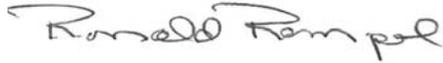


February 23, 2015

To: Mr. Chris Beale and Mr. Scott Flint

From: Ron Rempel



Subject: Comments on the Desert Renewable Conservation Plan (DRECP)

The DRECP documents include an enormous amount of information, some of it is factual and some of it lacks a basis in fact and science. My comments are from the perspective of a professional wildlife biologist with over 30 of experience developing, writing, reviewing and implementing conservation plans in California. My experience includes serving as the Department of Fish and Wildlife's (at the time Department of Fish and Game) executive responsible for Natural Community Conservation Plan (NCCP) policy, science and permitting decisions. I developed and administered the NCCP program's original non-regulatory guidelines and was the DFW executive responsible for negotiating the wording in the current NCCP Act (NCCPA) with a wide array of organizations representing conservation organizations, environmental and business groups and trade associations and local government representatives. I drafted the original version of SB 107 and subsequently edited the specific wording of the draft NCCPA (SB 107) after each negotiation session. Prior to each negotiation session DFW provided revised copies to each of the involved stakeholders. Much of the wording in the NCCPA is based on the prior non-regulatory guidelines I wrote and from the experiences DFW gained in working closely with stakeholders in preparing NCCPs in southern California. My resource assessment team at DFW prepared and was responsible for implementing the first comprehensive NCCP monitoring program which was for the Western Riverside County Multiple Habitats Conservation Plan (WRCMHCP). My budget at DFW funded the preparation of the USGS's adaptive management and monitoring document (Atkinson et. al) and the DFW employees that are coauthors of the report were part of my NCCP and Resource Assessment team. I have also served as the Executive Director of the RCA that was the implementation entity for the WRCMHCP. I established the San Diego Management and Monitoring Program (SDMMP) and for the past 6 years, I have been the Program Administrator of the SDMMP. The SDMMP is the overall coordination entity for management (utilizing an adaptive management framework) and monitoring (including protocol development, data analysis and management for over 100 covered species, 20+ natural communities, ecosystem processes and connectivity) across multiple NCCPs in San Diego County. The management and monitoring program in San Diego is the recognized leader for NCCP management and monitoring and in providing data for all agencies, stakeholders and the public to review and utilize for independent analyses.

I congratulate the CEC and other participating agencies for preparing the longest and most extensive set of documents for an NCCP to date. It's also the most complicated (and sometime confusing) set conservation planning documents I've ever reviewed and proposes a conservation program that will likely be too complicated to implement and track (compliance etc.) and is woefully underfunded for adaptive management and monitoring. Its governance structure will be a bureaucratic nightmare and result in significant inefficiencies and result in intra- and inter- agency conflicts. The structure will preclude utilizing the best science to inform species, habitats and ecosystem management decisions will preclude the development of a management and monitoring program independent of political influence in its recommendations and identification of priorities.

While those who have been working on DRECP for years probably think the hard work is nearly done, its really only just beginning. From experience, a much more difficult part will be administering the permits and permit compliance portion of the program. And while those parts may be difficult, the hardest part will be implementing an appropriate adaptive management and monitoring program for the NCCP. While these to elements are difficult and hard, the challenges are often exacerbated by initial governance structures and wording in documents that sounded good but were in reality not doable or subject to multiple interpretations. I recommend that key DRECP authors take time to sit down with the relatively small group of NCCP implementation experts in southern California and openly discuss how to create a DRECP NCCP plan that can be more easily implemented. It will reduce costs, result in better outcomes and have greater long-term public support. The current set of documents reflects a lack of implementation experience on the part of the authors.

The documents include jargon and imply a level of scientific knowledge far beyond what is currently available and attempts to create a conservation program at an unprecedented scale. Even with the plethora of documents provided for public review, there is no single document that can be identified as a Natural Community Conservation Plan pursuant to Fish and Game Code Sections 2800 et sec. Its unclear where the CEQA document leaves off and the plan begins, what is background material – i.e. merely species analysis and/or environmental setting and what the specific obligations of the permittees and permittors are for plan implementation, including suspension and revocation of the 2835 permit. Or maybe it should be permits since its unclear how many permits will be issued and how compliance of all of them will be tracked and the how many personnel will be needed to administer the program. The issues could have easily been simplified from a state perspective by DFW only issuing permits to the CEC and CSLC and acknowledging that their permits allowed take of covered species for all projects they permit through their respective authorities. Based on reading between the lines in the documents, it appears that this was an unacceptable approach to the CEC because they wanted to exert that they interpret their Warren Alquist Act (WAA) authority over the siting of certain type and sizes of power projects. As a result, the CEC claims

it has the authority to issue 2835 permits so long as DFW approves a NCCP plan. While it claims the authority to issue 2835 permits, the CEC takes no responsibility for any other obligations the DFW has under the NCCPA including providing assurances, permit suspension and revocation (the documents specifically say its DFW's responsibility for both of these actions) nor do the documents indicate that the CEC has to make the findings required under the NCCPA. In other words, the CEC exerts its right to substitute the CEC in place of the Department in section 2835 but nowhere else in the NCCPA. Since DFW has not exerted that take of non-listed species (as a result of power projects) is prohibited by the Fish and Game Code, no 2835 permit is required and any take of state-listed species could be via Fish and Game Code Section 2081 permits which the CEC has also exerted its authority to issue. In essence, the CEC is exerting authority to issue permits under an voluntary program (NCCPA) for the sole purposes of having DFW provide assurances regarding future mitigation requirements and locking in mitigation pursuant to CEQA for an extended period of time regardless of new scientific knowledge and future changed circumstances which is outside of the ability of the CEC to control including future development that is totally within the purview of the local land use jurisdictions. Following the CEC's rationale regarding its authority under the WAA if the CEC wanted to site a power project under CEC jurisdiction requiring water for operation it would have the authority to authorize the onsite extraction of water from a water basin that had a basin plan approved by the State Water Resources Control Board and if the board was utilizing the basin plan to make water rights decisions. The documents include wording from Section 2081's issuance standard- "impacts of the taking". The NCCPA does not contain this wording (impacts of the taking) nor is it implied as a standard for issuance of a 2835 Permit.

In multiple locations in the document, the term "incidental take" is used in reference to the take that will be authorized under the 2835 permit. The NCCPA intentionally did not utilize the term "incidental" take since it was intended also authorize the intentional "take" associated with management and monitoring of conserved species and conserved lands. The term "incidental" should be deleted anywhere it is used in association with 2835 permits/permitting.

On a related point, the documents indicate the take authorizations are intended to include management and monitoring but since the FWS will be authorizing take on BLM lands pursuant to Section 7 and will be issuing project specific 10(a)(1)(B) permits, how will take associated with management and monitoring under the FESA be authorized? It will likely be for a different geographic location and may be associated with lands conserved under the 2835 Permit but not pursuant to a section 7 or a project specific 10(a)(1)(B) permit. How will the FWS address take levels associated with management and monitoring? In other NCCP plan areas where the FWS did not cover take associated with these activities, it has led to significant obstacles for management and monitoring programs and increased their costs. In some cases, it appears that the FWS has used the lack of take authorization for management and monitoring as an opportunity for a "second bite at the apple"

to force changes to management and monitoring activities that had been previously agreed upon.

Implementation Structure

The implementation structure is very hierarchical and based on my experience in developing, providing staff direction, directly implementing (both from a DFW and a local jurisdiction perspective), and administering comprehensive NCCP monitoring and management programs, it will result in an internal agency structure of an agency's representative directly reporting to the agency's representative at the next higher level. As a result, it will be extremely unlikely that an agency's representative will be allowed to provide input that is not tempered by what the next level up wants to hear. Both DFW and FWS have mixed roles in the implementation structure- coordination, compliance, monitoring and preserve management. While it may be appropriate for there to be top down internal guidance regarding coordination, compliance, budgeting and in some instances preserve management issues, top down guidance has to be avoided if the performance monitoring and adaptive management programs are going to succeed and have broad public support. The monitoring program must be free to design and implement monitoring protocols (based on an approved budget), analyze data and design adaptive management experiments independent top down management which at times has tended to resist collecting and sharing critical data in favor of "being nice or playing friendly". In one recent example, DFW decided to expend monitoring funds to gather data to make a permittee look good- i.e. they were doing something even when it was apparent from the start the data collected was of little or no value and could not be analyzed to inform adaptive management actions.

For the most part, DFW and FWS do not have the expertise nor staff to design, implement, and analyze the data from monitoring programs associated with NCCPs. The monitoring and management program (at least the adaptive portion of it) need to be independent of the hierarchical implementation structure and should not include representatives of the agencies in the implementation structure. The hiring of an independent manager for the adaptive management and monitoring program and the approval of annual and five-year budgets after receiving the recommendations by the independent monitoring and management program would provide more than adequate oversight by the parties to the conservation program. The independent management and monitoring program would also assure all stakeholders that the science being used to inform program decisions is truly independent.

The documents acknowledge that it's critical for the data collected be available to the public but then goes on to state that there may be instances when it might not be available due to data sharing agreements, data sensitivity etc. DFW has recently tried to keep critical data from the public and even its NCCP implementation partners (DFW seems to think that sensitive data includes any data that might reflect badly on DFW's land management rather than sensitive species data that might be used to negatively impact species). Copies of emails regarding DFW's refusal to provide data are available to substantiate this "keep the data secret" approach. DFW staff created a new type of data sharing agreement in an attempt to

avoid releasing data - “verbal” data sharing agreements. The data availability section needs to be significantly strengthened. First, it should be clear that all data (including covariate data and species mortality data):

1. Collected will be made public in a timely manner (and in a format which is utilized by the management and monitoring program) which allows the public to do their own independent analysis of the data
2. Will not be collected by any organization that requires a data sharing agreement that would restrict the release of the data to the public either in content or in time (e.g. data holds to allow for publications to be prepared, etc.)
3. Collected regarding sensitive species attributes (e.g. golden eagle nest sites, etc.) would be made available in the least restrictive manner possible taking into account the sensitivity of the data. For golden eagle nest site, this might mean showing a blob within which a nest site occurs rather than the precise location as contrasted to eagle foraging areas that would be more specific.
4. That is withheld after a request is made for it would require a specific explanation regarding why its being withheld including the adverse consequences anticipated if it were made available to the requesting party
5. Would all be stored on a single server outside of the control of any of the agencies responsible for the plan so as to preclude an agency making an independent decision regarding data availability. Duplicate datasets would be held on one or more agency’s servers to ensure that its subject to record act requests.

FWS Authorities

The documents state that the DFW permit requirements are subservient to FWS permit conditions should there be a conflict. There is nothing in the ESA or state law that substantiates this assertion. Listing of a species under the ESA does not change the species status under CESA nor does it eliminate jurisdiction of DFW over the species. If the FWS conditions were protective than the DFW conditions, then clearly the FWS conditions would have to be implemented for a project. But if the state permit conditions was more protective of the species, then those conditions would prevail and if there are conditions that are not in conflict, both set of conditions would have to be implemented. In the case of conflicts, the issue would have to be worked out between DFW and FWS as anticipated by the state/federal coordination of Section 6. The FWS would have the obligation to work with the state in such instances. While the ESA gives regulatory authority over the take of federally listed animal species to DOI, it does not transfer their trust (i.e. ownership) from the state to the federal government. Only in certain instances does wildlife within a state not the property of the people of the state. Where its not is generally in National Park administered lands and even then, it depends on the authorities under which a specific NPS land unit was established. While it is good seek a coordinated approach and requirements between DFW and FWS permits (what about CEC 2835 permits?), the documents and the IA should be revised to eliminate any indication that a FWS

permit or section 7 consultation in some way trumps a state permit's conditions. Failure to do so results in a situation where it's not possible to evaluate the adequacy of the "conservation plan" to meet the 2800 standards since what might be required by the FWS will not be finalized until they actually issue a 10(a)(1)(b) or 10(a)(1)(a) permit as appropriate for the action/project based on the GCP and any other information the FWS decides to utilize to support permit issuance (including any conditions added as a result of the internal section 7 Consultation done by the FWS for their issuance).

Additionally, the documents may be misleading to the majority of the public and industry. They indicate that the FWS will be providing assurances for the covered species as though they are "co-insurers with DFW (will the CEC be a co-insurer in the event they issues 2085 permits?) regarding increases in future mitigation requirements. The documents should make it clear that the FWS assurances are only for federally listed species since they have no jurisdiction over non-federally listed species. As a result, DFW is the sole "insurer" for many of the covered species assurances. Although DFW is providing assurances, DFW has not identified funding source that would allow it to fund additional conservation measures should they be needed to ensure the plan continues to meet "conservation of the species" permit issuance standard. Based on the number of NCCPs permitted and in progress, the DFW and by association, the people of the state of California may have a very large unfunded future obligation. The only way the risk of this potential unfunded obligation is reduced is to hold NCCPs to the highest standard possible and ensure that they will be fully implemented and fully funded in all respects. The DRECP does not provide for accomplishing this but rather the full implementation and funding is dependent on projects not described (future infrastructure, housing and industrial development, etc.) in the DRECP plan area to help implement the needed conservation. As currently drafted, DRECP is only obligated to implement what the DRECP believes is their appropriate share.

Since DFW assurances are species information and duration specific, the DRECP needs to be revised to identify the specific information DFW will be basing its assurances on and the rationale for the time period of the assurances for each species.

Other NCCPs- permitted and in progress

The DRECP fails to identify impacts to other nearby and adjacent NCCPs (e.g. San Diego NCCPs). The San Diego MSCP includes requirements for the permittees to maintain a specific number of occupied golden eagle territories. Recent telemetry data indicates that some of the MSCP eagle pairs have movement areas that may extend into areas where potential DRECP projects could kill them. If their loss results in the MSCP population falling below the required number of identified occupied territories, it could affect the MSCP permits. DRECP needs to analyze potential impacts to other NCCPs and include measures to avoid those impacts such as precluding the siting of facilities in certain locations.

Impacts on other government entities

While it is admirable that DRECP attempts to create a conservation design for a very large area, the CEC, SLC, DFW, FWS, BLM and other parties have little to no jurisdiction over private lands within the DRECP planning area. The jurisdictions with land use authority include multiple counties and cities. While DRECP does not directly apply to their decisions regarding land use, the DRECP, if approved as an NCCP, will have to be addressed as part of the CEQA process for every discretionary project they approve. They will have to address how it affects the NCCP and will likely be open to legal challenge should they approve a project that adversely affects it or if they do not require mitigation commensurate with its requirements (taking into effect the differences in the impacts to covered species between a DRECP project and a local project).

Caltrans will also have similar issues for its projects and the Caltrans issue will be further exacerbated when they proposed a project that could affect a DRECP identified linkage. Caltrans' CEQA document will have to address the linkage issues at the DRECP identified locations without the supporting data for the linkage designation being available.

Use of Conservation Easements

While historically conservation easements have been utilized as one of the land protection tools in NCCPs and 2081 permits, it has become apparent that their utilization (based on standard DFW/WCB conservation easement language) is a major impediment to achieving the anticipated conservation benefits, especially when the fee title holder is a private entity/individual or a homeowners association. The standard conservation easement wording essentially prohibits the use of the property in a manner that would reduce its conservation value. It does not provide for active and adaptive management of the property to ensure conservation objectives are accomplished nor does it provide for a right of entry to conduct biological monitoring. As a result, lands conserved through conservation easements generally can't be utilized to accomplish the basic tenets of the NCCPA- adaptive management and monitoring in perpetuity. If DRICP is going to utilize conservation easements as a mechanism to secure properties, the bundle of ownership rights transferred to the easement holder must be significantly greater than the ownership bundle that results from a standard conservation easement. This will likely result in the cost of an appropriate easement being nearly the same as the cost for fee title ownership and the cost estimates in the plan should be adjusted accordingly. If easements are used, the implementation program must clearly provide the information regarding which agency/organization holds the easement. Currently, DFW refuses to disclose (as a matter of unwritten but verbal policy) which properties it holds conservation easements on and prohibits any organization that has obtained the information from DFW from identifying DFW as the easement holder.

Program Implementation Costs

While the DRECP documents include estimated cost for its implementation, the cost estimates are not well documented and where documentation is referenced, the sources are inappropriate. In addition, it's unclear if the cost estimates were based on private party negotiations or based on public purchase of lands using the processes required by law. While the information from the Coachella Valley NCCP is helpful, their estimated costs should have been compared with actual costs of the lands acquired to date. It should have been relatively easy to obtain information on actual cost of acquisitions (using state and federal acquisition processes) from various government entities (WCB, cities, counties, special districts, Caltrans, etc.) since they are public records. As stated above, the cost for appropriate easements that allow for adaptive management and monitoring is significantly understated and is likely to be 90-100% of fee title costs.

The estimates for management (including adaptive management) of mitigation lands are well off the mark and where there are cost estimates they do not reflect the real costs of the extensive monitoring program that will be needed to evaluate if the DRECP is functioning as anticipated. Based on wording the monitoring sections it could be argued that it's ok if no monitoring occurs since the DRECP's monitoring requirements are always couched in terms of available funding. It's obvious that the preparers of the management and monitoring funding section never obtained realistic monitoring costs from southern California NCCPs – Western Riverside, Coachella Valley and San Diego (NCCP monitoring aggregated under the SDMMP). It appears that the estimated monitoring cost may be off as much as an order of magnitude. For example, Appendix I identifies a \$100,000 annual contribution to GOEA population monitoring. Since there are no annual appropriations to DFW, FWS or BLM for GOEA population monitoring, the \$100,000 contribution is likely to be all the funding that is available. In western San Diego County (less than 5% the size of the DRECP area, the GOEA monitoring costs are currently in excess of \$350,000 annually. The San Diego GOEA monitoring effort is designed to evaluate plan performance and inform GOEA management actions utilizing an adaptive approach. The cost to monitor a relatively easily monitored species, cactus wren, is currently over \$200,000 annually while the cost to monitor California gnatcatcher has been over \$1 million over the past 8 years. The entire section on management and monitoring costs needs to be significantly revised to reflect real world costs. It's highly recommended that in doing the revision, the preparers consult with and utilize the actual cost from southern California NCCPs.

The cost estimates also don't appear to include establishing an endowment to fund management and monitoring in species and conservation lands in perpetuity. Appendix I only displays management and monitoring cost for a small number of the proposed covered species, what will be the cost associated with the other species?

Maintaining connectivity is a cornerstone of the DRECP conservation strategy and a requirement of the NCCPA yet there is no definitive connectivity monitoring program described. There is no funding to determine if the putative linkages currently function for a wide array of species and no monitoring is proposed to evaluate the on-going performance of the identified linkages. NCCPs are intended to conserve the biological diversity of the plan area yet there is no biodiversity monitoring proposed. It could be a combination of herp arrays (based on a statistical sampling methodology), invertebrate sampling focused on pollinators, or other similar biodiversity monitoring. A decrease in the biological diversity of the plan area should trigger increase efforts to determine its cause and implement appropriate adaptive management actions.

NCCPs in southern California have demonstrated an on-going need for focused law enforcement on preserves to deal with illegal activities including, trespass, dumping, vegetation clearing, drug production and host of other issues. The demonstrated need for law enforcement is greater than provided through existing resources and requires specialized training and tools. This is even the case for San Diego BLM lands even though a BLM Ranger is stationed in the area. Additional law enforcement capacity will be needed within DRECP to ensure unauthorized and/or illegal human activities are deterred and appropriate enforcement actions are taken. Security firms have been utilized on specific preserves but have not been especially effective since they have no arrest authority and cannot pursue (even on foot) uncooperative people. The most successful enforcement efforts in existing southern California NCCPs have been those implemented by DFW Wardens. While they have successfully changed human use patterns in critical locations, DFW Wardens have a full plate without having to focus on NCCP preserves. The only reason for their special focus in San Diego was because they were specifically funded to work overtime to deal with NCCP related issues. When available, they did an outstanding job. Because of DFW's ever shrinking warden force, they have limited ability to absorb more work with their current staff even when overtime funding is available. At a minimum (based on other NCCPs) five additional wardens (4 wardens and 1 lieutenant) are needed for the non-federal land DRECP preserves). The cost per position would probably be about \$120,000 per year including equipment and training. In addition, because of the large area involved, the most efficient way to detect issues in the more remote areas is utilizing DFW warden pilots. A minimum of \$50,000 per year should be budgeted to fund aerial surveillance on an as needed basis. Since warden positions are legislatively established, and both a governor's representative and the DFW director are part of the DRECP executive team, the IA should commit the Department to submitting a Budget Change Proposal (BCP) for 5 enforcement positions for the DRECP area in the year that the NCCP is approved funded by DRECP. The Natural Resources Secretary and the Governor's office approval for the submittal of the BCP should be committed to as a part of the approval of DRECP. Funding for the enforcement positions should be included in the DRECP budget calculations and funding plan.

Studies associated with southern California NCCPs have demonstrated that inter-observer bias results in significant sampling error including vegetation community monitoring and covariate data. This bias can be so great as to make the data difficult to analyze and lead to very large standard deviations. While to some extent it can be controlled for by the sampling methodologies, it can best be controlled for by utilizing a fixed team of monitors that is well trained, does not deviate from the monitoring protocols, QAQCs data daily and utilize date collection methods that reduce/eliminate data entry errors. These lessons learned should be instituted for DRECP, and establishment of a long-term monitoring team(s) should be assured. Data collection by contractors (they often change field team personnel frequently) is extremely problematic and in some situation resulted collecting data that cannot be utilized as part of a long-term data set to inform management decisions. Funding for a monitoring team needs to be included in the DRECP cost estimates.

The following are more specific comments on the DRECP documents.

IA

The NCCPA does not authorize the CEC to issue 2835 permits anymore than it can issue depredation permits for species that might think impacts a CEC permitted power project. While it is debatable whether the CEC has the authority to authorize take of state listed species pursuant to section 2081, at least the presence of a listed species could be construed to affecting siting actions for projects under CEC jurisdiction. The same cannot be said for non-listed species. Their presence is not a siting issue for which DFW claims jurisdiction. If the CEC claims they can substitute the CEC for the Department in Section 2835, they also have the obligation to substitute CEC through out the NCCPA and take on the full roll of DFW in regards to NCCP.

In the event there is a conflict between the terms of the GCP and the NCCP, the term most beneficial to the conservation of the species should prevail and if there is no actual conflict, the terms in both should prevail otherwise the NCCP will have to be amended following public comment on the proposed change or acknowledge that the 2835 permit is not applicable to that specific project.

The IA should include the Fish and Game code definition of conservation and clearly make it clear in the documents when its use is referring to the Fish and Game Code definition and not the alternative definition in the glossary. Its suggested that when its intended to be the Fish and Game Code definition that Conservation be capitalized to signal to the reader its being used as a “term of art”.

Assurances are provided by both DFW and the CEC yet the CEC has no authority under the NCCPA to give them and surely not on behalf of DFW. Neither the IA or DRECP identify the potential costs of providing additional conservation measures

nor how they will be allocated between DFW or the CEC should the NCCP conservation standard not be met through the implementation of plan's conservation actions.

The term of the agreement is 25 years in Section 1.7 yet the management and monitoring obligations go on in perpetuity. The IA needs to make it clear the perpetuity responsibilities are articulated in the IA.

Since the BLM LUPA can be modified in the future based on its independent decision, how will adverse impacts from LUPA changes be addressed? Since the LUPA could be modified in the future, all need conservation on private lands should take precedence over actions on BLM administered lands thereby reducing the risk to NCCP covered species in case the LUPA is modified as a result of executive orders or BLM or congressional actions.

The IA only provides an opportunity for FWS to coordinate its GCP with the NCCP. The IA should require the FWS to coordinate its GCP with the NCCP to avoid future conflicts created by the FWS's individual project permitting.

There is not identified need for the DFW to consider project-specific 2835 permits since any of jurisdiction can sign onto the NCCP and obtain a jurisdiction 2835 permit for projects it is permitting. The NCCPA was never intended for project specific permitting since an individual project is not capable of implementing an NCCP. For the same reason, the CEC cannot issue project specific 2835 permits although they could be issued a 2835 permit by DFW and utilize it to extend their authorization to take covered species to individual projects.

The implementation structure should be modified to create an independent adaptive management and monitoring team as described above. The implementation structure is too complex and costly. It needs to be greatly simplified so it will actually get the needed work done as contrasted to requiring an inordinate amount meeting time. It's a classical government bureaucracy design that will be inefficient, costly but not productive in regards to conserving species. Similar structures have been developed for other NCCPs and have been dismantled in favor of more streamlined governance structure.

The rough proportionality section is confusing. In one section it says that reserve assembly will occur faster than impacts. Then it goes on to say it will stay even with permittee impacts (even is not defined- is it an acre for acre even or mitigation ratio even or some other even). Then it goes on to say that all compensatory mitigation will be completed or initiated within 12 months of the after the impacts occur. It's unclear how reserve assembly will stay ahead of or even with the permittee impacts when compensatory mitigation doesn't only have to be initiated within 12 months of the impacts occurring. How will it be tracked? Who will certify its correct and whose permit is in jeopardy if rough proportionality is not achieved for each DRECP area? Revoking a project specific take authorization will have little consequence to most

projects since the take associated with them will already have occurred. In addition, the IA should address how bankruptcies will be dealt with should they occur prior to fulfillment of mitigation requirements and no mitigation lands should have any project ownership (even with a conservation easement going to an agency) to avoid LUZ type issues. The IA also needs to address how the California statute regarding due diligence for mitigation lands fits into the IA and agency obligations.

The criteria for restoration and/or enhancement compensatory mitigation are totally inadequate and need to be much more defined including requiring that ecological functions be restored.

The use of “incidental take” terminology in relation 2835 take has crept into the IA in multiple locations. A global word change should be done to simplify and avoid inaccurate wording. Use the term authorized take/take authorization throughout and define these terms to be incidental take pursuant to FESA Section 10(a) and take pursuant to Fish and Game Code Section 2835. This change is applicable to all DRECP documents.

The section on streamlined review appears to create a new time processing standard for CEQA documents. It’s unclear under what authority the parties can modify CEQA document time frames.

DRECP Agency Funding Commitments clearly show that the DRECP identified measures are inadequate to implement DRECP. What is the shortfall and what are the specific obligations of the parties to make the program whole so it meets the applicable NCCP issuance standards. The inadequate funding section undoes the assurances section since it states that the FWS and DFW could reconsider the viability of the already issued take authorizations. This is good but seems somewhat disingenuous. Additionally, how the CEC fit into the picture since they believe they are also a 2835 permit issuing entity.

While the IA addresses the holding of endowments, how much funding will go into endowments to provide for management and monitoring in perpetuity seems to be missing from the DRECP documents.

Section II.3

The term “incidental” take under the NCCPA occurs in multiple locations. The NCCPA does not utilize “incidental” in describing the take that can be authorized. Please edit all sections on the DRECP to remove the term “incidental” in relationship to take authorized pursuant to the NCCPA. The section regarding assurances incorrectly states the statute. A species does not have to be listed to trigger the assurances section of the NCCPA. While the assurances might not be important for most non-listed species, it could be important to a project proponent should their

project affect a fully protected or otherwise protected species for which DFW has no alternate permit authority.

The acreage figures for the proposed preserve system include State Park Lands. How will on-going and new management and facilities be addressed and what commitments is State Parks making to manage their lands consistent with the DRECP conservation goals and objectives? In other NCCPs, State Parks has sometimes agreed to manage their lands consistent with the NCCP and at other times they have not. Some State Park lands are critical to providing for the conservation of covered species within the DRECP plan area. What happens if the conservation value of their lands decreases due to lack of management. Who makes up the conservation shortfall?

Throughout all DRECP documents, the term “conservation” occurs but sometimes it refers to the Fish and Game Code definition and at other times it does not. The revised DRECP draft needs to make it easy for all readers and future implementers of the NCCP which definition is applicable each time the word is used. See above suggestion of how to make it clear.

Since the DRECP effectiveness monitoring program has not been designed its impossible to assess if it

1. Meets the requirements of the NCCPA
2. Will provide the data necessary to determine if the plan is providing for the conservation of covered species
3. can be adaptively modified based as better science and methods are developed (potentially an adequacy of funding issue)

In addition, lacking clear questions it will be designed to answer and potential monitoring protocols to answer critical questions, it not possible to estimate implementation cost and evaluate if the proposed funding levels for DRECP are adequate.

In almost every instance the effectiveness monitoring framework elements are conditioned by the term “available resources”. Since there is no indication of what the available resources are, let alone an identification of resource needs, the only conclusion that can be reached is that the effectiveness monitoring could range from nothing (i.e. no available resources) to the most robust monitoring program that could be designed. While one would meet the NCCPA standards the other clearly would not. As a result of the lack of definition, the only conclusion that can be reached is that its impossible to determine if the effectiveness monitoring program meets the NCCPA standards and as a result, DFW cannot utilize the information provided to make a finding that it does.

Effectiveness monitoring (even the specifics of what parameter will be monitored) is deferred to the future and since there are not quantifiable objectives, there in no way to even determine if the monitoring program will be robust enough (and

funded at an appropriate level) to determine if the conservation of covered species will be achieved nor if any of the other plan performance standards required by the NCCPA will be met. At a minimum, a detailed list of the questions the effectiveness monitoring program has to answer should have been included. Merely identifying the some potential parameters/techniques that might be utilized is inadequate. The current draft of DRECP falls far short of the current state of the science monitoring programs being implemented in southern California NCCPs. Its unclear if this shortfall is related to a desire to have a state of the science monitoring program or a just a lack of effort on the part of the preparers of the NCCP to learn about the current state of the science monitoring that is already ongoing. Scientists implementing the southern California NCCP monitoring programs regularly share what they've learned with each other and with a robust group of stakeholders. It occurs at monthly meetings, local symposia (on multiple occasions they have been funded by DFW), and one-on-one or small group meetings. There has never been any reluctance in sharing lessons learned, cutting edge techniques for determining species presence (use of canine scent dogs to remote sensing), creating quantifiable science based objectives, data analysis, data collection to improve predictive models and detect change over time, etc. etc. It appears that DRECP fell far short of the state of the science for its monitoring program because the preparers failed to make the effort to utilize the expertise that was readily available to them.

While there is some indication that monitoring will be over a large area, there were no details and an analysis of the minimum spatial extent that the monitoring will have to occur over to detect changes and inform management decision critical to the conservation of the species/natural community within the DRECP plan area. The sample frame for monitoring is critical to understanding the areal extent to which the inferences can be applied. A cogent discussion of the issues associated with rare plant monitoring (inter-annual variation, site occupancy, critical covariate data collection, etc.) including sampling and data analysis issues (see , McEachern et. al. 2006 and subsequent reports) would have at least indicated that the monitoring issues for annual rare plants had been adequately scoped.

In some instances, DRECP references potential monitoring protocols that were designed to detect the presence of a species not monitoring/detecting the species population/status change over time. A five-year monitoring cycle may not be the appropriate cycle for some species depending on detection probabilities, normal fluctuations etc. etc. Available data on covered species (or closely related species) should have been analyzed to better predict what sampling cycle (and number of sample points) that might be needed to detect change. Even more complicated will be developing a monitoring scheme that will provide the data regarding cause and effect of population changed/range changes so that appropriate management changes can be made should the species status (population, occupied area, etc.) change.

Making some monitoring subject to the availability of funds clearly indicates some identified monitoring will not likely occur, but lacking information on the size of the

monitoring budget and an estimated of potential monitoring efforts, its not possible to understand even at a gross scale, what monitoring will be done and if its adequate to meet NCCPA standards.

Contributing to the desert tortoise monitoring may be helpful but are the monitoring protocols adequate to inform adaptive management that DRECP should be funding. There are potential scale and cause and effect issues that may not be adequately addressed in the current protocols. At a minimum, the DRECP documents should have discussed how the existing monitoring program data could be used to appropriately inform DRECP funded adaptive management.

While its commendable that DRECP will fund range-wide MGS monitoring, its unclear if a 5-year monitoring cycle monitoring is appropriate. Is there an adequate number scientist available to monitor the entire range in the same year? If the entire range isn't done in the same year, significant data analysis problems are likely. What the cost will be? Is it realistically possible to lay out a sampling design that can be allow for inferences across the range and what level of change will the protocol be designed to detect? Since it appears that only distribution or status will be the focus of the studies, DRECP needs to clearly articulate how the change in one or the other (or potentially both) will used to inform DRECP adaptive management. Its unclear if DRECP is going to develop an MGS monitoring program based on a meta population model or a disconnect/isolated population model. The sampling methodology would likely be quite different between the two. At a minimum, DFW should require that all MGS capture studies obtain genetic samples from every individual MGS handled for the first time and DRECP should fund the genetic analyses of all samples to determine if and/or too extent the MGS populations are connected/fragmented. If they are fragmented, the most endangered populations of MGS need to be further evaluated for viability and the need for threat/stressor management. The concept of population centers needs to be critically evaluated since the most resilient populations may not be the areas with the highest population in any given year.

Because there could be an negative incentives (precluding energy development, issue for local government land use decision, negative affect on land values, etc.) to designating a new population center, genetic flow linkage, etc., the **identification** of a new population center should be done through and independent science process. If one is **identified**, it would be submitted to the DRECP coordination group for a decision on **designating** it at a noticed public meeting. Science first, politics second!

While it sounds good to say that bird monitoring will be done using standardized protocols reserve-system wide, it provides little real information on what will be done. More importantly though, it fails identify what the question(s) are that the protocol will be designed to answer and how the answers to the question(s) will inform the adaptive management program. In regards to agricultural-dependent covered species, how will the protocols/data analysis differentiate between range-wide population changes and DRECP population changes that may be ameliorated through DRECP adaptive management?

Based on experiences with other NCCP monitoring programs in southern California, the Adaptive Management Team will not have the expertise to design all of the needed monitoring protocols but more importantly, the first step in monitoring program development is identifying the question(s) that the monitoring protocols need to answer and their relationship to informing management decisions. How large is the budget for the Adaptive Management Team and how large will it be? Clearly, a monitoring strategic plan linked to a management strategic plan is needed for DRECP. The basic components of these strategic plans must be included in the revised draft of the DRECP so the adequacy of them can be independently evaluated.

Table II.3-17 appears to be just an accumulation of information and lacks a serious analysis of how important any of the described monitoring approaches are to answering critical questions and informing the DRECP adaptive management program. Because of the amount of information in the table, it appears to be an effort to create an appearance that the monitoring will be robust but in actuality the robustness of the monitoring program can't be determined since it's deferred to the first 5 years following the approval of DRECP. These types of misleading tables should be deleted or moved to an appendix focused on the types of monitoring that have been used in other venues and clearly acknowledging that the DRECP may or may not utilize any of the approaches.

For all individuals of any covered species handled, genetic samples should be collected for future analysis (including population connectivity, potential ploidy levels and cross pollination issues, etc.).

Since the relatedness of southwestern flycatchers population is unknown, the species appears to be declining in California and skewed sex ratios have been detected in some populations in southern California it will be critical to integrate DRECP data collection for this species with other southern California monitoring efforts. It will be critical to understand if the DRECP southwestern willow flycatcher population is closely linked to the largest (but declining) population in California located along the San Luis Rey River just to the west of the DRECP area. To ensure the conservation of this species, DRECP may need to implement/fund required actions outside of the DRECP plan area. This could also be the situation with other covered species such as sandhill crane and Swainson's hawk.

There is a critical error in the golden eagle section. The table states that the goal for the Nielson et. al study was to detect a 3% annual population decline over a 20-year period with a statistical power of ≥ 0.8 with a 90% confidence interval. The actual goal included the "average" after 3%. The error in correctly stating the goal could be very misleading to the average reader of the document since it significantly changes what the protocol was designed to detect. Additionally, the way the information is presented implies the protocol could detect the stated level of change. They did not reach that conclusion and acknowledge their studies needed to go longer. They also stated that their surveys may indicate GOEA population in their sample frame may

be stable but that they could not statistically say that based on the current dataset. Additionally, the table should disclose that the DRECP area is outside of their sample frame and include their acknowledgement that detection of GOEA is more challenging terrain (similar to the DRECP plan area). Detection probabilities were lower rough terrain could affect confidence intervals and/or sample sized needed if a similar methodology was utilized in the DRECP area.

The objectives of the Pagel et al survey methodology should have been included in the table to help show it lack of applicability to monitoring the DRECP GOEA population (likely too labor intensive to be feasible across the DRECP area. The CEC should be commended on funding the development of a monitoring protocol by the Fuller team but since their work is not completed, it's not possible to review their methodology's applicability for monitoring conservation of GOEA in the plan area.

The TCBB protocols utilized for statewide monitoring protocol that is unlikely to provide the data needed to determine if DRECP is providing for the conservation of this species. This is a highly mobile species that is in serious decline in the state and especially in southern California. Its status was recently elevated by the California Fish and Game Commission. Because of the current and on-going threats to this species, it likely to be extirpated from the DRECP area within the next 25 years so its unclear how DFW and can make the NCCP findings for this species.

How will public and independent science be incorporated into the decision process regarding protocol development and implementation? The current implementation structure creates potential internal agency conflicts and reporting structure issues. The AMT responsibilities need to be with an independent organization not subject to influence by agency managers. Agency managers will have the ability to inject their concerns during the budget approval process.

The long-term management, adaptive management and monitoring costs for NCCPs will generally exceed the land acquisition cost. This is not reflected in the cost analysis for DRECP which probably means that the long-term management will be underfunded. Appendix I utilized management costs that were incorporated into permits/approvals/EAs instead of identifying the actual costs from other plans for management, monitoring, data analysis etc. Project level mitigation land monitoring is substantially different from NCCP adaptive management and monitoring and should not be used to estimate actual cost. For the most part, project level mitigation did no include an obligation for adaptive management and effectiveness monitoring (generally only detection monitoring because of the small scale of the mitigation sites). The projects used to develop the per acre cost figure did not include mitigation and monitoring for the suite of species identified in DRECP. One of the rationales for providing assurances under the NCCPA is that management and monitoring on a broad scale will provide much greater benefits than done on a small scale as often occurs as the result of DFW 2081 permitting. Assurances are a tradeoff for a much more comprehensive and robust conservation.

The GOEA population estimates for the DRECP plan area (appendix H) are suspect and need additional verification. Since FWS will only allow for the take of GOEA if the **GOEA population is stable or expanding**. Are the protocols available to track the population at the precision level needed. The identified population area extends outside of California. DFW's permit needs to limit the take of GOEA to a level that will not affect the state's population that currently appears to be declining rather than the population area in Table H-1. Under the NCCPA, the take should be limited to a level that does not result in a decrease in the DRECP population or the populations in adjacent NCCPs. DRECP impacts on other NCCPs must be fully mitigated so other NCCP permits are not jeopardized by the take associated with DRECP permitted projects. Further, DRECP should help fund GOEA monitoring efforts in adjacent NCCPs to help determine if DRECP is affecting their populations. Exhibit H-2 appears to be unworkable since there are no GOEA NCCP take issuance standards that reflect the need to not decrease the GOEA population within the DRECP plan area. In addition, it's unclear how any of the appendices fit with the NCCP- are all identified mitigations in the appendices requirements of the NCCP or are they merely an informational item? It does not appear that they are actual requirements of the NCCP as such, they cannot be used by DFW to make its findings.

Deferring the design of the GOEA trend monitoring to the time frame between the draft and final version of the NCCP precludes public review and comment, this is inappropriate and the costs of implementation are not disclosed (this same issue occurs for other species and vegetation communities). Will its robustness be based on the best science or based on the funding level displayed in Appendix I?

Use of the Bittner data should be qualified in regards to its accuracy. Work currently underway by USGS strongly indicates his mapping of home ranges, foraging area etc. was extremely inaccurate and misleading in regards to potential project impacts.

It's unclear in the documents how decisions of the Coordination Group will be made. The plan and IA should obligate the Coordination Group decisions regarding what adaptive management and monitoring recommendation will be funded be done at a publicly noticed meeting. The recommendation should be available for public review and comment at least 60 days prior to the meeting. The specific rationale for not funding specific recommendations should be in writing and the votes of each member agency recorded.

Compensatory Mitigation ratios (compensation ratios) ranging from 1:1 to 5:1 are proposed for project impacts. The documents indicate that they were designed to offset the impacts of the taking of covered species. The discussion of mitigation ratios also indicate they were driven or at least justified to some extent by the numbers of acres of impacts and acres of protection needed in different units/alternatives. While these may seem like similar and compatible concepts, one is a FG Code Section 2081 standard while the other appears to be a preserve

assembly standard more in line with an NCCP preserve assembly concept. It may be difficult to sustain a legal challenge to them unless there's a better nexus analysis in the document regarding the link between the impacts of a project and the mitigation required. Its difficult and legally challenging to do the nexus analysis after the fact.

Having been on the leading edge of developing the rationale for the mitigation ratios utilized by DFW since the Dinkey Creek Hydro Electric Project mitigation agreement in the early 80's and the issuance of the first FGC 2081 permit (American Honda Test Track at Cantil), its critical that documents clearly articulate the biological rationale for a mitigation ratio. The mitigation ratios historically utilized by DFW are based on the concept of the enhancement potential of mitigation lands through conservation, aggregation and management (including monitoring). A 4:1 mitigation ratio reflected and estimated 25% increase in conservation benefit to the species on the mitigation lands (i.e. it takes 4 acres with a 25% improved conservation benefit to offset the loss of 1 acre). A 5:1 ratio reflected a potential to increase the conservation benefits by approximately 16%. The accuracy of the assumptions that went into the creation of the widely used mitigation ratios has never been fully analyzed but based extensive experience with wildland management and species monitoring, it's likely that the standardized mitigation ratios overestimates how much species' benefit can be achieved through better management. The benefits from aggregation of lands into manageable units with reduced edge effects etc. may, overtime, make up for the shortfall in the enhancement potential of the mitigation properties.

In closing, while there are many shortcomings with the current DRECP documents, the long term conservation of species in the DRECP plan area will require the development and especially the implementation of bigger and more complex conservation strategies than currently in place. Breaking up the DRECP areas into subregions with a specific NCCPs for each subregion would help reduce the current problem of planning beyond what can support by the currently available science. While planning larger is often helpful, DRECP is too large of an area to address in one NCCP. Its too great of a risk to species to lock in conservation decision at least through 2040 over such a large area and with such limited data. The current documents do not provide support for the array of standard and associated findings required in the NCCPA, especially Sections 2820 – 30 over the entire DRECP area.

Other Funding Sources

Potential other implementation funding sources are mentioned but their description does not clearly identify restrictions on their use (both legislative and policy). Traditional Section 6 funds (grant to the states) are formula driven and any use of them to assist DRECP will reduce their availability for in other areas of the state and are specifically for federally listed species. DFW, by policy, has precluded their use for long-term management and monitoring activities. State Wildlife Grant (SWG) funds also have limitations and cannot use for plants and harvest species. The soon

to be released new State Wildlife Action Plan will also provide guidance on where and for what SWG can be used.

The DRECP effort would be well served by consulting with the relative small group of NCCP practioners with extensive NCCP development and implementation experience from the non-regulatory agency perspective. They've been down the dead ends and figured out what actually works and understand the complexities of monitoring and adaptive management programs as required by the NCCPA. In other words, they've made their mistakes and learned from them. There's no reason for the DRECP to make the same mistakes and waste limited resources.