

**California Spotted Owl Conservation Strategy Discussion**  
**Sierra Nevada Framework Team**  
**801 I St. Room 473**  
**Sacramento, CA**  
**November 2, 2000**  
**10:00 a.m. - 5:00 p.m.**

Present: Mark Seamons University of Minnesota, Bill Laudenslayer US Forest Service (USFS) PSW, George Steger USFS PSW, Mike Landrum USFS R5, Dawn Lipton USFS Framework IDT, John Stevenson US Fish and Wildlife Service (USFWS), Rocky Gutierrez Humboldt State University, John Keane USFS Framework Science Team, Peter Stine USFS Framework Science Team, Jared Verner USFS PSW (retired), Chris Iverson USFS, Danny Lee USFS PSW, Phil Detrich USFWS, Maria Boroja USFWS, Mike Gertsch USFS Framework, Steve Clausen Framework IDT leader, Bernie Bahro Framework IDT, Gordon Gould California Department of Fish and Game, Bob Motroni California Department of Forestry and Fire Protection, Catherine Hibbard USFWS (recorder), Jim Boudin USFS.

Peter Stine welcome and introductions. Petition accepted by USFWS. There have been ongoing discussions between R5 Regional Forester Brad Powell and USFWS California/Nevada Operations Manager Mike Spear.

Rocky Gutierrez: Need spatial context, landscape scale. Need proportions of area, etc. of extent of all areas. Chris Iverson mentioned handout and queries underway and available. Will hand out today.

Presentation by Mike Gertsch on strategy. Questions on urban interface definition.

Peter Stine: Context of development of strategy: owls (old forest), fire and fuels, lower west side hardwoods, aquatic conservation strategy, noxious weeds.

Maria Boroja: USFWS needs comments on 12 month finding by Dec. 11. Substantive finding on 90-day finding. Need five different pieces of information for listing factors at the time of the petition. Is Dec. 11<sup>th</sup> drop dead date?  
Phil Detrich: Can extend public comment period.

Peter Stine: Forest Service needs to make a call on viability. NFMA requirement. Need input on viability. Only on partial range and only on Forest Service land. Assessment of potential conflict. Strategy consists of land allocations and standards and guidelines. Location, area, size, intent (management) of allocations and how they relate to viability is focus today. Many S&Gs apply to owl directly and indirectly. Many will be scrutinized carefully because they will create areas of conflict with competing interests of decision-maker. What are desired outcomes of owl and unintended consequences (need to be disclosed and resolved). Thanks to owl scientists for attending.

Chris Iverson: Where did this strategy originate? From DEIS 6 and 8. Looked at strengths and weaknesses (in regard to owl viability) in draft and any new literature and public comment and tried to build upon. Crux: trying to balance needs for owls and manage to reduce risk of fire. Treatment of habitat v. loss of habitat via fire. Is treatment more of a risk than the long term risk to fire?

Allocations: Old Forest Emphasis (specific management), general forest, two zones of urban wildland interface. Inner zone is one structure per five acres buffered by .25 miles. About 400k acres plus overlap with OFE of 120K. Outer zone is 1.25 miles out from .25 miles and is 1.2 million plus .5 million overlap with OFE. Spatially several different types of areas of overlap. Question of why figures Chris Iverson presented add to 13 million not 10.5.  
Rocky Gutierrez: Is there a minimum density of structures? Dawn Lipton: there is a minimum density. Is this the same as the California Fire Plan? Rocky Gutierrez: how are structures determined? (If cabins thought to be structures, could be over representation of urban interface). Mark Seamons: If you don't know where structures are how can you plan for owl? Dawn Lipton: it is not entirely unknown. That area will be expanding over time, point to keep in mind. Bill Stewart of CDF does not think increases will be great (infill of already occupied areas) therefore, not perceived to be significant risk. They are dealing with the best data available.

Handout: summary of data. Page 1. Can array risk. How conservative can we be? Tradeoffs of management in inner urban v. protection in old forest, for example. In wilderness and unroaded areas, relatively unsurveyed. Used

owl sites discovered since 1987 because that's when intensive surveys were begun. Approximately 1/3 of population gets most protection. 5% gets the most intensive fuels treatments (least protection to owls).

Page 2. Owl sites arrayed across Sierra Nevada. Northern = Lassen, Central = all other forests except Sequoia and Sierra, South = Sequoia and Sierra. For all analyses, alternative 8 from draft EIS is the basis for the OFE layer. Gordon Gould: Question on labels for maps (one says buffer and one says home range). This is a labeling error. They all should say home range. Question of Modoc in central area. Included because only a few owl sites. In the numbers in the table, wilderness included in OFE and GF. Jerry Verner: Point: should show acreage with and without wilderness: point lots of wilderness, but not many owls in wilderness. Could distinguish red fir zone to clarify. Wild and Scenic Rivers: some sort of protection depending on classification.

Components of the strategy applied forest wide: see handout. Treatments are for fuels treatments. Focus on landscapes of highest risk, south and west aspects. Prioritized in inner, then outer zone. High risk and location of people combined are highest priority for treatment. 80,000 acres of fuel treatments now region wide, draft proposes 100k. Mechanical treatment will go to urban interface and burning to old forests (to reintroduce fire to the system). Will some areas require mechanical treatment before burning? Yes.

Jerry Verner: won't determination for treatments be done site specifically? Personalities, season of year important at site specific level. Can burn in denser stands in the spring. Doesn't see how the strategy incorporates what time of year, coordination with pollution control, who decides what to do, etc.

Mike Landrum: Point: the 80K figure is region wide, some areas targeted more than others (eg., HFQLG area).

Bill Laudenslayer: Why retain all trees in S&Gs? One was concern over large tree component. Point: all standards used in this strategy were in the draft in some form. Matrix Burn/Mechanical is prescription 21 light then from below = remove ladder fuels up to 12" dbh if necessary to introduce fire without risk to canopy. Phil Detrich: Point: 50% of snags could be lost therefore characterization of minimal impact could be incorrect.

Bullet 3 under Forestwide Management Direction. Danny Lee: How would these be mapped? Implementation mapping would be done on project level.

Jerry Verner: need better language for delineation of PAC due to different implementation across forests.

Rocky Gutierrez: Will new territories be given PACs? Yes. This was not done in the past.

Bill Laudenslayer: Guidelines for general forests? What about Modoc and Humboldt Toiyabe? Currently strategy would occur there now. What about eastside pine? Chris Iverson: We have not given this must attention. DL: Need to tie strategy to vegetation types.

Bullet 4, about 60 PACs could be treated in inner urban zone. Need formally designed study to do more than 10% per decade outside of this area.

Jerry Verner: Need more protection around large trees, not just nest trees from burning. (Hand treatment). Bill Laudenslayer: Need staged approach.

What size of downed woody material for 10-15 tons per acre. Need to specify largest material available down to 11". Chris Iverson: pointed out that standards and guides are more explicit than the bullets of overall strategy.

Need to be more explicit regarding general salvage and salvage of catastrophic events. Rules on salvage? Dawn Lipton: leave 10% of burn area (only limitation). Does not apply just to burns.

Potential to reduce disturbance buffer in inner urban zone with monitoring/research design to answer questions regarding appropriate buffer distances.

Question: cool/spring burning and reproductive owls. Want to explore this later.

For plantations of 3x need more discussion on appropriate size/age limit on 3x sizes.

#### General Forest

20% core area approach used via Bingham and Noon. 65% of telemetry locations were in 20% MCP. How does this compare to Hunsaker et al. paper? They looked at 50% and 70% locations.

Advisable to add a sd or se to median home range?

Home range sizes. Why so great in Lassen? Swain mountain area where study done? Yes. Much red fir and prey base. Rocky Gutierrez: Strong relationship between amount of flying squirrels in diet and home range.

Mark Seamons: Elevational range east to west as well north to south. Maria Boroja: Jennifer Blakesley said owls using buttes. Mike Landrum: Barry Noon mentioned Swain Mt. bias. John Keane: Barry and Jennifer thought home range for central forests better for Lassen west side than east side. Gordon Gould: Should east side of Plumas get larger home range as well?

Aggregating habitat at core. Is this done with a circle or an irregular configuration. Needs to be explicit. Intent is irregular.

Rocky Gutierrez: How CWHR implementation done. Dawn Lipton: Needs to be done via photo interpretation (PI) (needs to be explicit).

Jerry Verner: Guidelines for removal of 12" trees where they contribute to canopy cover? If 12" tree is ladder fuel and contributes to canopy: we have struggled with this. We have a thought process of doing this. Goal of retaining most of canopy, but eliminating ladder fuels. How to write S&Gs? Bill Laudenslayer: Could incorporate basal area. Such a prescription could help with insect and disease outbreaks.

Jerry Verner: loss of PACs over last 10 years has not been significant. Bill Laudenslayer: If material is removed, how long would it take to return?

What to do if home range did not have 60%. Priority would be to go close to the nest to get lower quality types rather than go outside of the home range. Right now could do both. Jerry Verner: If home range with 60% in landscape that is deficient would we want to be more conservative? Phil Detrich: If we go with this approach, is 60% enough?

George Steger What about overlap of home ranges? Each home range evaluated individually but same habitat could be used for both birds. Gordon Gould: Any limit of size of stands? No current guidance other than 1 acre guidance in types 5 and 6. George Steger: Could eliminate 20% if say retain 5,6, etc. as close to the activity center as possible.

Jerry Verner: What about 60% retention in general landscape if not currently available? Should manage that which is capable towards achieving OFE conditions.

#### Urban Interface

Important note in inner urban zone: not every acre will be getting treatment.

Rocky Gutierrez: What is a SPLAT? Strategically placed area treatments. Slightly less intense treatment than DFPZs.

Jerry Verner: Future outlook of inner and urban areas? How will they change over time? Function of land ownership and roads. Phil Detrich: Probably gross amount will not change, but amount in inner will, so now what is outer is now inner. Mark Seamons: If industrial timberland and smaller timberlands could be bought and developed in which case new outer/inner could be created. What assumptions should be used?

Jerry Verner: decline from 69% to 50% suitable a big decline.

What should trump in outer urban? OFE or outer urban?

Don't want to incorporate unintended consequence on ability to manage fuels or protect owls therefore want interagency oversight that would be included in ROD.

Premise or assumption that Chris did not mention at beginning. Three demographic studies show declines. We presumed that declines are reasonably accurate. Therefore we are taking conservative approach to maintaining habitat. Do not want to make type II error if weather is responsible for recent declines and weather gets better, but then there is no habitat. Phil Detrich: Wanted strategy to allow for risks in areas where needed to do fuels treatments. Is the backbone strong enough to assume additional risk in the high treatment zone? Chris Iverson: We may not want to continue prescriptions after 5-10 years. If taking out 12" and lower over 50 years could reduce recruitment. Bill Laudenslayer: Assumption is trajectory that more is better than what we have now. Assuming what we have now is good stuff. Black's Mountain study area is losing big trees, insects and disease, but no second layer of trees for recruitment. Managing for what we have now.

Dawn Lipton: Currently only 50% of owl sites range wide have more than 60% suitable habitat.

Jerry Verner: Burden of proof where it is is a breath of fresh air in this planning effort.

Maria Boroja: Look at #'s is management of 27% (urban zones) too much for recovery of species? Is the management of other areas sufficient for recovery?

Jerry Verner: 50 pairs enough for demographic stability up to 10k needed for evolutionary stability. 1K should be good for demographic stability. Effects on owls should not happen all at once. If serious study done on different intensity of home range protection, we will know more about acreage of suitable habitat, effects of acreage reductions, removal of big trees etc.

Rocky Gutierrez: Agrees with experimental approach to answer questions. Is an opportunity to test things on the ground. Disagrees with N needed for evolutionary stability. Some people think less.

Gordon Gould: Should be careful with numbers game. Probably only 700 pairs of which half are regular breeders. What is recovery? Is recovery maintaining semblance of current distribution? Could have fewer owls and still have distribution.

Phil Detrich: Need long term survival, approximate current range. Can't say what recovery would need. Recovery team would address.

Peter Stine: What about other lands? Chris Iverson: NFMA applies to FS lands. Service issue incorporates other lands.

Jerry Verner: Do numbers incorporate OFE in parks? It apparently is marked as such. Chris Iverson: Maps are misinterpretation.

Dawn Lipton: concept of private lands do not count for acreage in the study. Gordon Gould: Areas of concern special treatment?

Phil Detrich Forest Service responsible for all when AC on private land and home range on FS?

Rocky Gutierrez: Need mechanism for mapping when not enough FS land. Jerry Verner: What happens to suitable while rest is developing? Dawn Lipton: treatments to 12" and below.

How to appropriately manage stands while developing? Jerry Verner: would hope that honest assessment be done for owls.

Mike Landrum: Need to relax s&gs to allow timber. Rocky Gutierrez: this did not work before. Managers ought to have flexibility, but the past has not demonstrated trust. Perhaps in the short term plan should be restrictive and then relaxed as monitoring shows that the program has been implemented. Mike Landrum: trust issue will drive them to ground zero. Jerry Verner: Dedicated silviculturalist would love challenge to have opportunity to grow owl habitat. Where is the conflict?

Steve Clausen: Used to have timber program. Based on past perception. No ASQ in this effort. This is different. You can't design a plan for dinosaurs, need plan for the future. Dawn Lipton: tension is economics. Can't pay for fuels treatments. Desire to add more economic ability by adding treatment. This is where the tension comes on the limits. Not doing many service contracts yet. Steve Clausen: Need to create new form of economics. Mike Landrum: Define land base, what going to do, for what, and for what cost? Don't need s&gs if not doing much on landscape. How can we save the owl and save some of the traditional programs? Worried about black oak and principles of silviculture in plan. Strategy walks away from much land. Policy of more is better in terms of canopy cover is major sidebar as well as diameter limits. What about loss of habitat at small scale?

Jerry Verner: Doesn't want high canopy cover everywhere. If every m3g m3m taken down to 50%, inappropriate. Jerry Verner has confidence in Mike Landrum and a few other silviculturalists, but doesn't know others.

Phil Detrich: Entire planning group aware of context. Have asked owl experts to be here to ask them what they want. Peter Stine: Ask Mike Landrum what he wants. Phil Detrich: let's wait for Bernie to talk about treatments and what condition we want the forest in (outcome) and let prescription get us there.

Danny Lee: One more unintended consequence: Talking about structure and not species composition. Preferentially selecting species to detriment of others such as Ponderosa Pine, Sugar pine and black oak. Jerry: if fuel loading is concern, should be getting rid of undesirable species through treatment of ladder fuels.

Mike Landrum: Current strategy has no reforestation strategy.

Chris Iverson: Not a long term strategy. Sustain over 5-10 years to arrest decline rather than degrade what we have. They want to prevent that scenario. Maintenance over near term with providing protection to inner and outer urban. Bill Laudenslayer: many more stems per acre than what we had 10 years ago. Thinks we're setting ourselves up for losing many big trees (as in Black's Mountain).

Mike Landrum: Big trees are issue of trust than about the owl. Rocky Gutierrez: Many of questions we still don't know answers 10 years later (no resources for studies). Strategy to reduce fire risk not CASPO. In face of listing, still don't have the answers. Timber is viewed as excuse to do fuels. Need to acknowledge a priori a timber program is needed. Will not be perceived as subterfuge. Jerry Verner has wanted to do home range studies for years (800k/year), but management not supportive. Hazardous fuel budget 17 million last year. Will get 50 million. About 1/4 to southern, 1/4 to northern. 25 million to Sierra. 6.5 million acres of conifer. Assume no problem on 4.5 million. West side 5-20 year fire frequency. Gear to manage for 20 years. 2 million acres every 20 years 100,000 per year (draft alternative 6). 250\$/acre to do the work (indirect costs, NEPA). Would need to do service contracts (\$500/acre). Can we offset by cutting larger trees (a little bit, but cannot entirely fund by cutting larger trees).

Jerry Verner: Can this EIS survive by cutting bigger than 30" in current political climate? Can only do to reduce fire hazard now as plan currently written?

Peter Stine: Difference between 12-20" trees at forest supervisor's meeting was multibillion dollar treatment. Good reason why fire treatment programs have not been done.

Mike Landrum: Would like to see administrative feasibility (labor, smoke). Could be done in context of the owl. Need to clear up land base. Biological assumption that more is better needs a harder look and allow management in density zones.

Steve Clausen: Danger of confusion of desired conditions and tools to do them. Need to focus on owl conservation strategy (biology) today.

Bernie Bahro: Urban interface (alternatives 2 and 5 have no buffer beyond .25 miles) buffered in preferred alternative. Can look at landscape to change fire behavior and have DFPZs. Put SPLATs near people. DFPZs Rx 55 and 51. One Rx down to 40% owl foraging. Has to do with juxtaposition of trees on ground. Some stands that have had no fuels reduction for years, reluctant to do fall burns. Jerry Verner: if can do study as well as management objective. No motivation to treat. Jerry Verner: Owls are tying up Sierra and still don't have answers. Data suggest that more, higher density, sites are better, but still don't know what it takes to sustain owls. Bernie Bahro doesn't understand motivation that fire is not the risk to owls, the treatment is. Jerry Verner: Limited number to enter because of budget. Those should be in urban areas. Bernie Bahro: not clear on risk. Not clear what we are protecting the owls against. Doesn't understand PAC (different interpretation of PACs). Can't put diameter limits on prescriptions, doesn't make sense. George Steger uncomfortable with setting 12" across board. What do we use? Need to evaluate on ground. Phil Detrich: need to evaluate outcome.

Bernie Bahro: What is common ground for fuels and owls? Doesn't like diameter limits. Not much research on crown fire behavior in California (irregular stands not the norm). Jim Agee's work. Is there a threshold bulk density? Tables (see handout). No need to harvest large trees for fuel treatments. Bernie Bahro is talking about the outer buffer.

Phil Detrich: Canopy cover can be degraded? Bernie Bahro: Is threshold. Likelihood of mortality of >70% increases. Advantage to be at 70% and lower from fire standpoint. First column is existing condition, not outcome. Bernie Bahro: How can this table be used for effects analysis? Bernie Bahro: Current canopy could be reduced to achieve outcomes. Point: applies to only 85-90%. Therefore, some of the >70% stands need not be treated.

Chris Iverson: How do we get to post treatment conditions? Rocky Gutierrez: not transparent what this means. Public can view this as a way to obscure what is going to happen on the ground. To make transparent, need explanation of what this looks like. Bernie Bahro: Premise: 12-24" stands are what we are talking about. Jerry Verner: Can't tell effect of treatment on stands (small reduction of canopy) without knowing about rest of owl's habitat.

Bernie Bahro: Need a way to describe outcomes and balance. Jerry Verner: Suggest to provide additional metric to be understandable (post treatment). Peter Stine: Why can't get canopy cover post treatment? Bernie Bahro: every plot has different outcome.

Dawn Lipton: added metric for tree diameter to add comfort for owl habitat. Is the diameter limit the problem? How do we get assurance through diameter or canopy cover metrics.

Phil Detrich: How do we describe the 12" situation as George Steger suggested? Bernie Bahro: Can't achieve fuels objectives with 12" limit. Needs bound and needs flexibility to implement. Jerry Verner: can describe stand classification before and after? Bernie Bahro: Difficult.

Dawn Lipton: What about 5% canopy modification limitation? Bernie Bahro: Getting closer.

Rocky Gutierrez: Does 30" limitation cause problems? Bernie Bahro: needs to be lower around 24".

Rocky Gutierrez: Doesn't have heartburn over making higher diameter than 12", but no cutting > 30". Doesn't have much concern over 5% reduction in canopy. Thinks 80% down to 65% will respond soon. Mike Landrum: depends on age of tree. Phil Detrich: What about 20" limit and can't reduce 5% overall? Or codominants and dominants? Maria Boroja: Do we have tools to measure 5%? George Steger was working to nearest 5%, but most to nearest 10% (skilled in PI).

Gordon Gould: What about making opening for regeneration? Bernie Bahro: shorter term strategy. Enough opening in many areas at the time being. In interim, if we have big trees, we want to conserve. Has problems over s&g to preclude removal of trees for ladder fuels and not affect canopy.

Peter Stine: How to ensure canopy? If constraints are too tight, will treat elsewhere. Problem with implementation of what is said we are going to do and what is done (could be challenged post treatment if desired condition is not achieved).

Dawn Lipton: with 20" and about 5% canopy cover standard is this doable (perhaps not 100%)? Bernie Bahro: Yes, getting closer.

SC: Some stands he's seen this prescription would not work (14-15" stands).

Bernie Bahro: If have high canopy cover and can raise height to live crown then can have flexibility with diameter. Problem is uniform stands. Chris Iverson: Did not want reduction in canopy and retention in owl habitat with burn mechanical 12" limit. Does that make sense?

Jerry Verner: Depends on how much reducing canopy cover. Phil Detrich: Can reduce a little? Jerry Verner: How much in how much time? 10% of existing? Jerry Verner part of discussion missing is how much and where? Gordon Gould more worried in old forest than general forest.

Phil Detrich: What about 10% reduction of canopy closure; are reductions tolerable? George Steger: If site in the PAC, no. Phil Detrich: What about outside PACs. Bernie Bahro: Are PACs 300 acres? Phil Detrich: need discussion. No reason to look to treat in OFE areas immediately. Need to resolve overlap of general forest and urban interface.

Jerry Verner: Design study with inner urban extreme measures, outer less extreme. Dawn Lipton: That's what we attempted to do.

Mike Landrum: How many acres of owl habitat? Chris Iverson: 3 million acres in Sierra? Mike Landrum: agree on limitation of acres to be treated? Limit the acres treated? Gordon Gould: Limitation on thinning may not be that much. Jerry Verner: most of treatments recently affecting owl habitat because that is where the timber is.

Phil Detrich: If areal limit? Would there be impetus to put in one area (QLG?). Maria Boroja: QLG ROD 10% could be treated. Just within that small area tracking has been difficult. Phil Detrich: If focused on QLG other areas would not be treated. Peter Stine: could be proportionate over forests? Possibly.

Phil Detrich: Concept of some reduction in canopy is probably ok if not over too large over landscape and minimal repetition of entry. Bernie Bahro: Flexibility has to be measurable. Maria Boroja: In areas greater than 60% and no high risk don't treat. Bernie Bahro: no incentive to treat in PACs outside urban area. Old Forests in urban areas unsurveyed would not be treated either. Can't have patchwork of 4 foot and 8 foot flame length outcomes. If want to prescribe for fire, be flexible. Otherwise the area will not be treated.

Gordon Gould: should not reduce canopy over large areas. Need to keep spots within areas that maintain canopy. Change uniformity of canopy cover. Wonders where treatments occur. Bernie Bahro: lands outside urban area, outside PACS and plantations. Can move these stands forward, don't need to go to PACs outside urban buffer.

Mark Seamons: many sites in 4; treatment proposed could change to become non-habitat in entire home range. 20" trees are contributing to canopy. Thinks could live with 20% reduction in canopy. George Steger: says 10% is better than 20%. Bill Laudenslayer: fire can do with 5%. George Steger: thinks issue is not fire, is mechanical. Jerry Verner: urban interface area where to find out questions.

Rocky Gutierrez: Too many issues to digest. Economic or flexibility point of view won't do things to prevent harming owl habitat. Can't see incentive of managing without compromising owl habitat. Need to predict outcome. Prescriptions need to be based on predictions that could be achieved or not.

Bernie Bahro: Thinks way too much emphasis on burning in urban areas. Rocky Gutierrez: would be surprised if owls persist in inner zones. In Southern Cal not in inner zones. Owls in outer zone probably less productive (Mark Seamons and Rocky Gutierrez). Rocky Gutierrez: wouldn't worry about inner zone due to political considerations if the area were not treated. Outer urban is where restrictions should occur, but cannot discern strategy due to all choices.

General agreement for treatments in inner zone. Jerry Verner: Study needed to track owls and effects. Peter Stine: Suggestion that outer zone is where studies should be conducted. Jerry Verner: could learn about young owls in

those areas Phil Detrich: should learn what we can.

What about PACs? Jerry Verner: look at Hunsaker and Noon papers, would be better science to apply core area approach. Appropriate to extrapolate management in PACs to larger landscape? Bernie Bahro: Strategy focused in first decade in urban area. First decade focused on Herger Feinstein area and urban inner.

Phil Detrich: Nothing in this plan assesses timber program outside of treatments. Would need to do separately. Maria Boroja: Amendments to LRMPs this will override current timber program? Steve Clausen: Yes. Maria Boroja: What about salvage? Will this count as area treated? Steve Clausen: not built in for treatment acres.

Back to PAC question. Is it a biological necessity? Mark Seamons: Depends on what is being done outside PAC. Gordon Gould: If not doing anything for 20 years, moot point. Jerry Verner: 300 acres based on empirical 50% foraging location ADK model. Noon and Bingham and Hunsaker show need to carry out beyond that boundary for conservative measures. The size of the circle needs to be in proportion to owl home range. Dawn Lipton: Can have subarea within core area as having different management. Phil Detrich: Is there some biological rationale v. treatment. George Steger: depends on treatment outside of PAC. Phil Detrich: is there level within alternative where uncomfortable. George Steger and Gordon Gould like 300 acre PAC where tread lightly. Phil Detrich comfortable with PAC v. larger core? Jerry Verner and Gordon Gould: progressively more conservative as move towards activity center. Gordon Gould: determine how nest sites move. Rocky Gutierrez: thinks could go either way. Need to pay attention to what goes on outside. Sometimes can move 1/4 to 1/2 mile away. Phil Detrich: need discussion for how to designate PACs when activity center moves. Bernie Bahro: treatments will not go beyond 50%. Gordon Gould should use 60% rather than 50% cc if error. Jerry Verner troubled by Rx 31 where 50-70 allowed to 50 in 4m and 4d.

Bernie Bahro: Thinks little being done in suitable capable habitat outside PAC. Phil Detrich: recall treatment in Old Forest and General needs to provide strong certainty for tradeoff.

Phil Detrich: Where 60% came from: Hunsaker median value of productive sites with 50% and greater. Bernie Bahro: what is incentive? Phil Detrich: fire risk. Bernie Bahro: need to ID owl sites that have risk.

Phil Detrich what are differences in options? Chris Iverson: Option 1: incorporates core area concept and more implementable. Option 2, need to map out 40/60%. Management in home range leaves uncertainty in areas outside home ranges. Gordon Gould: Option 1 allows more flexibility for treatments. Option 2 allows more flexibility for other species. Option 1 would cause less shock factor and possible achieve the same objective (because not expected to be much activity). Rocky: Option 1 implementability is key. George Steger: trouble understanding 2.. Jerry Verner: given not much activity, agrees with Rocky.

What about QLG? Jerry Verner: will this supercede? George Steger and Jerry Verner's understanding that this will supercede. Chris Iverson: need something in place to have strategy to QLG.

Jerry Verner: need structure built into strategy so 69% not taken down to 50% in all cases. Jerry Verner would view this as a big loss for the owl. Jerry Verner: where are the DFPZs? Chris Iverson: mostly in inner zone. Chris Iverson: Are there stands in 4M where evenage where thinning may improve heterogeneity and improve stand for shade intolerant species. Certain stand types in 4ms where this could be done and concerns 50% and less reduced. Mike Landrum: most of stands in 4M 40-50 can't touch. Remainder 50-60 to 50. Is this O.K.? Jerry Verner: yes, according to what stand looks like. Mike Landrum: 60 down to 50, 70 down to 60 and >70 down to 70 in class 4s. Chris Iverson: Is this immeasurable? Phil Detrich: is it enough to improve?

Gordon Gould: Would rather make small openings rather than overall canopy. Dawn Lipton: Plenty of opportunity to allow small openings with way they are averaged.

QLG: Selected alternative 2 deferred owl strategy to framework. Request from committee for viability analysis (see handout). Predicament: 2 areas of concern in QLG: connectivity with NSO, low density, problem with fragmentation and second area with private area separating northern and CSO population. Asking to deviate from overall strategy. Steve Clausen: Can this strategy take the 5 year implementation of the QLG to pass viability or using alternative 3, or our rules. They will be doing QLG implementation. They want us to look at opportunity for applying. Jerry Verner: This applies only to suitable spotted owl habitat. Jerry Verner: DFPZ is a farce for



preserving 11,000 acres of owl habitat (3 home ranges); it is a timber program. Mike Gertsch: concerns within areas of concern in QLG. Connectivity and local viability. Jerry Verner: rate at which entering stands is higher than what we are doing here. It is a timber grab. Jerry Verner: disavows what he proposed to QLG (Table 2.16 of FEIS) if Framework does not supercede QLG strategy.

SC: Regional Forester needs to know if QLG implementable. Jerry Verner: would not support regional forester if he tried to implement QLG without owl strategy developed by Framework.

Need to define LOPs for 1/4 mile everywhere. Would affect spring burning most. George Steger: found nest after fire begun (took measures to protect nest). Owls failed, but many others that year did. Rocky Gutierrez: writing paper on fires. Probability of survival is same, no risk of moderate to low intensity fires. Risk to population likely low. Population itself would not be affected. May affect reproduction rate. Particularly true of low number. Gordon Gould: would want LOP on nesting birds. Mark Seamons: if nested and burn, would probably abandon. Rocky Gutierrez: low risk in terms of survival. George Steger: would burn without known nesting and would protect if found nest. Agrees with Rocky, doesn't see drop in survival due to birds. Jerry Verner: if indecision about where nesting, start burn away from nest. George Steger: get in their early to see if nesting. Jerry Verner doesn't buy argument that biologists can't get in. Dawn Lipton: issue is planning time. Chris Iverson: how big burn plans? Hundreds to thousands of acres. In general people think LOP good on nesting. Rocky Gutierrez: thinks owls are more resilient than we think they are in regard to fire. Gordon Gould: In big nesting years would want to back away from treatment.

Areas of concern: Reason for special management? Gordon Gould: Is this plan what the NW forest plan that the FS will provide for owl regardless of management on private lands. What if listed? Phil Detrich: If listed, difficult to get dispersal prescription with take prohibitions. Gordon Gould: Does SPI have high enough density of owls? Chris Iverson: presuming no habitat on non-federal lands. Gordon Gould: Accepting higher burden in area of concern. Steve Clausen: If in area of concern different management? Is level of concern of dispersal across these areas of concern? Rocky Gutierrez: doesn't think the areas per se important, areas where they end up important (area on fringes). Thinks need more habitat in public land. Maria Boroja: need to overlap areas of concern with urban areas. Gordon Gould agrees. Chris Iverson: biological question.

## Viability

Chris Iverson: Interested in comfort level relative if risk to viability addressed. Have they used the best info and variety of risk? Are they headed in right direction? Gordon Gould: risk to viability is risk to fragmenting the population large blocks or smaller areas. Any degree of fragmentation is riskier position. Risk may not show in 20 years, may show in 50 years. What does viability mean? Chris Iverson: Could have gaps, but could population interact over planning area. Gordon Gould: How much dispersal can occur across gap? Things can deteriorate to zero. Increasing risk to viability by allowing wedge to be driven. Therefore need to address areas of concern. By managing to avoid burning houses, may provide viability risk to owls. Needs to be explicit in document. Losses can magnify. Jerry Verner: Would like to block up federal land to reduce fragmentation? For example Eldorado, wouldn't be better? Gordon Gould: May have to exchange land at lower elevations to get that land. Think should have thought it out. Agrees in principle that blocking up lands is good. Chris Iverson: if lands fragmented, can still do best and population still decline. Gordon Gould: What is done on private lands is important to what plan will do.

Mark Seamons: Concern over reducing suitability outside of PACs and what that will do over time. Needs monitoring, specific study design. Thinks if implemented as is is probably better than now. Things being cut now on Eldorado in sake of hazard trees and powerlines. Not sure of viability. Thinks maybe not a problem, but not certain. Rocky Gutierrez: can discount genetic viability as concern. Demographic issue: needs demographic rescue (fragmentation concerns as with Gordon). Land exchange should not exacerbate the problem. Genetic work on effects of environment on population. Effects of fire probably low. Mechanical treatment unknown. Weather may have short and long term effects. In their genetic work, owls in the Sierra Nevada disappeared or were at low numbers. Can look at short term and long term events (work in progress) short term effects 7-900 years ago with droughts followed by fire. Plan with diminution of fire is good. Unknown if fire or drought associated with fire could have been interplay. Reducing fire risk is good thing. Regarding treatment: Don't know if habitat now is really good habitat. May be medium between open and closed stands. Encourages to pursue reintroducing fire. Evolutionary aspect may give insight. Chris Iverson: any publication? (In the works) Found ancient haplotype in

northern spotted owl that probably was in Sierra (none now).

Bill Laudenslayer: Scott Stine's drought paper. Premise of current plan: let it alone and everything will be fine. Trying to assume that burning and mechanical worse than not doing anything. Systems evolved with fire. Disappointed in some of the way things are going. Echoes Rocky's point that more burning could be done in owl areas. Bothered by large burn areas and need to actively manage those areas to improve the habitat by using fire and mechanical.

George Steger: Doesn't have a problem with viability. Jerry Verner: Feels better about this version than previous draft. Thinking changes in right direction would like to see final language before judgement. Doesn't think will lose the owl in the next ten years. Wants to maintain the Kings River study area as available to answer questions.