

Plan Area Scientific Subject	Subject sub-Topic (optional)	Citation	Information Source	Basis for not being considered the BASI (requires one or more of not being the most accurate, reliable, or relevant)			Notes for not being the most accurate, reliable, or relevant.	Is there a separate citation that describes why this citation is not accurate, reliable, or relevant?	Is there a clear scientific consensus on the subject?	Is this citation contradictory to the BASI identified in the record?
				Accurate	Reliable	Relevant				
Animal and Plant Species	Sage-grouse	Aldridge, C.L., D. J. Saher, T.M. Childers, K.E. Stahlnecker, Z.H. Bowen. 2012. Crucial nesting habitat for Gunnison sage-grouse: A spatially explicit hierarchical approach. <i>The Journal of Wildlife Management</i> . 76(2)	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	This is a study of Gunnison sage-grouse in Colorado, USA. Many studies of habitat selection are available for the Greater sage-grouse in habitats closer to the Bi-State area and also for the Bi-State sage-grouse specifically.		yes	no
Animal and Plant Species	Sage-grouse	Baruch-Mordo, S., J.S. Evans, J.P. Severson, D.E. Naugle, J.D. Maestas, J.M. Kiesecker, M.J. Falkowski, C.A. Hagen, K.P. Reese. 2013. Saving sage-grouse from the trees: A proactive solution to reducing a key threat to a candidate species. <i>Biological Conservation</i> , Vol. 167, pp. 233-241.	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Paper is really about conifer stand stand encroachment, model based approach in the state of eastern Oregon. Used remotely sensed data. There are more relevant papers available for Bi-state sage grouse. Further, this paper does not support the commenter's argument about setting a surface disturbance threshold of less than 3 percent per section in the revised LMP. Recommendations in the paper are about conifer CC, not disturbance thresholds.		Yes	no
Animal and Plant Species	CSO	Bond, M.L., D.E. Lee, R.B. Siegel, and J.P. Ward, Jr. 2009. Habitat use and selection by California Spotted Owls in a postfire landscape. <i>Journal of Wildlife Management</i> 73: 1116-1124	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Small sample size (n=7) and only 4 territories post-fire data. 2019 Cons. Strategy for owl identifies high severity fire as > 75% BA loss. Burn severity categories in Bond 2009 more categorical and qualitative in nature. Used newer lit from Lee, Bond, and Siegel 2012; Lee and Bond 2015.	Berrigan et al 2018 which are cited in the CSO Cons Strategy note that overinflated occupancy estimates caused by false positives can potentially mask effects of ecological disturbances. False positives have not been accounted for in much of the spotted owl occupancy works relating occupancy with burn severity. Rockweit et al. note Bond study lacked pre-fire data and only looked at short-term effects. Finally, Bond et al 2009 not cited in the 2019 CSO strategy-conservation strategy notes risk from high-intensity fire as an AM trigger for CSO management. Keane 2017 state that "neither the optimal mix of severity patches nor the optimal spatial configuration of vegetation is known. Peery et al. 2019 and Stephens et al. 2016 state that "Large, high-severity wildfire threatens CSO persistence across the landscape .	No	Yes
Animal and Plant Species	CSO	Bond, M.L., R.J. Gutiérrez, A.B. Franklin, W.S. LaHaye, C.A. May, and M.E. Seamans. 2002. Short-term effects of wildfires on spotted owl survival, site fidelity, mate fidelity, and reproductive success. <i>Wildlife Society Bulletin</i> 30:1022-1028.	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Yosemite structure different, lacks logging history. Newer studies have come online that are more reflective of current conditions on the landscape. Sample size included territories in AZ, CA, and NM. Authors caution use of prescribed burning in owl territories based on their observations and that more study is needed to determine long-term impacts and cause-effect relationships. Found that California spotted owls use this mosaic for a variety of different activities such as low severity for nesting and roosting and higher severities for foraging.	Not cited in the 2019 CSO strategy. Rockweit et al. 2017 note lack of pre-fire data, small sample size, and only looked at short-term effects.	No	No
Animal and Plant Species		Burnett, R.D., P. Taillie, and N. Seavy. 2010. <i>Plumas Lassen Study 2009 Annual Report</i> . U.S. Forest Service, Pacific Southwest Region, Vallejo, CA	Not peer-reviewed article	Estimation of condition or trend	Documented but not published	Similar in space or time to plan area	Unpublished status report is better summarized in published, peer-reviewed BASI from the same authors and others (e.g., Saracco, Siegel, and Wilkerson 2011; Fogg, Roberts, and Burnett 2014; Siegel et al. 2014)		Yes	No
Animal and Plant Species	BBWO	Campos, Brent R. and Ryan D. Burnett. 2015. <i>Avian monitoring of the Storrer and Chips Fire Areas: 2014 report</i>	NGO data	Measurement of conditions with statistical evaluation	Documented but not published	Not the most relevant because [see note]	The objection is focused on the decision to not include BBWO as an SCC and this information would not change that finding. Questionable relevancy, study is site specific to fires which burned on the Lassen and Plumas NFs; represent preliminary/ baseline (BAC) study that used 4-10 years of pre-treatment data and 1 year of post treatment data (i.e. not a long term data set and limited replication). Management recommendations include "retaining substantial portion of post-fire areas for large patches (20-300 acres) burned with high severity as wildlife habitat".		No	No
Animal and Plant Species	Sage-grouse	Christiansen, T. 2009. Fence marking to reduce greater sage-grouse collisions and mortality near Farson, Wyoming – summary of interim results. Wyoming Game and Fish Department unpublished interim report.	Not peer-reviewed article	Measurement of conditions with statistical evaluation	Documented but not published	Not the most relevant because [see note]	This study occurred in Wyoming and was still in experimental phase, thus results were interim and not final. Contrary to the objection, this study does not assert every fence is a problem; those that tend to cause problems typically include one or more of the following characteristics: 1) constructed with steel t-posts, 2) are constructed near leks, 3) bisect winter concentration areas, and/or 4) border riparian areas.	See Stevens et al. 2012, Van Lanen et al. 2017, Hanser et al. 2018, USFWS 2013-COR for differing perspectives (e.g. Stevens et al. found much higher survivorship than Christiansen; FWS recommends minimizing impacts from fences through marking and placement strategies).	no	no
Animal and Plant Species	California spotted owl	Clark, D.A., R.G. Anthony, and L.S. Andrews. 2011. Survival rates of northern spotted owls in post-fire landscapes of southwest Oregon. <i>Journal of Raptor Research</i> 45:38-47	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Northern spotted owls not CA spotted owls. Results inconclusive based based on small sample size and high variability across habitat.		No	No
Animal and Plant Species	CSO	Clark, D.A., R.G. Anthony, and L.S. Andrews. 2013. Relationship between wildfire, salvage logging, and occupancy of nesting territories by northern spotted owls. <i>Journal of Wildlife Management</i> 77:672-688.	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Not cited in new CSO strategy, study took place southwest Oregon. Conclude that wildfire and salvage logging negatively affect owl occupancy. However, the main finding in this study is inconclusive because the study was not set up to accurately determine cause-effect. Very difficult to determine cause effect relationships in ecological studies due to failure to replicate and minimize the interplay of confounding variables. Authors state "however, we were unable to separate the impacts of wildfire from land management activities. As a result, we recommend future research to clarify the relationship between high severity fire and spotted owl site occupancy in the absence of past timber harvest and salvage logging. We believe that widespread, stand-replacing wildfires will negatively affect site occupancy by spotted owls, so we suggest efforts should be made to reduce the risk of widespread, stand-replacing wildfire in spotted owl habitat". Birds in this study were not marked or telemeter-ed making it difficult to discern whether or not the owls were the same individuals making it difficult to estimate if new animals were entering or exiting the system (e.g. accurate estimates of survivorship).	See Rockweit et al. 2017—although study concludes wildfire had negative effects on owl occupancy it was confounded by post-fire salvage logging and only looked at short-term effects. Fire occurred in 2002, almost 20 years ago; landscape conditions and fire behavior may have changed since then. Also see Jones and Peery 2019.	No	Yes
Animal and Plant Species	Sage-grouse	Doherty, K.E. 2008. Sage-grouse and energy development: Integrating science with conservation planning to reduce impacts. Dissertation. The University of Montana.	Not peer-reviewed article	Measurement of conditions with statistical evaluation	Documented but not published	Not the most relevant because [see note]	Study occurred in Powder River Basin, Montana and Wyoming. Other published studies of habitat use are available for the Greater sage-grouse closer to the Bi-State area and also for the Bi-State sage-grouse specifically. In addition, this study is focused on landscape-scale habitat use. Findings showed that bird abundance varies by state, core areas contain a disproportionately large segment of the breeding population and that risk of development within core areas varies regionally.		No	No

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Animal and Plant Species	Sage-grouse	Doherty, K.E. 2008. Sage-grouse and energy development: Integrating science with conservation planning to reduce impacts. Dissertation. The University of Montana.	Not peer-reviewed article	Measurement of conditions with statistical evaluation	Documented but not published	Not the most relevant because [see note]	Study occurred in Powder River Basin, Montana and Wyoming. Other published studies of habitat use are available for the Greater sage-grouse closer to the Bi-State area and also for the Bi-State sage-grouse specifically. In addition, this study is focused on landscape-scale habitat use. Findings showed that bird abundance varies by state, core areas contain a disproportionately large segment of the breeding population and that risk of development within core areas varies regionally.		no	no
Animal and Plant Species	Sage-grouse	Doherty, K.E., D.E. Naugle, and B.L. Walker. 2010. Greater sage-grouse nesting habitat: The importance of managing at multiple scales. <i>Journal of Wildlife Management</i> 74:1544-1553.	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Comment is about restoring essential habitat so that at least 70 percent of the land cover is sagebrush steppe sufficient to support sage-grouse different land use history, however this paper does not make that recommendation. The paper is about multi-scale habitat use and selection and the importance of defining habitat needs at different scales for various life stages. More focused on topography and landscape features. Further, the study occurred in Powder River Basin, Montana and Wyoming. Other published studies of habitat use are available for the Greater sage-grouse closer to the Bi-State area and also for the Bi-State sage-grouse specifically.	The FWS 2013 COR for sage grouse does not list specific percentages.	no	no
Animal and Plant Species	Sage-grouse	Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A meta-analysis for greater sage-grouse nesting and brood rearing habitats. <i>Wildlife Biology</i> 13 (Supplement 1):42-50.	Peer-reviewed journal article	Not the most accurate because [see note]	published peer-reviewed article	Not the most relevant because [see note]	This is a meta-analysis of data from a number of different studies in North America. Other studies in the Bi-state area are available and more applicable. Looked at silver sagebrush, mountain big sagebrush, and Wyoming big sagebrush, which are not most common species on Inyo. Commenter suggests plan should include 15-40 percent can cover of sagebrush but does not specify at what scale.	FWS COR 2013 emphasizes use of data applicable to local site ecological conditions, unless local data are not available. Hanser et al. 2018 (and references therein) note that positive relations between nest success and grass height could be an artifact based on the timing of vegetation surveys rather than an actual effect. Hanser et al. 2018 also note "range-wide guidelines for suitable sagebrush cover for nests range from 15-25 percent in both mesic and xeric sites, but are narrowed to greater than 19.6 and 20.4 percent in mesic and xeric sites, respectively". The bi-state action plan notes cover at nests differs from range-wide studies (e.g. Kolada et al. 2009 found 42% shrub cover at nest sites in Mono County.)	no	no
Animal and Plant Species	California spotted owl	Hanson CT, Bond ML, Lee DE (2018) Effects of post-fire logging on California spotted owl occupancy. <i>Nature Conservation</i> 24: 93-105. https://doi.org/10.3897/natureconservation.24.20538	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Same in space and time to plan area	Issues outlined in Peery et al. (2019), Jones and Peery (2018), and Berigan et al. (2019); also methodological issues related to: (1) classification of high fire severity, (2) statistical analysis inappropriate, (3) categorization of salvage logging, and more		No	Yes
Animal and Plant Species	Fire effects	Hanson, C. T. and M. P. North. 2008. Postfire woodpecker foraging in salvage-logged and unlogged forests of the Sierra Nevada. <i>Condor</i> 110: 777-782	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Limited sampling effort, study locations, and statistical inference of results; only addresses spp. presence/absence; other BASI provides more statistical inference and information than this one		Yes	Yes
Animal and Plant Species	Fire effects	Hanson, C.T. 2013. Pacific fisher habitat use of a heterogeneous post fire and unburned landscape in the southern Sierra Nevada, California, USA. <i>The Open Forest Science Journal</i> 6: 24-30	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Methodological issues (taken from Spencer et al. 2015, page 59) include: (1) use of idiosyncratic definitions of "moderate" and "high" severity classes and subsequent combining of these two fire severity categories for statistical analyses means that no conclusions can be drawn concerning the effects of moderate or severe fires on fisher habitat use; (2) inspection of fire history maps and Figure 1, most fisher scats were found in unburned or lightly burned areas, and scats inside fire perimeters were mostly near edges rather than fire interiors, and survey transects did not adequately sample large areas burned at moderate to high severity to draw any conclusions about their use by fishers; and (3) evidence that fishers sometimes use post-burn habitats does not imply that they can establish home ranges and reproduce in such areas (inappropriate inferences from data).	See: (1) Spencer et al. (2015) Fisher Conservation Assessment, and (2) Peery et al. (2019) Agenda-driven science publications; also study takes place on Kern Plateau, which is atypical of the Southern Sierra fisher population (see Spencer et al. 2015, 2016; fisher conservation assessment and strategy); based on presence/absence detections only	no	Yes
Animal and Plant Species		Hanson, C.T. 2014. Conservation concerns for Sierra Nevada birds associated with high-severity fire. <i>Western Birds</i> 45: 204-212	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Also issues with inappropriate statistical analysis, biased use of relevant published literature, and inappropriate inferences drawn from results.	See Peery et al. (2019) agenda-driven science; in addition, this article does not provide any limitations of the study regarding (1) the use of Breeding Bird Survey data to detect populations trends (quality of trend estimates, assumptions, data quality, etc.), (2) assumed cause and effect relationships between populations trends and mechanism of decline (assumed to be lack of early seral forest habitat when many other potential causal factors exist; "correlation vs. causation"), and (3) minimal analytical & methodological information provided such as types of statistical analyses used for BBS data, sample sizes, spatial variation (and autocorrelation), and other information (whether observer effects or other potential confounding variables were included in models).	Yes	Yes
Animal and Plant Species	Fire effects	Hanson, C.T. 2015. Uses of higher severity fire areas by female Pacific fishers on the Kern Plateau, Sierra Nevada, California, USA. <i>Wildlife Society Bulletin</i> 39: 497-502	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	See notes in response to Hanson (2013) above as similar issues exist	See: (1) Spencer et al. (2015) Fisher Conservation Assessment, and (2) Peery et al. (2019) Agenda-driven science publications; also study takes place on Kern Plateau, which is atypical of the Southern Sierra fisher population (see Spencer et al. 2015, 2016; fisher conservation assessment and strategy); based on presence/absence detections only	no	Yes
Animal and Plant Species	Bighorn Sheep	Heffelfinger, J. 2004. Bighorn sheep disease epizootic in the Silver Bell Mountains, southern Arizona. Performance report. Project No. W-78-R-54. Arizona Game and Fish Department.	Unpublished federal or state data	Estimation of condition or trend	Evaluation of expert	Not the most relevant because [see note]	This is a "short communication" of 4 months data w/1 author noted in <i>Journal of Wildlife Disease</i> . Not the most relevant because it is bacteria related to pinkeye while the FEIS focus is on bacteria associated to pneumonia.	n/a	No	No
Animal and Plant Species	Fire regimes	Hutto, R. L. 1995. Composition of bird communities following stand-replacement fires in Northern Rocky Mountain (U.S.A.) conifer forests. <i>Conservation Biology</i> 9: 1041-1058	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study from Northern Rocky Mountains and is not relevant to the plan area		Yes	Yes
Animal and Plant Species	Fire regimes	Hutto, R. L. 2008. The ecological importance of severe wildfires: Some like it hot. <i>Ecological Applications</i> 18: 1827-1834	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study from Northern Rocky Mountains and is not relevant to the plan area		Yes	Yes

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Animal and Plant Species	Fire regimes	Hutto, R.L., R.E. Keane, R.L. Sherriff, C.T. Rota, L.A. Eby, and V.A. Saab. 2016. Toward a more ecologically informed view of severe forest fires. <i>Ecosphere</i> 7(2):e01255	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Opinion paper that only presents a biased selection of scientific literature focused primarily on the Rocky Mountains and Pacific NW; only Sierra Nevada publications cited as those considered non-BASI for reasons stated above		Yes	Yes
Animal and Plant Species	Fire regimes	Hutto, Richard L and David A. Patterson. 2016. Positive effects of fire on birds may appear only under narrow combinations of fire severity and time-since-fire. <i>International Journal of Wildland Fire</i> . http://dx.doi.org/10.1071/WF15228	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Study from Northern Rocky Mountains and is not relevant to the plan area		Yes	Yes
Animal and Plant Species	Bighorn Sheep	Jansen, B.D., J.R. Heffelfinger, T.H. Noon, P.R. Krausman, J.C. Devos Jr. 2006. Infectious keratoconjunctivitis in bighorn sheep, Silver Bell Mountains, Arizona, USA. <i>J. Wildl Dis.</i> 42(2). https://doi.org/10.7589/0090-3558-42.2.407	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	See Heffelfinger 2004 (above), same reporting information. Not the most relevant to the FEIS analysis.	n/a	No	No
Animal and Plant Species	CSO	Jenness, J.S., P. Beier, and J.L. Ganey. 2004. Associations between forest fire and Mexican spotted owls. <i>Forest Science</i> 50:765-772.	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Jenness et al. conducted their research on Mexican spotted owl in NM and AZ forests, which are predominately ponderosa pine and have a different disturbance history and topography than the Inyo. Further, Jenness et al. note the negative relationship between recently burned areas and spotted owls was statistically weak and that owls had lower occupancy in burned sites that were pure pine which comprised 38-85% of burned sites. Presence of pure pine was the co-variate most strongly influencing occupancy which is logical since MSO tend to favor pine-oak habitat. (thus its possible they may have had lower occupancy rates in those sites to begin with). Jenness et al. 2004 state " Although statistical significance was weak, our sample size was small, resulting in low power to detect a significant association between occupancy rank and fire. Further, we lack information on spatial and temporal variability in owl occupancy rates, and our burned areas encompassed a wide range in both burn extent and severity. These factors complicate interpretation of our data. "	See USFWS 2017 Conservation report; USFS 2019 (RS-TP-043) and references therein for more info on high severity fire.	No	No
Animal and Plant Species	Sage-grouse	Karl, M. and J. Sadowski. 2005. Assessing big sagebrush at multiple spatial scales: An example in southeast Oregon. Technical Note 417. BLM/ST-05/001+4400. Bureau of Land Management, Denver, CO. 41 pp.	Unpublished federal or state data	Measurement of conditions with statistical evaluation	Evaluation of expert	Not the most relevant because [see note]	Tech report/synthesis from southern Oregon. There is more recent work on the Bi-state area that would apply to the Inyo--could not find support for 70 percent land cover requirement mentioned by the commenter.		no	no
Animal and Plant Species	Sage-grouse	Knick S.T., S.E. Hanser, K.L. Preston. 2013. Modeling ecological minimum requirements for distribution of greater sage-grouse leks: implications for population connectivity across their western range. <i>U.S.A. Ecol Evol.</i> 2013 Jun; 3(6) 1539-1551	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	broad-scale continental study but not area specific; the study parameters are not necessarily suitable at the scale of a forest plan; CA only minimally represented in the study area. Data analyzed for active leks from 1998-2007 refers to percent cover of sagebrush land cover at leks and appears to be at odds with the comment which appears to refer to land cover habitat requirements more broadly. paper is more appropriate for guiding large-scale reserve design. not at the forest-scale.		no	no--theplan does not specify numerical thresholds for SG; but rather more broad/general conditions.
Animal and Plant Species	CSO	Lee, D. E. 2018. Spotted Owls and forest fire: a systematic review and meta-analysis of the evidence. <i>Ecosphere</i> 9(7):e02354.10.1002/ecs2.2354	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Not cited in CSO strategy. Questionable reliability because Lee's conclusion is not supported by the results. High variability among fire-effects between the 21 studies he reviewed. Did not account for between site variation or differences in context. Longer term effects not well understood.	See Peery et al. 2019. Berigan et al. 2018, Ganey et al. 2017, Jones and Peery et al. 2019	No	Yes
Animal and Plant Species	Fire regimes	Lee, D.E. and M.L. Bond. 2015. Occupancy of California spotted owl sites following a large fire in the Sierra Nevada, California. <i>The Condor</i> 117: 228-236	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Issues outlined in Peery et al. (2019), Jones and Peery (2018), and Berigan et al. (2019)		No	Yes
Animal and Plant Species	CSO	Lee, D.E., and M.L. Bond. 2015b. Previous year's reproductive state affects spotted owl site occupancy and reproduction responses to natural and anthropogenic disturbances. <i>The Condor</i> 117:307-319.	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Questionable accuracy because unmarked birds and based on nocturnal detections only--birds can move around quite a bit at night which can inflate occupancy estimates. This publication is cited in the CSO 2019 Conservation strategy which notes that owls likely benefit from low, moderate, and mixed fire severity, with smaller high-severity fire patches and edges that create forest heterogeneity (Lee et al. 2012, 2013; Lee and Bond 2015b; Roberts et al. 2011). The strategy goes on to note that the optimal mix of severity patches and spatial configuration of vegetation is currently unknown. See also Keane 2017, Jones et al. 2016, Stephens et al. 2016; Ganey et al. 2017, Jones and Peery et al. 2019 for alternative views. Take home: No one size fits all approach to fire and very few long term studies to assess true effects. This is important because short-term occupancy can be driven by site fidelity/memory recall in which case non-optimal habitat actually functions as a "sink". Short term gains or maintenance of suitable foraging habitat are ephemeral and do not offset the negative longer term effects to nesting habitat (i.e. stands of large old trees with high canopy cover for nesting can take >100 yr to regenerate). Study took place in SoCal.	See Peery et al. 2019. Berigan et al. 2018, Ganey et al. 2017, Jones and Peery et al. 2019	No	Yes
Animal and Plant Species	CSO	Lee, D.E., M.L. Bond, and R.B. Siegel. 2012. Dynamics of breeding-season site occupancy of the California spotted owl in burned forests. <i>The Condor</i> 114:792-802.	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Similar in space or time to plan area	Results challenge previous thinking on mixed-severity fire; will use patches of habitat of high severity burned area. Nocturnal detections only-did not account for inter territory movement--could have been the same birds moving around. Can lead to false positives and questionable accuracy.	See Peery et al. 2019. Berigan et al. 2018, Ganey et al. 2017, Jones and Peery et al. 2019	No	Yes
Animal and Plant Species	CSO	Lee, D.E., M.L. Bond, M.I. Borchert, and R. Tanner. 2013. Influence of fire and salvage logging on site occupancy of spotted owls in the San Bernardino and San Jacinto mountains of southern California. <i>Journal of Wildlife Management</i> 77:1327-1341.	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Similar in space or time to plan area	Research conducted in Yosemite NP-looked at fire effects only (n=16). Conclude that mosaic of vegetation types with varying burn severity-low severity for nesting/roosting and high severity for foraging. Conclude that landscape-level prescribed burning and wildland fires is beneficial. CWD and BA most significant factors-challenges previous work by Blakesley et al. (2005) who found CC and BA were important-but CC was a derived variable in that study and it was across a much larger spatial scale. unmarked birds, nocturnal calls only--can lead to false positives and higher occupancy rates.	See Peery et al. 2019. Berigan et al. 2018, Ganey et al. 2017, Jones and Peery et al. 2020	No	Yes

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Animal and Plant Species	Sage-grouse	Manier, D.J., Wood, D.J.A., Bowen, Z.H., Donovan, R.M., Holloran, M.J., Julissou, L.M., Mayne, K.S., Oyer-McCance, S.J., Quamen, F.R., Saher, D.J., and Titolo, A.J., 2013. Summary of science, activities, programs, and policies that influence the rangewide conservation of Greater Sage-Grouse (<i>Centrocercus urophasianus</i>): U.S. Geological Survey Open-File Report 2013-1098, 170 p., http://pubs.usgs.gov/of/2013/1098/ .	Unpublished federal or state data	Measurement of conditions with statistical evaluation	Evaluation of expert	Not the most relevant because [see note]	Range-wide assessment/synthesis of BASI through 2012. Other more recent reports have come online since then (Hanser et al. 2018). These data and analytical approaches provide a regional assessment tool suitable for guiding regional mid- to long-term planning scenarios over broad spatial scales. Goes on to say that local expertise and data are needed to complement landscape data when developing specific management plans using these regional guides.	See Hanser et al. 2018 for most current science synthesis by USGS.	no	no
Animal and Plant Species	BBWO	Pierson et al. 2010. Do male and female black-backed woodpeckers respond differently to gaps in habitat? <i>Evolutionary Applications</i> 3(3): 263-278	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	This citation is specifically referenced with regard to the SCC objection and seems to be suggesting that BBWO in CA are genetically at risk due to dispersal barriers. paper is really about landscape scale management within the context of the continental BBWO population structure. Authors do not conclude CA population is disconnected from OR and WA, just that OR may have a barrier between CA or WA. Lots of uncertainty. Conclusion: "Our data suggests there has been gene flow across the boreal forest for a long period of time. Management actions should strive to maintain forested connectivity between burned patches to maintain these levels of gene flow". This project used multiple study sites in N.A., closest being OR.		No	No
Animal and Plant Species	Sage-grouse	Prather, P.R. and T.A. Messmer. 2010. Raptor and corvid response to power line distribution line perch deterrents in Utah. <i>Journal of Wildlife Management</i> 74(4).	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study occurred in UT in 2006 and focused on Gunnison SG habitat; 1-year of data. Perch deterrents evaluated were not effective because of inherent design and placement flaws. Additionally, previous pole modifications that mitigated avian electrocutions provided alternative perches.		no	no
Animal and Plant Species	BBWO	Rota CT, Millsbaugh JJ, Rumble MA, Lehman CP, Kesler DC. 2014. The Role of Wildfire, Prescribed Fire, and Mountain Pine Beetle Infestations on the Population Dynamics of Black-Backed Woodpeckers in the Black Hills, South Dakota. <i>PLoS ONE</i> 9(4): e94700	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study is from South Dakota, limited relevance to plan area. Other more relevant BASI is available.		No	No
Animal and Plant Species	BBWO	Seavy, N.E., R.D. Burnett, and P.J. Taille. 2012. Black-backed woodpecker nest tree preference in the burned forests of the Sierra Nevada, California. <i>Wildlife Society Bulletin</i> 36: 722-728;	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	The objection point is focused on the benefits of mixed severity fire. This study was focus on snag densities, not fire effects and patch dynamics specifically and is not the most relevant citation for the point they are making. Study found that in burned areas birds preferentially selected nest trees with higher surrounding snag densities of med-to-small diameter trees (within 11.3-m radius of the nest) compared to random trees. Do not preferentially nest in largest snags. Smallest nesting tree was 7 inches dbh. Data could not be extrapolated beyond the nest site scale: small sample size (n=31) in 2 different burn areas (in one geographic location, i.e. localized study. Short term study (3 years of data.). Limited to one spatial scale (nest site). Cub Fire burned at moderate to low severity with small to medium-sized patches of high severity; Moonlight Fire was higher severity with large high-severity patches. The main conclusion that the data from this study can support is that maintaining large patches of high snag densities should benefit BBWO at the nest site scale--the data cannot be extrapolated across multiple spatial scales. Concern with reliability of the conclusions with regard to burn severity and patch dynamics in this study.	Also see Seigel et al. 2014; 2018 for more info on snags and mixed-severity fire.	No	No
Animal and Plant Species		Siegel, R.B., M.W. Tingley, and R.L. Wilkerson. 2012. Black-backed Woodpecker MIS surveys on Sierra Nevada national forests: 2011 Annual Report.	Not peer-reviewed article	Measurement of conditions with statistical evaluation	Not the most reliable because [see note]	Similar in space or time to plan area	Unpublished status report is better summarized in published, peer-reviewed, relevant BASI cited in the FEIS (e.g., Saracco, Siegel, and Wilkerson 2011; Fogg, Roberts, and Burnett 2014; Siegel et al. 2014)		Yes	Yes
Animal and Plant Species	Sage-grouse	Slater, S.J. and J.P. Smith. 2010. Effectiveness of raptor perch deterrents on an electrical transmission line in Southwestern Wyoming. <i>Journal of Wildlife Management</i> , 74(5).	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study took place in WY, looked at efficacy of perch deterrents for power lines, 1-year of observational data and driving surveys. Found deterrents to be least effective on GOEA and ravens, more effective on smaller hawks but lack of nearby perch availability may have been more of a factor affecting on-line perch use--very few SG in the areas. mixed results, witnessed few hunting attempts and very few SG in the area (only 3 historic inactive leks) so could not ascertain conclusive effects on SG.		no	no
Animal and Plant Species	CSO	Stephens, S.L., S.W. Bigelow, R.D. Burnett, B.M. Collins, C.V. Gallagher, J. Keane, D.A. Kelt, M.P. North, L.J. Roberts, P.A. Stine, and D.H. Van Vuren. 2014. California spotted owl, songbird, and small mammal responses to landscape fuel treatments. <i>BioScience</i> 64:893-906.	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Similar in space or time to plan area	Supports low to moderate intensity fire with some patches of higher intensity fire on the landscape and treatments should allow for patterns of fire effects that approximate those occurring under more natural forest conditions. Owls responded negatively to increasing amounts of mechanical treatment, however authors note it was also difficult to disentangle confounding effects from other stressors such as barred owls and note that patch thresholds for patch sizes of high-severity fire (benefit vs negative) are currently unknown.		No	No
Animal and Plant Species	Sage-grouse	Tymstra, 2018. PowerPoint highlights research on sage grouse metabolism and impacts from chemical stressors on reproductive success in the Bodie Hills Lek.	Expert opinion or obs	Not the most accurate because [see note]	Not the most reliable because [see note]	same in space and time to plan area	Slides provide overview and background information on the relationships between plant chemistry and nutrition of SG but there is no quantitative analyses conclusions, or recommendations. This information looks to still be in the exploratory phase.		no	no
Aquatic ecosystems	Fire regimes	Malison, R.L. and C.V. Baxter. 2010. The fire pulse: wildfire stimulates flux of aquatic prey to terrestrial habitats driving increases in riparian consumers. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> 67: 570-579	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study conducted in central Idaho and is not relevant to the plan area		Yes	No
Aquatic ecosystems	Fire regimes	Sestrich, C.M., T.E. McMahon, and M.K. Young. 2011. Influence of fire on native and nonnative salmonid populations and habitat in a western Montana basin. <i>Transactions of the American Fisheries Society</i> 140: 136-146	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study from the Northern Rocky Mountains with no relevance to the plan area		Yes	No
Infrastructure	Fire management	Cohen, J.D. 2000. Preventing disaster: home ignitability in the Wildland-Urban Interface. <i>Journal of Forestry</i> 98:15-21	Peer-reviewed journal article	Measurement of conditions without statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Conclusions based on model outputs and case studies are limited to CA chaparral fires; a number of specific conclusions may not be applicable to SN region		Yes	Yes

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				Accurate	Reliable	Relevant				
Infrastructure		Cohen, J.D., and R.D. Stratton. 2008. Home destruction examination: Grass Valley Fire. U.S. Forest Service Technical Paper RS-TP-026b	Not peer-reviewed article	Measurement of conditions without statistical evaluation	Documented but not published	Not the most relevant because [see note]	Case study focused on single wildfire event in Southern California (Grass Valley Fire), which has some limited relevance to plan area; report conclusions based on general observational evidence rather than a statistical or quantitative analysis		Yes	No
Terrestrial Ecosystems and Vegetation	Fire regimes	Baker WL (2017) Restoring and managing low-severity fire in dry-forest landscapes of the western USA. PLoS ONE 12(2): e0172288. doi:10.1371/journal.pone.0172288	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Methodological and other issues include: (1) few "calibration sites" and "prediction sites" in the plan area (2 total for each) and none relevant to the eastern Sierra Nevada included, (2) biased and selective use of citations and studies used in dataset, (3) conclusions made that are beyond the inferential space of the study results, (4) use of unaccepted fire terminology definitions (e.g., low severity fire), (5) lack of familiarity with data sets analyzed, (6) lack of sufficient information (e.g., regression assumptions) to determine whether linear regression analysis was appropriate for evaluating hypotheses, and (7) inappropriate conclusions based on a new and untested analytical approach that is not placed in proper context (e.g., no clearly stated limitations or assumptions; biased treatment of competing hypotheses).		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Baker, W. L., and C. T. Hanson. 2017. Improving the use of early timber inventories in reconstructing historical dry forests and fire in the western United States. Ecosphere 8(9):e01935.10.1002/ecs2.1935	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Major methodological and other issues related to accuracy and reliability summarized in Haggmann et al. (2018)	See Haggmann et al. 2018. Improving the use of early timber inventories in reconstructing historical dry forests and fire in the western United States: Comment. Ecosphere 9(10):Article e02232.	Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Baker, W. L., C. T. Hanson, and M. A. Williams. 2018. Improving the use of early timber inventories in reconstructing historical dry forests and fire in the western United States: Reply. Ecosphere 9(7): e02325.10.1002/ecs2.2325	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	This is a reply to Haggmann et al. (2018) publication that does not provide sufficient evidence in support of the authors' original publication (Baker et al. 2017) or refutation arguments presented by Haggmann et al. (2018)	See Haggmann et al. 2018. Improving the use of early timber inventories in reconstructing historical dry forests and fire in the western United States: Comment. Ecosphere 9(10):Article e02232.	Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Baker, W.L. 2014. Historical forest structure and fire in Sierran mixed-conifer forests reconstructed from General Land Office survey data. Ecosphere 5(7): Article 79	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Major methodological and other issues related to accuracy and reliability summarized in Levine et al. (2016), Fule et al (2014), Safford and Stevens (2017), and other publications cited in FEIS	See: (1) Levine et al. 2016. Evaluating a new method for reconstructing forest conditions from General Land Office survey records. Ecological Applications 27(5):1495-1513; (2) Fule, P. Z., T. W. Swetnam, P. M. Brown, D. A. Falk, D. L. Peterson, C. D. Allen, G. H. Aplet, M. A. Battaglia, D. Binkley, and C. Farris. 2014. Unsupported inferences of high-severity fire in historical dry forests of the western United States: response to Williams and Baker. Global Ecology and Biogeography 23:825-830, and (3) Miller and Safford. 2017. Corroborating evidence of a pre-Euro-American low- to moderate-severity fire regime in yellow pine-mixed conifer forests of the Sierra Nevada, California, USA. Fire Ecology 13(1): 58-90.	Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Baker, W.L. and M. Williams. 2018. Land surveys show regional variability of historical fire regimes and dry forest structure of the western United States. Ecological Applications, 28(2), 2018, pp. 284-290	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Major methodological and other issues related to accuracy and reliability summarized in Levine et al. (2016), Fule et al (2014), Safford and Stevens (2017), and other publications cited in FEIS	See: (1) Levine et al. 2016. Evaluating a new method for reconstructing forest conditions from General Land Office survey records. Ecological Applications 27(5):1495-1513; (2) Fule, P. Z., T. W. Swetnam, P. M. Brown, D. A. Falk, D. L. Peterson, C. D. Allen, G. H. Aplet, M. A. Battaglia, D. Binkley, and C. Farris. 2014. Unsupported inferences of high-severity fire in historical dry forests of the western United States: response to Williams and Baker. Global Ecology and Biogeography 23:825-830, and (3) Miller and Safford. 2017. Corroborating evidence of a pre-Euro-American low- to moderate-severity fire regime in yellow pine-mixed conifer forests of the Sierra Nevada, California, USA. Fire Ecology 13(1): 58-90.	Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Black, S.H., D. Kulakowski, B.R. Noon, and D.A. DellaSala. 2013. Do bark beetle outbreaks increase wildfire risks in the Central U.S. Rocky Mountains: Implications from Recent Research. Natural Areas	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Not the most relevant because [see note]	Study conducted in different geographic region (Central Rockies) which is not relevant to plan area		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Bond, M.L., D.E. Lee, C.M. Bradley, and C.T. Hanson. 2009. Influence of pre-fire tree mortality on fire severity in conifer forests of the San Bernardino Mountains, California. The Open Forest Science Journal 2:41-47	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Not the most relevant because [see note]	Study focused on Southern California mountains in earlier, moderate drought event, and has limited relevance to the plan area and ecosystems following exceptional 2012-2016 drought. There are also methodological issues, such as: (1) limited sample size (one moderate-sized wildfire (5860 acres) following a moderate drought event), (2) the analysis did not include the likely influence of weather on fire behavior even though it was recognized as important in the Discussion (see Hicke et al. 2012, Forest Ecology and Management 271:81-90), and (3) tree mortality data based exclusively on Aerial Detection Survey (ADS) data that was not field-verified and used at an inappropriate scale of analysis (much error in polygons at the scale of analysis; 30x30 m pixels).		Yes	Yes

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				Accurate	Reliable	Relevant				
Terrestrial Ecosystems and Vegetation	Fire regimes	Bradley, C. M., C. T. Hanson, and D. A. DellaSala. 2016. Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States? <i>Ecosphere</i> 7(10):e01492. 10.1002/ecs2.1492	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Not the most relevant because [see note]	Analysis by protected area status confounded by several factors not accounted in statistical models, including: (1) different fire management approaches used in each type (e.g., the highest protected status has a greater no. of wildfires managed for resource objectives compared to lower protected area classes), (2) different past management histories (e.g., greater historical logging impacts in non-protected areas), (3) proximity to human communities (i.e., generally greater in non-protected areas), and (4) geographic scope of study much larger than the plan area and combines forest types from different regions (e.g., Rocky Mountains, Pacific, NW, CA) without examining more specific patterns for the plan area. Additionally, as noted in the Discussion section, "due to the coarseness of the management intensity variables that we used (i.e., GAP status), we cannot rule out whether low intensities of management decreased the occurrence of high severity fire."		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	DellaSala, D., M.L. Bond, C.T. Hanson, R.L. Hutto, and D.C. Odion. 2014. Complex early seral forests of the Sierra Nevada: what are they and how can they be managed for ecological integrity? <i>Natural Areas Journal</i> 34: 310–324	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Opinion paper with a number of citations placed out of appropriate context and misleading information		No	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	DellaSala, D.A., R.L. Hutto, C.T. Hanson, M.L. Bond, T. Ingalsbee, D. Odion, and W.L. Baker. 2017. Accommodating mixed-severity fire to restore and maintain ecosystem integrity with a focus on the Sierra Nevada of California, USA. <i>Fire Ecology</i> 13(2): 148–171.	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Opinion paper with a number of citations placed out of appropriate context and misleading information		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Donato, D.C., J.B. Fontaine, W.D. Robinson, J.B. Kauffman, and B.E. Law. 2009. Vegetation response to a short interval between high-severity wildfires in a mixed-evergreen forest. <i>Journal of Ecology</i> 97:142–154	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study in Pacific Northwest region (Klamath–Siskiyou Mountains, Oregon) which has limited relevance to plan area		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Donato, D.C., J.L. Campbell, J.F. Franklin. 2012. Multiple successional pathways and precocity in forest development: can some forests be born complex? <i>Journal of Vegetation Science</i> . Vol. 23(3).	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	Developed for Pacific Northwest forests (Douglas fir stands) which is not relevant to plan area		Yes	Yes
Terrestrial Ecosystems and Vegetation		Franklin, J.F., D.B. Lindenmayer, J.A. MacMahon, A. McKee, J. Magnuson, D.A. Perry, R. Waide, and D. Forster. 2000. Threads of continuity: ecosystem disturbance, recovery and the theory of biological legacies. <i>Conservation Biology in Practice</i> 1(1): 8-16.	Not peer-reviewed article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	Focused on Pacific Northwest or Rocky Mountain regions with minimal relevance to plan area; unclear if this journal article is peer-reviewed		Yes	No
Terrestrial Ecosystems and Vegetation	Fire regimes	Gibbons, P. et al. 2012. Land management practices associated with house loss in wildfires. <i>PLoS ONE</i> 7: e29212	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study occurs in Australia which has limited relevance to plan area		Yes	No
Terrestrial Ecosystems and Vegetation	Fire regimes	Hanson, C. 2018. Landscape Heterogeneity Following High-Severity Fire in California's Forests. <i>Wildlife Society Bulletin</i> 42(2):264–271.	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Methodological issues include: (1) satellite-derived fire severity was not field verified to classify H5 burned plots, (2) statistical analysis inappropriate (analysis of distance from H5 patch edge was treated as a categorical factor rather than a continuous with >300 m the largest category), (3) simplistic analyses did not control for spatial autocorrelation, interactions between factors, or other important explanatory variables (e.g., distance to seed source for conifer regen), (4) sample size very limited (fewer than 25 plots per distance class), (5) lack of sufficient information about frequency of conifers in plots (High Standard Deviation indicates many plots with zero conifers).		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Hanson, C.T. and D.C. Odion. 2016. Historical fire conditions within the range of the Pacific fishers and spotted owl in the central and southern Sierra Nevada, California, USA. <i>Natural Areas Journal</i> 36: 8–19	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Issues related to inappropriate data analysis, assumptions, and interpretation as noted by Collins et al. (2016).	See (1) Collins et al. 2016. A response to Hanson and Odion. <i>Natural Areas Journal</i> 36(3):234-238, (2) Peery et al. (2019) agenda-driven science, (3) Safford et al. 2015. Differences in land ownership, fire management objectives and source data matter: a reply to Hanson and Odion (2014). <i>International Journal of Wildland Fire</i> 24, 286–293, and (4) Miller and Safford (2017)	Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Hanson, C.T., and M.P. North. 2009. Post-fire survival and flushing in three Sierra Nevada conifers with high initial crown scorch. <i>International Journal of Wildland Fire</i> 18(7): 857–864	Peer-reviewed journal article	Not the most accurate because [see note]	Not the most reliable because [see note]	Similar in space or time to plan area	Issues include: (1) very limited sample sizes for 2 of 3 species (Jeffrey pine, red fir), (2) only includes 2 wildfires in CA (limited inference of results); (3) did not sample areas of crown fires; (4) does not examine the interactive effects of fire with future drought, bark beetles, or pathogens; (4) does not acknowledge that low level of post-fire foliage (~30% for pines) often corresponds to low future survival in large trees with other stressors.		Yes	Yes
Terrestrial Ecosystems and Vegetation	Bark beetles	Hart, S.J., T. Schoennagel, T.T. Veblen, and T.B. Chapman. 2015a. Area burned in the western United States is unaffected by recent mountain pine beetle outbreaks. <i>PNAS</i> 112: 4375–4380	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Regional study (western US) on mountain pine beetle and fire relationships has very limited applicability to Sierra Nevada in the montane zone (some limited relevance to lodgepole pine forests)		Yes	No
Terrestrial Ecosystems and Vegetation	Forest health	Hart, S.J., T.T. Veblen, N. Mietkiewicz, and D. Kulakowski. 2015b. Negative feedbacks on bark beetle outbreaks: widespread and severe spruce beetle infestation restricts subsequent infestation. <i>PLoS ONE</i> 10(5): e0127975	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study focuses on spruce beetle which is not relevant to plan area		Yes	No
Terrestrial Ecosystems and Vegetation	Fire regimes	Harvey, B.J., D.C. Donato, W.H. Romme, and M.G. Turner. 2013. Influence of recent bark beetle outbreak on fire severity and postfire tree regeneration in montane Douglas-fir forests. <i>Ecology</i> 94:2475–2486	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Study focused on Northern Rocky Mountain region in Douglas fir forests which is not relevant to plan area		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Odion and Sarr 2007. Managing disturbance regimes to maintain biological diversity in forested ecosystems of the Pacific Northwest. <i>Forest Ecology and Management</i> 246 (2007) 57-65. https://www.academia.edu/3302137/Managing_disturbance_regimes_to_maintain_biological_diversity_in_forested_ecosystems_of_the_Pacific_Northwest	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	Focused on Pacific Northwest with minimal relevance to the plan area		Yes	Yes

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				Accurate	Reliable	Relevant				
Terrestrial Ecosystems and Vegetation	Fire regimes	Odion D.C., C.T. Hanson, W.L. Baker, D.A. DellaSala, and M.A. Williams. 2016. Areas of agreement and disagreement regarding ponderosa pine and mixed conifer forest fire regimes: a dialogue with Stevens et al. <i>PLoS ONE</i> 11(5): e0154579; Stevens J.T. et al. 2016. Average stand age from forest inventory plots does not describe historical fire regimes in ponderosa pine and mixed-conifer forests of western North America. <i>PLoS ONE</i> 11(5): e0147688.	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	See methodological issues raised in Stevens et al. (2016) and Miller and Safford (2015)		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Odion, D.C., C.T. Hanson, A. Arsenault, W.L. Baker, D.A. DellaSala, R.L. Hutto, W. Klenner, M.A. Moritz, R.L. Sherriff, T.T. Veblen, and M.A. Williams. 2014. Examining historical and current mixed-severity fire regimes in Ponderosa pine and mixed-conifer forests of western North America. <i>Plos One</i> 9(2): e87852	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	See methodological issues raised in Stevens et al. (2016) and Miller and Safford (2015)		Yes	Yes
Terrestrial Ecosystems and Vegetation	Fire regimes	Swanson, M.E., Studevant, N.M., Campbell, J.L. and Donato, D.C., 2014. Biological associates of early-seral pre-forest in the Pacific Northwest. <i>Forest Ecology and Management</i> , 324, pp.160- 171.	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Focused on the Pacific Northwest and has minimal relevance to the plan area		Yes	Yes
Timber and Other Forest Products	Wilderness	Boisrime, G. et al. 2016. Managed wildfire effects on forest resilience and water in the Sierra Nevada. <i>Ecosystems</i> .	Peer-reviewed journal article	Measurement of conditions with statistical evaluation	Published peer-reviewed article	Not the most relevant because [see note]	Objection is about limitations of restoration work in wilderness. Paper argues merits of wildland fire in the wilderness. FS does not dispute beneficial effects of managed wildfire, but rather the ability to safely apply it and make progress toward DCs. The paper is not really relevant to the argument being made which is about wilderness act constraints with regard to mechanical treatment and the merits of wilderness fire. Further, Yosemite has been using managed wildfire for over 40 years and has a very different history of fire suppression than the Inyo. In addition, the study does not compare areas of managed wildfire alone (in Yosemite) with areas mechanically treated before putting fire on the ground so it's impossible to discern if treatment efficacy would have been improved in conjunction with mechanical entry, or not.	Fuel reduction treatments that combine fire and mechanical removal, can create current conditions that are more resilient to high-intensity wildfire by reducing ladder fuels and interlocking canopy at the landscape scale (Stephens et al. 2012, Kalies and Kent 2016).	Current thinking on wilderness fire and its use has evolved over the last 50 years and the scientific community now recognizes the beneficial effects lower intensity wildfire may have on forest structure and BUT under less-than-extreme conditions. (Miller and Applet. 2016)	no
Timber and Other Forest Products	carbon	Buchholz, T., Friedland, A. J., Hornig, C. E., Keeton, W. S., Zanchi, G. and Nunery, J. (2014). Mineral soil carbon fluxes in forests and implications for carbon balance assessments. <i>GCB Bioenergy</i> , 6: 305–311. doi:10.1111/gcbb.12044	Peer-reviewed journal article	Not the most accurate because [see note]	Published peer-reviewed article	Not the most relevant because [see note]	Questionable relevancy because study based in NE US, found FS paper which addressed concerns with citation.	CM Hoover, L.Heath 2014. A commentary on "Mineral soil carbon fluxes in forests and implications for carbon balance assessments": a deeper look at the data	Yes	Yes
Timber and Other Forest Products	carbon	Ernst-Detlef Schulze, et al. 2012. Large-scale Bioenergy from Additional Harvest of Forest Biomass is Neither Sustainable nor Greenhouse Gas Neutral. <i>Global Change Biology Bioenergy</i> 4(6): 611-616	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	Questionable relevancy because global in scale; found dissenting article.	Bright, R., et al A commentary to "Large-scale Bioenergy from Additional Harvest of Forest Biomass is Neither Sustainable nor Greenhouse Gas Neutral": Important insight beyond greenhouse gas accounting	No	Yes
Timber and Other Forest Products	carbon	Harron, Mark E. et al. 1996. Modeling Carbon Stores in Oregon and Washington Forest Products: 1900–1992, 33 <i>Climatic Change</i> 521, 546	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	Questionable relevancy because study data and processes seems to have lots of uncertainty; at the time (1996) modeling was new; concluded 40-60% of carbon in harvested wood is "lost to the atmosphere . . . within a few years of harvest" during wood products manufacturing process		No	No
Timber and Other Forest Products	carbon	Mouillot, F. and C. Field. 2005. Fire history and the global carbon budget: a 19 x 19 fire history reconstruction for the 20th century. <i>Global Change Biology</i> 11: 398–420;	Peer-reviewed journal article	Estimation of condition or trend	Published peer-reviewed article	Not the most relevant because [see note]	Questionable relevancy because global scale estimate; "...product should be viewed as a spatially explicit best guess, subject to a number of caveats and uncertainties."		No	No