DEIS, p. 78: “There is no proposed removal of snags within the first 50 feet from the perennial stream channel within the Old Forest Linkage corridors. Beyond 50 feet snags may be removed if they contribute to ladder conditions (generally 10 to 50 ft high).”)

We asked district staff about the criteria used to identify hazard trees. Several characteristics defining the quality of the tree to be removed as a hazard were identified for us, including that hazard had to be able to reach a target such as a road or other improvement. Our field review of several units indicated that hazard trees were only marked near roads. We largely agree with the hazard tree marking we reviewed in the field, but at present the narrative in the DEIS does not appear to reflect the existing mark. Because snags are a very important habitat element for fisher and many other species, we ask that you more clearly state the intent and criteria for their removal.

There is a reference in one section of the DEIS about the intent to retain any felled snag on site for down woody debris (DEIS, p. 91 and 156). As stated in the DEIS, it appears to be a general design criteria applied throughout the project area. We think this is an important design criteria, especially for snags greater than 15” in diameter and on portions of the project that do not have desired levels of down wood. We ask that you include this reference to the retention of snags as down wood in the DEIS section “Design Criteria Common to All Action Alternatives.”

B. Limited Operating Period for Fisher

The definition of how a Limited Operating Period (LOP) will be applied differs between the DEIS and the BE. The DEIS (p. 14) indicates that “A 700-acre den site buffer of the best available habitat will be designated for known den site locations with a Limited Operating Period established within the den site buffer.” In contrast, the BE (p. 76) states that “An LOP from March 1 to June 30 within suitable denning habitat (canopy cover of $\geq 70\%$) will minimize potential disturbance to fishers during the reproductive season.” These differences need to be resolved in the FEIS.

The BE found that the application of an LOP to all suitable denning habitats (not just habitat associated with a den buffer) would:

...also mitigate potential project-related disturbances to breeding fishers within suitable breeding habitat (conifer stands with $\geq 70\%$ crown closure and size class ≥ 4).

(BE, p. 88). Because minimizing direct disturbance to denning fisher is very important, we ask that you follow for all action alternatives the LOP as defined in the BE, i.e., apply the LOP to all suitable denning habitat in the project area.

C. Activities Allowed in Den Buffers

As described in the DEIS, the 700-acre den buffer appears to control the level of activity allowed in Alternative 2 compared to Alternative 3 (DEIS, p. vi). However, the determination in the BE for fisher appears to assume that under all action alternatives:

The one known fisher den sites will be protected by a 700 acre LOP and lower fuel ladder removal only.

(BE, p. 88). We ask that you address this apparent discrepancy between the BE and the DEIS.

D. Streamside Management Zones (SMZs) and Old Forest Linkages (OFLs)

We are uncertain about what activities are proposed within or near to streams. There are several terms used to define management areas associated with drainages (e.g., SMZ, RCA, and RMA). Depending on the feature type, activities appear to be limited in various ways (e.g., no disturbance, no mechanical equipment, reduce ladder fuels). For example, the buffer distance for an RCA is 150 feet and the SMZ ranges from 0 to 75 feet, and equipment is not allowed in any SMZ. Realistically, what type of vegetation removal would occur within SMZs if no equipment is allowed? Also, for seasonally flowing streams, do the RCA buffers outside of the SMZ impose any limitations on harvest activities?

The DEIS also introduces the term “riparian reserves” and indicates that “no management will occur in designated riparian reserves” (DEIS, p. 91 and 156). It is not clear how the designation “riparian reserves” relates to the other management zones (i.e., RCAs, SMZs, RMAs, and OFLs). Understanding the definition of “riparian reserve” is important since presently the design criteria for OFL allows activity 50 feet to 300 feet from a perennial stream.

It is unclear if this is in conflict with the statement in the DEIS that no management will occur in riparian reserves. We ask that these terms be clarified in the FEIS.

We also believe that there is overlap in the discussion of the design criteria for OFLs and SMZs (DEIS, p. 15-16) with respect to the treatments allowed beyond 50 feet from a perennial stream. The design criteria for OFLs limit activity within 50 to 150 feet from a perennial stream to treating surface and ladder fuels whereas the design criteria for a Class I stream appears to limit activity within 50 to 100 feet of the perennial stream. If the design criteria for OFLs and SMZs were integrated into one section, it would more clearly identify the actions proposed in the Class I and OFL areas.

Lastly, Table 1 (DEIS, p. 16) reports the buffer “widths” of various feature types and stream classes. We believe that the “widths” reported are actually the distance from the feature. It appears that the values represent only one-half the actual distance of the width. The table heading or the numbers themselves should be modified to reflect the actual width of the buffer.

II. Suggested Changes to the Proposed Action or Design Criteria

A. Retention of Shrub Cover and Understory

Fishers have been identified as habitat specialists associated with mature and late-successional forests (Truex et al. 1998). Multiple canopy layers and low, closed canopies have been identified as important habitat elements. These structural aspects are important in providing cover to reduce predation and to provide habitat for prey species (US Fish and Wildlife Service 2006). Providing for understory diversity was also one of the issues specific to fisher that was identified in the DEIS (p. 6).

Our field review of the several of the units indicated that shrub understory diversity and canopy layering was well developed in many portions of the stands to be treated. Understories of dogwood and ceanothus were quite common, especially on more shaded and moist sites. The design criteria appear to address understory cover in a fairly limited way. Within treated areas, understory retention appears to be focused for the most part around oaks, in streamside management areas, steep slopes, and archeological sites. It is difficult to determine how extensive these areas are within the proposed treatment units.

We ask that you include specific measures to conserve additional understory vegetation. We recognize that there is a balance between meeting fuel objectives and retaining understory structure. We suggest that focusing areas of retention on cooler moist sites (North et al. 2009) and in retaining the less flammable understory species would be one approach to achieving increased understory diversity without compromising fuel objectives.

B. Prescribed Fire

The DEIS (p. 19) indicates that under all action alternatives, the amount of prescribed fire is limited to 215 acres. This represents less than 10% of the treated acres and about 4% of the project area. This amount of prescribed burning seems too low. We noticed a fair amount of

young white fir during our field review of several of the stands; prescribed burning could be used to reduce this intrusion now rather than dealing with it later when the trees are larger making the treatment more difficult and costly.

As a general matter, we are concerned that prescribed burning is applied to an insufficient area on projects throughout the Sierra Nevada. Prescribed burning can be an inexpensive tool to increase fire resiliency and enhance forest structure. We ask that you consider additional opportunities for prescribed fire in the project area.

C. Plantation Treatments

We agree that the plantations within the project area will benefit from pre-commercial thinning, brush management, and commercial thinning. The proposed action indicates that about 65 acres of commercial thinning will be completed in plantations within “T” areas (DEIS, p. 7), but little is said about how that thinning will be accomplished. We are interested in seeing heterogeneity and structural diversity introduced into plantations as they mature. If appropriate for the size of individual plantations, we ask that you consider varying the post-treatment stand density across the unit rather than adopting a uniform spacing guideline.

We did not review the 45-year old plantations in the field, since we were uncertain about their specific location. As a result, we recognize that it is possible this variable spacing approach has already been incorporated into the marking guidelines.

III. Analysis of Effects on Fisher

A. Citing the Biological Evaluation (BE) in the DEIS

We suggest that the biological evaluation be cited at the beginning of the section on terrestrial wildlife species. This is a common approach taken in environmental documents on other national forests and helps the reader understand that a more detailed analysis is available. Common language used to accomplish this is:

The direct, indirect and cumulative effects to the terrestrial wildlife species are summarized from the Biological Assessment and Evaluation for the Silver Saddle Forest Project (Yasuda, 2008).

(Eldorado National Forest 2009). We also suggest citing to the other specialist reports that are relevant to specific sections in the DEIS.

B. Information on Fisher Surveys

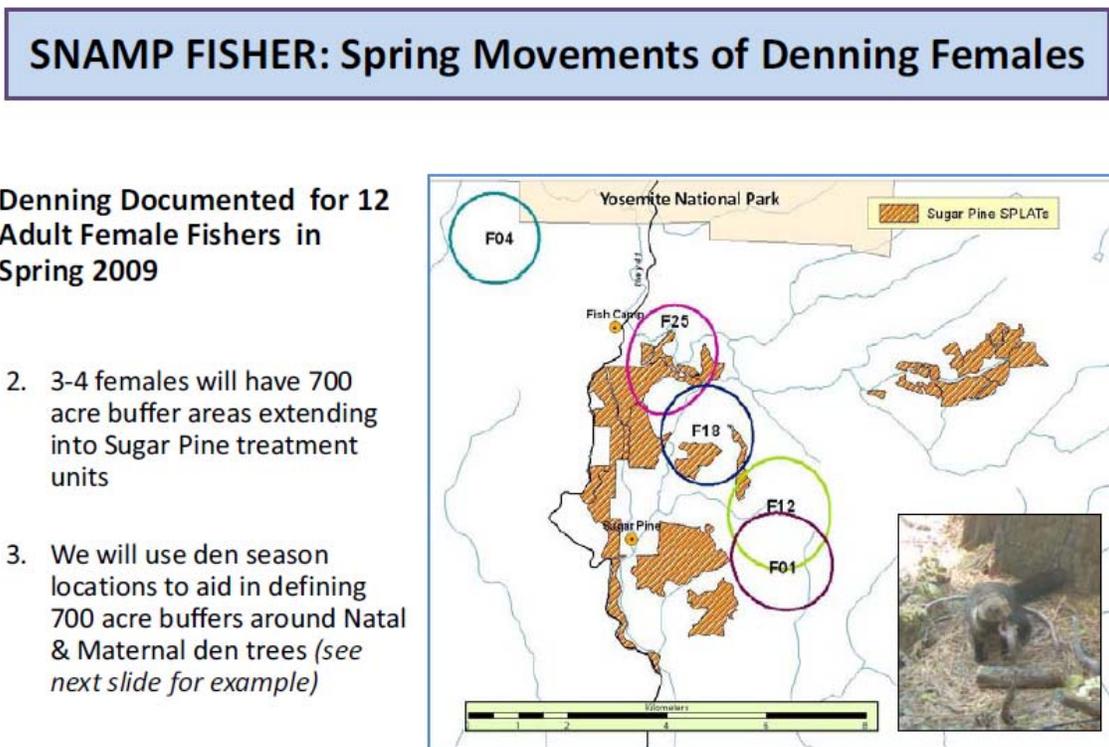
The DEIS and BE do not mention recent information on fisher use in the project area. The BE does mention the SNAMP study and the program of radio collaring fisher, but reports little of this information in the BE. There is summary information provided in the BE on fisher detections (BE, p. 55-61), but this does not include the results from the SNAMP study or the

Kings River study being conducted in the Shaver Lake area. Further, the more recent information that is reported does not appear to be up to date. For instance, the BE states that:

No known dens occur within the project area; however, there is one suspected den site (female F3, see attached map) within one mile of the project area in the Miami Motorcycle Area that is currently being monitored by the UC Berkeley study group. There is likely another den site (female F1) northwest of the project area in Nelder Grove; however, that has yet to be narrowed down to a specific location by the UC research group.

(BE, p. 75). The BE appears to be describing fisher occurrences during the 2008 season. However, results from surveys in 2009 indicate that several fishers are denning in the project area and that den buffers of approximately 700 acres overlap with treatment units (see Figure 1 below). This information was presented by Rick Switzer in May, 2009 and is posted on the SNAMP website.

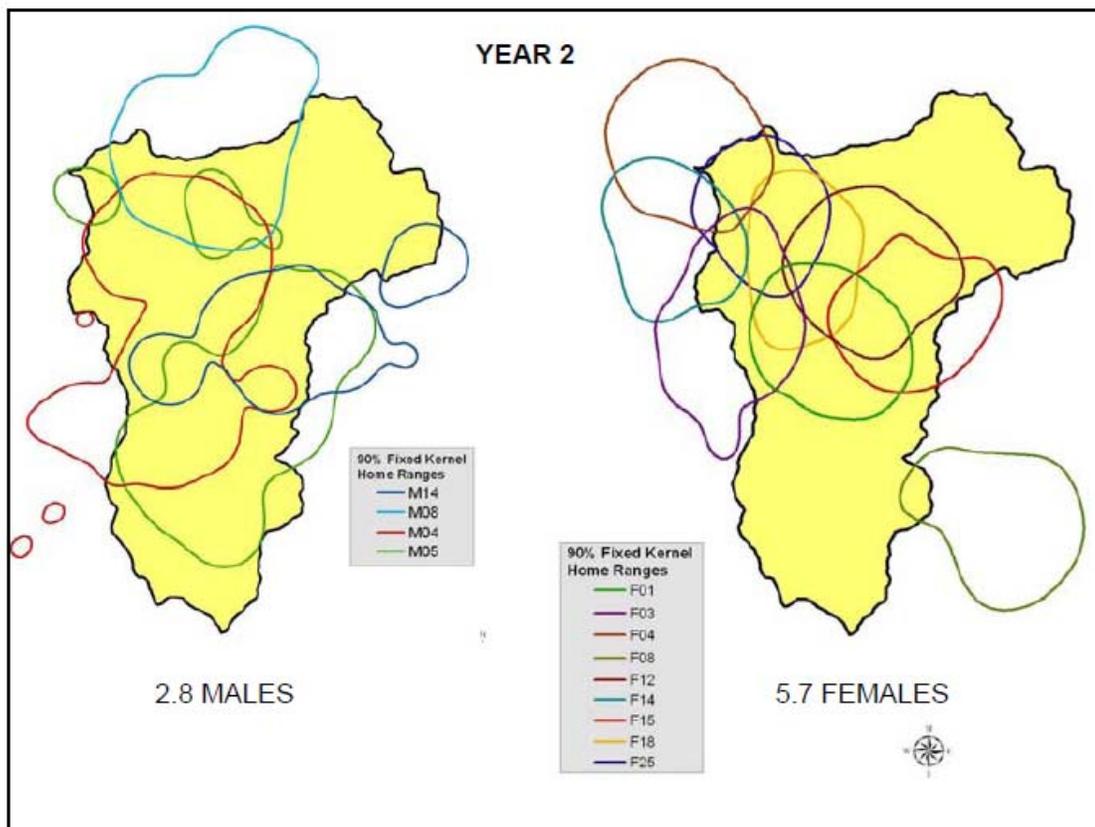
Figure 1. Approximate locations of female den buffers in the Sugar Pine project area in relation to treatment units. Taken from Switzer and Barrett (2009).



We are also aware that male fisher have been using the project area, but there is no mention of this in the BE or DEIS. The figure below (Figure 2) depicts the home ranges of males and

females detected during the 2009 season. Comparing this figure to the project area map for Sugar Pine it is clear that both males and females are currently using the Sugar Pine area.

Figure 2. Homes ranges of male and female fisher detected in 2009 in the Sierra Nevada Adaptive Management study area. This study area includes the Sugar Pine treatment units. Taken from Barrett and Sweitzer (2009).



We ask that this information and any other information on the specific use of the area by fisher be incorporated into the analysis of effects of the project on fisher.

C. Analysis of Effects on Fisher Are Incomplete

It does not appear that all of the potential effects of the project on fisher were discussed in either the DEIS or BE. In part, this was because, as mentioned above, the potential effects on fisher were generalized and not related to ongoing fisher use of the area. Because denning females are utilizing the area, the potential to disrupt the activities of the females and their kits should be discussed. For example, the effect of the duration of implementing the treatments (i.e., how long it takes to implement the treatments) on fisher using the area, including the females and their kits, should be included in the analysis of effects. We also found that the existing condition for fisher habitat was not sufficiently described. The BE (p. 64) quantifies the potentially suitable habitat in the project area, but does not describe whether this is low,

moderate, or high quality habitat. Further, the quantification of habitat seemed to rely only on remotely sensed information which does not address important habitat elements such as large snags and down logs, and understory vegetation.

We also noted that some of the assumptions made in the BE about the project design measures (as noted in section I of these comments) were not consistent with the design measures proposed in the alternatives. The conclusions in the BE appear to be based on these different design measures and do not seem to reflect an evaluation of the alternatives as proposed in the DEIS. The BE and DEIS should be revised to make them consistent with each other.

Because of the uncertainty about fisher persistence in actively managed landscapes, it is especially important to provide a thorough evaluation of cumulative effects. The cumulative effects analysis for fisher presented in the BE (p. 78-80) does not appear to define a specific analysis area or described the effects of past, present and reasonably foreseeable projects. Several analysis areas are mentioned for the cumulative effects area, including the SSFCS (BE, p. 79), Kings River Project Area (BE, p. 79), Fresno watershed (BE, p. 77), and Bass Lake RD (BE, p. 80), but it not clear which is the analysis area. Regardless of what area might be intended as the analysis area, the existing condition of the cumulative effects analysis area is not presented.¹ Past activities are also mentioned (BE, p. 79), but it is not clear how these actions altered the habitat conditions important to fisher or the extent to which they had an effect on fisher habitat conditions.

The analysis of cumulative effects should also consider the effects on habitat connectivity and fisher dispersal to the north and south. The importance of the Sugar Pine area to connectivity north and south and the potential for this area to provide a source of animals for natural dispersal to the north should be discussed. Cumulative effects from mortality induced by disease, predation, and canine disease may be exacerbated by habitat disturbance and should be discussed in the analysis of effects.

We have a suggestion to improve the clarity and organization of the effects analysis on fisher. Several habitat features important to fisher are mentioned in the DEIS; they include:

- High canopy cover (average in a stand should not drop below 50% and significant portions of the treated stands should be at 60% or greater canopy cover),
- Especially in larger [>20 inch diameter] sized trees,
- Relatively high basal areas,
- Understory structure (provide for understory diversity),
- Adequate large snags and downed wood, and
- Available movement corridors linking to suitable habitat outside of project area (habitat connectivity).

¹ We do note that there are several paragraphs that discuss an analysis process (BE, p. 79), yet the results of such an analysis were not reported.

(DEIS, p. 6). The analysis of effects could be structured to evaluate the existing and desired conditions and assess the degree to which the proposed action and alternatives alter or promote these habitat features. If the effects for some elements do not vary among alternatives, then the discussion could be handled in a general discussion of effects across all alternatives. As an example, the format in the aquatic wildlife section of the DEIS (69-88) generally follows this approach. This section identified desired conditions for habitat elements such as canopy cover, large woody debris, and water temperature and then focused the analysis of effects on the degree to which each alternative altered or promoted these conditions. By refining the analysis in this manner, we suggest that an evaluation of the conservation benefit of the proposed activities be included in the discussion.

In summary, we ask that you revise the BE and the EIS to reflect a more thorough analysis of the effects of the project on fisher.

IV. Forest Vegetation and Silviculture

Appendix D was very helpful in understanding the range of variability in the stand structure and the likely changes to structure from the proposed treatments. If it is possible to give an indication of the extent of the different stand data, i.e., how often such conditions occur across the landscape, it would improve the ability to assess the degree of change expected to habitat conditions. We did note during our field review of several units that we infrequently observed trees marked for harvest that were 20” to 30” in diameter. This suggested to us that the more intensive harvest reflected in the table (e.g., in Unit 7) occurs infrequently, but the tables do not provide information allowing us to evaluate this.

V. Proposed Forest Plan Amendment

The need to undertake a forest plan amendment if Alternative 2 is adopted is first mentioned on page 2 of the DEIS. There is very little information provided at this point in the document about the nature of the amendment. For instance, it is unclear if the amendment is being proposed only for activities related to this project or more broadly. This section also refers to the effects analysis beginning in Chapter 3 that addresses the amendment. However, we found upon completing our review of the DEIS that the most informative discussion about the forest plan amendment was located on pages 158-159. This section discussed the scope (geographic and temporal) of the amendment and included some discussion of effects. We suggest that to improve clarity and understanding about the proposed forest plan amendment, additional discussion be provided on page 2 of the DEIS that addresses the scope of the amendment and identifies the regulatory direction that allows such project specific amendments.²

We also believe that the discussion and evaluation of the forest plan amendment would benefit from an analysis of the potential conservation costs and benefits to fisher from undertaking the amendment versus the alternatives. The den buffer measure was included in the 2004 Framework to increase the conservation benefit to fisher. A more complete discussion

² We note that the regulations relevant to evaluating the significance of an amendment are mentioned on pages 158-159, but the authority to amend on a project specific basis is not referenced.

about why the den buffer measure is not appropriate or effective and how the desired action better addresses conservation should be included in the analysis. Such a discussion is probably best addressed in the BE and possibly summarized in the discussion on pages 6 or 158-159 of the DEIS.

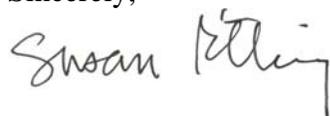
We understand the rationale presented about undertaking a project in the SNAMP study that most clearly reflects the likely actions that would be undertaken by the Forest Service on future projects. We want to identify here that we would find it unacceptable for subsequent projects to propose such amendments for which den sites are known. If you seek to undertake an approach that differs from the 2004 Framework anytime a den is encountered in future projects, then the forest plan should be amended as a whole and not project by project.

VI. Literature Cited Section

We found many instances of references included in the literature cited section that were not cited in the DEIS. We suggest that you review the citations in the narrative of the DEIS and include in the reference section only those that were directly cited in the DEIS.

Thank you for considering our comments. Please contact Susan Britting if you would like to discuss our concerns.

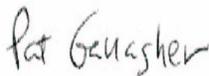
Sincerely,



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References

Barrett, R. and Sweitzer, R. 2009. SNAMP fisher study: status indicators. Presentation given on July 15, 2009.

Eldorado National Forest 2009. Environmental assessment for the Silver Saddle Forest Health Project. April, 2009..

North, M., Stine, P., O'Hara, K., Zielinski, W., and Stephens, S. 2009. An ecosystem management strategy for Sierran mixed-conifer forests. Gen. Tech. Rep. PSW-GTR-220. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 49 p.

Sweitzer, R. and Barrett, R. 2009. Background & Status of the SNAMP Fisher Study. Presentation given on May 13, 2009.

Truex, R.L. W.J. Zielinski, R.T. Golightly, R.H. Barrett, and S.M. Wisely. 1998. A meta-analysis of regional variation in fisher morphology, demography, and habitat ecology in California. Draft report submitted to: California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Section. Sacramento, California, USA. 118 pp.

U.S. Fish and Wildlife Service 2006. Review of the draft environmental impact statement for the Kings River project. Sierra National Forest, California, for effects on the fisher and the Yosemite toad. July 26, 2006.