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Community Advisory Committee

Regional Transportation Commission Building, Room 108
600 South Grand Central Parkway, Las Vegas, Nevada 89155

Draft Meeting Summary for March 18, 2010



Meeting Summary

Community Advisory Committee Meeting 14, March 18, 2010, 2:30 p.m.

Regional Transportation Commission Building, Room 108

The following pages contain a summary of the presentations and discussions from the Desert Conservation Program (DCP) Community Advisory Committee (CAC) Meeting of March 18, 2010. These pages, together with the presentation slides and handouts, constitute the meeting record.

Meeting 14 Agenda

1. Opening and Introductions
2. Approval of Meeting Notes from the February 2010 CAC Meeting - Action Item
3. Review and Adopt CAC Guiding Principle on Mitigation - Action Item
4. Discussion of Avoidance, Minimization, and Mitigation - Action Item
5. Public Comment
6. Meeting Wrap Up and Closing

Appendix A - Meeting 14 Agenda

Appendix B - Revised 2010 Meeting Dates

Appendix C - Presentation on Avoidance, Mitigation & Minimization Measures

Appendix D - Letter from FWS regarding Burrowing Owl

Appendix E - Committee Responses to Data Gathering Exercise

Appendix F - Southern Nevada Homebuilders Association Statement Before the CAC

1. Opening and Introductions

Ruth Nicholson, Lead Facilitator, opened the meeting at 2:45 p.m. and noted that a quorum was present. Paul Larsen, Business/Small Business, participated by telephone.

2. Approval of Meeting Notes from the February 2010 Meeting - Action Item

Ruth asked the committee if it had any questions or comments on the February 2010 meeting summary. Scot Rutledge, Environment/Conservation, noted that in addition to the recorded comment concerning the acreage cap, he had also commented that if avoidance was not being used expanding the acreage cap did not make as much sense. Doug Huston, Meeting Documentation, stated he would check the meeting raw notes and audio recording and clarify the summary as necessary.



Jim Rathbun, Education, noted that on page 11 of the summary there was a discussion about the development of the Desert Tortoise Conservation Center and he remembered a comment about the purchase of grazing land. Terry Murphy, Homebuilder, clarified that grazing rights had been purchased, not the grazing land itself. Jim asked if those grazing rights were still owned by Clark County. Marci Henson, DCP Plan Administrator, responded that they were. Terry explained that the grazing rights had been retired. Jane Feldman, Environment/Conservation, asked if the original owners of the rights were willing sellers. Terry replied that they were.

Scot referred to a discussion about the possibility of the committee designating avoidance areas or making recommendations concerning avoidance areas on Bureau of Land Management (BLM) lands that had not been disposed of yet. He wanted the notes checked to see if that question had been answered in the meeting and if not, could the committee get an answer to that question in the future. Doug responded that he would check the notes and audio recording to determine if the question had been answered in the meeting. The comment about answering the question in the future was added to the parking lot.

The committee accepted the notes by consensus.

3. Discussion of Avoidance, Minimization and Mitigation - Action Item

Ruth reviewed the agenda item with the committee. Eric Hawkins, Co-Facilitator, reviewed the committee's guiding principle on mitigation:

Guiding Principle Four: Activities related to the mitigation of take should seek to:

1. Have a measurable impact on species and habitat conservation
2. Promote efforts that are efficient and have value
3. Improve our knowledge of local conditions
4. Balance burdens among stakeholders and permittees
5. Allow for/recognize the value of a variety of uses of land and resources

Eric asked the group if it had any comments. Mindy Unger-Wadkins, City of Henderson, asked for clarification of "Improve our knowledge of local conditions." Eric explained that there had been activities in the past that had not resulted in the improvement of conditions or resulted in any insights on how to improve conditions. The committee adopted Guiding Principle 4 by consensus.

Eric then reviewed the take permit issuance criteria with the committee:

1. The taking will be incidental.



2. The applicant will minimize and mitigate the impacts of the taking to the maximum extent practicable.
3. There is adequate funding for the plan, and procedures for unforeseen circumstances have been developed.
4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.
5. The applicant will ensure that other measures the U.S. Fish and Wildlife Service (FWS) may require will be provided.
6. The FWS has received assurances that the HCP will be implemented.

He then reviewed the definitions of minimization and mitigation provided by Sean Skaggs, DCP Legal Counsel, with the committee:

1. **Minimization:** Actions that can be undertaken to reduce or prevent adverse affects to covered species. Such measures can include species surveys, seasonal restrictions on activities, and specific criteria for siting, design and construction of projects.
2. **Mitigation:** Designed to compensate for adverse affects to covered species that are caused by covered activities. Potential forms of habitat mitigation include acquisition and preservation of existing habitat, protection of existing habitat through conservation easements, enhancement or restoration of disturbed habitat, and creation of new habitat.

Jim asked if money had been set aside for the purchase of lands. Marci responded that it had. Jim clarified that this would represent mitigation, not avoidance. Marci agreed. Jim asked if Marci could explain how this process works. Marci responded that the definition discussed a couple different forms of action. For example, in 1995, Clark County purchased an interest in a conservation easement with Boulder City. This was 85,000 acres in the El Dorado Valley. This land is now held primarily for conservation purposes. Clark County has also purchased fee-title property (riparian areas) along the Muddy River and acquired interest in grazing allotments. In some cases, real property rights came with those grazing allotments.

Joe Pantuso, Developer/Homebuilder, commented that the first sentence of the minimization definition corresponded to what was considered mitigation under the National Environmental Policy Act (NEPA), and he did not see any difference between minimization and mitigation. Sean replied that some people do combine the two concepts in a global sense. However, for purposes of clarifying for the committee mitigation typically involves compensating for any residual effects that remain after reduce or avoid. Minimization is broken out from the broader idea of mitigation to help make the distinction clear. Joe asked if Sean meant



that under federal law the terms were synonymous. Sean commented that the Endangered Species Act (ESA) does not state “minimize and “mitigate.” He stated that again, the idea was to help differentiate the activities of reducing and preventing adverse effects from compensating for adverse effects. Joe stated that his position was that these activities are one and the same.

Jim asked if minimizing an effect affected the mitigation fund. Sean offered the example of a person who owned five acres which contained four nesting pairs of scrub jays. If this person was unable to minimize the impacts to any of those nesting pairs, he would need to conduct mitigation for four nesting pairs of jays. If he was able to minimize the impact to two pairs, he would only need to mitigate for the two pairs for which he was unable to minimize the impacts. The concept is that you minimize your impacts, then look at any residual effects and mitigate only for them.

4. Discussion of Avoidance, Minimization, and Mitigation - Action Item

Ruth invited John Tennert, Permit Amendment Project Manager, to speak to the committee on avoidance and minimization.

John reviewed the criteria used by the permittees to evaluate the specific conservation measures:

1. FWS recommended/required
2. Biologically necessary and purposeful
3. Practical
4. Will have a measurable effect/impact
5. Cost effective

He reviewed the ESA criteria for an HCP;

- 1. Section 10(a)(2)(A) of the ESA:** HCP must specify steps to minimize and mitigate the impact of the taking
- 2. Section 10(a)(2)(B) of the ESA:** FWS will approve HCP’s if the impacts of the take are minimized and mitigated to the maximum extent practicable.

He reviewed what constituted the “maximum extent practicable:”

1. Is the mitigation scientifically and rationally related to the level and impact of taking?
2. Is the minimization and mitigation commensurate with the taking?
3. Does the mitigation address all covered species?



4. Practicable is defined as “reasonably capable of being accomplished.”

John reviewed the criteria used by the permittees for determining the species for which minimization makes sense:

1. Relative impact
2. Range
3. Detectability
4. Rescue success
5. Persistence with disturbance

He reviewed the symbols used to apply these criteria to the covered species:

1. A full moon means the species is suitable for minimization measures under that criteria.
2. A half moon means that species is moderately suitable for minimization measures under that criteria.
3. An open circle means the species is not suitable for minimization activities under that criteria.

John then explained in more detail the five criteria used to evaluate species for suitability for minimization activities.

He explained that relative impact described the effects of covered activities on known occurrences and habitat strictly within the plan area. Species that are more likely to be impacted are more suitable for minimization. Range involves the distribution of the species. Species with broad distribution do not lend themselves to avoidance and minimization measures. Detectability involves how easy a species is to find. Species with high detectability are more suitable for minimization measures. Rescue success measures how likely a species is to respond positively to rescue. He explained that the classic example of a species with a low rescue success was the Las Vegas bearpoppy. There has never been a successful transplant or propagation of the Las Vegas bearpoppy.

Jane Feldman, Environment/Conservation, commented that if you cannot rescue a species, there is not much chance for mitigation. John responded that low rescue success meant there was not much chance for minimization. Marci explained that mitigation was possible. Jane commented that she was confused about the criteria. John explained that a full-moon symbol by a species meant that it was more suited for minimization under that specific criteria. Jane asked if that meant that a full moon meant that there was more chance of minimization success under that criteria. John responded that a full moon meant that, under that



criteria, that species was more suited for minimization. Scot asked if the bearpoppy had low rescue success did that mean avoidance measures would not be used? The poppies would be taken and that taking would be mitigated. John agreed.

John explained that persistence with disturbance evaluated a species ability to survive when its habitat was disturbed or fragmented. Species that are more adaptable to disturbance are more suitable for minimization. John explained that each species was evaluated under each criterion and across all criteria to assess how suitable the species was for minimization measures. The result of the evaluation was that 11 of 21 species were suitable for minimization.

Joe wanted to know who had done the analysis. John replied that an initial analysis had been done by ICF, Clark County's biological consultant and reviewed by the DCP, the Permittees and others. The lead on the analysis was Dr. David Zippen.

Terry questioned how the conclusion that desert tortoises are readily detectable was drawn since they are only detectable when they are not in hibernation and when it is not too hot. She also asked what persistence meant. John responded that persistence meant its ability to survive. John responded that was "persistence with disturbance." Terry commented that these conclusions seemed very subjective. John replied that they were subjective in a sense but had been verified by trained scientists such as ornithologists and botanists. Jane asked if the experts who reviewed this list were depending on the literature in the scientific base. She asked if all that literature was going to be included in the basis of this effort. She stated there will be controversy over the data set used as the basis for this effort. John replied that personal experience was also a factor in this analysis, not just research results. Jane commented that all these conclusions are very qualitative. John replied that there just is not a lot of data on some of these species. Jane asked how it was possible that the banded gila monster had a full moon under rescue success (suitable for minimization measures) when detectability is so difficult. She also pointed out that not much was known about how long gila monsters would survive after being relocated.

Allison asked if there were lower level criteria within these criteria that define what impact is. John replied that was an assessment by the biologists of how much habitat would be impacted by covered activities within the plan area. Allison asked if the criterion of detectability had any quantitative aspect to it. She explained she was looking for some quantitative method of determining whether a species got a half moon or a full moon for a certain criterion. John responded that it was a relative assessment.

Eric introduced the next activity. He invited committee members to write down their thoughts on the pieces of paper provided. If there were aspects of the assessment they liked, they should write them on the green paper. If they wanted more information, that should go on the yellow sheets, and concerns should go



on the red paper. Additional ideas for the process were to be noted on the blue sheets. The exercise was intended to allow committee members to get their thoughts organized and down on paper. Ruth explained that following the rest of John's presentation, the sheets would be collected and posted in the appropriate categories on the wall. She stated that hopefully, some of the committee members' concerns and questions would be answered by the next part of John's presentation.

John resumed his presentation. He reviewed the proposed impact zones with the committee:

1. Zone A: Urban Areas

- a. The majority of vacant land near or adjacent to developed land
- b. Wild desert tortoises and burrowing owls are absent or are very unlikely to occur
- c. Would also be developed for Mesquite, Boulder City and other communities where applicable
- d. Roughly commensurate with no pick-up boundary for pet tortoises
- e. No specific Avoidance and Minimization Measures (AMM) are recommended for these areas

2. Zone B: Future Urban Areas

- a. Generally characterized by natural land-cover types with varying levels of disturbance and development
- b. Las Vegas Valley - delineated as area between Zone A and either the Ultimate Development Boundary or BLM disposal boundary
- c. Other areas may have similar boundaries defined by city limits at time of permit issuance
- d. AMM's would focus on the avoidance of take of individual animals detected by surface observation and limited surveys (i.e. tortoise and burrowing owl clearance)

Mindy asked if the areas discussed in the Resource Management Plan (RMP) currently under development i.e., future disposal boundaries, would be in Zone B. John replied that it would depend on where the disposal boundary was located. Mindy used the example of Inspirada and wanted to know what zone that might be in. John replied that would probably be Zone B. Terry commented that a lot of that area is graded. Terry wanted to know if this would change the zone designation. John replied that it would remain Zone B, and those areas that were graded would already be covered if they had received their grading permit.

Darren Wilson, Nevada Taxpayers Association, asked if you went back five years, to the point it had just been disposed of by BLM and never been graded, would this area be Zone C? John replied that it would still be Zone B. He commented that the Permittees did not envision any of the Las Vegas Valley falling within Zone C.



3. Zone C: All Other Areas

- a. All areas in the study area (Clark County) that are not in Zones A or B
- b. Areas with no development or limited, low-density development surrounded by large amounts of natural land cover
- c. More likely to be adjacent to conservation areas for a variety of covered species
- d. AMM's would focus on more intensive surveys and avoidance measures to increase the likelihood of detection and minimize the chances of harming individual covered species, such as desert tortoise and burrowing owl

John reviewed the proposed minimization measures by zone with the committee. Mindy asked what on-site waste management was. John replied that it was keeping trash off-site to reduce incentives for predators such as ravens and coyotes. Mindy asked, using Inspirada as an example again, if an area was Zone C but is now adjacent to development, does it become Zone B? Marci pointed out that zone boundaries for Zones A and B can be revisited every five years or when 10% of the take allowance has been reached.

Jim asked for an example of an area within the Las Vegas Valley that would be Zone C. John replied that there would not be any areas within the Las Vegas Valley that would be Zone C. Mindy commented that initially the idea was to avoid maps in the permit but this situation seemed to require them. She wanted to know how the zone boundaries were going to be defined. John replied that it would be based on the situation at the time of permit issuance. Mindy commented that anything released in the valley in the future would be Zone B. John agreed as long as the area was in the current Ultimate Disposal Boundary. Mindy commented that her biggest question with respect to Zone B was how much it was going to cost to develop in this zone. Ruth suggested Mindy put that on a yellow sheet to add to the wall.

Eric explained to committee members that they were now going to repeat the feedback exercise from earlier. Again, write down on the appropriate colored paper what they liked, what information they still needed, and what their concerns were. The responses would be collected and posted on the wall.

1. What do you like about the minimization and zone proposals?
2. What additional information do you need?
3. What concerns do you have?
4. Other thoughts?

Ruth informed the committee that there was one more piece of information to pass out. A copy of a letter from the Southern Nevada Home Builders Association (SNHBA) concerning fees was distributed. Joe sum-



marized the letter for the committee. He stated that if there is any indication of any increase in fees, the SNHBA will oppose this very strongly. The home building industry believes that avoidance, minimization and mitigation are one and the same and to protect species and their habitats is the responsibility of every citizen of Clark County. See Appendix B for a full copy of the SNHBA remarks. Mindy asked if this position would hold true for all zones. Joe replied that it would. Scot asked if the home building industry knew where the money for minimization and mitigation would come from under these circumstances. Joe replied that it cannot come from the homebuilding industry any more. Mindy commented that part of the question was should all these additional requirements be added to the permit.

Darren commented that for the record, there needs to be some kind of accountability of where the money has been spent, and accountability for the expenditure of money for any future programs. Eric asked Darren to write that on a sheet of paper.

Eric pointed out that the way Joe handled this was exactly correct per the committee's **Guiding Principle 9:**

Each member of the Community Advisory Committee has the right and responsibility to communicate the interests of the group or demographic they represent in the permit amendment process.

Eric then reviewed the committee's responses to the exercise. See Appendix C for a copy of the responses to this exercise.

Ruth explained that the facilitation team would use these responses to draft preliminary recommendations on minimization and mitigation for the committee's consideration. Mindy asked if the committee would be going over the answers to the questions on this list at the next meeting. Marci replied that Clark County staff would draft some answers to some of these questions and get them to the committee before the next meeting. She commented that the goal was to get a recommendation on avoidance and minimization at the next meeting, so she would like to answer as many of these questions as possible before then. Mindy commented that one of the things the committee really needed was to hear from FWS on why minimization is necessary.

Darren mentioned that an issue that has been bothering him for a while concerns a tortoise rehabilitation program. He commented that some of the things he has suggested and discussed are a breeding program, collection of eggs, containment of tortoises to a certain age and release into historic ranges, and credit back to the applicant for a successful reintroduction program. The committee is not talking about these things. He stated the discussion is just about avoidance, minimization and mitigation. He suggested that talking about this "front-side" could have a larger impact on the species than the activities currently being discussed.



He also commented that there needs to be better accountability on project costs. He wondered where the \$88 million that has been spent to date. Marci commented that one of the challenges Clark County has in its role and responsibility as a part of the regulating community is the role of the FWS as the tortoise recovery unit and what role Clark County has in contributing to and influencing that process. Darren asked if that process was not funded by Clark County. Marci asked for clarification as to which part of the process Darren was referring to. Darren clarified that he was referring to the breeding of tortoises to be released. Marci replied that Clark County is not currently funding this program. Darren asked if Clark County had ever funded that program. Marci replied that Clark County has been funding translocation. This has been of limited value as FWS views the population at the translocation center as experimental. She commented that what she thought Darren was saying was that the program needed to move away from that perspective and those animals need to start counting towards species recovery. Darren commented that if Clark County is paying for this it needs to get something on the front end and that FWS needs to explain what can be done.

Ruth pointed out to Scot that one of his earlier questions had been placed in the parking lot, and she wanted to know if Scot wanted to put it on the sticky wall. Eric suggested Scot put it on a yellow sheet.

Mindy commented that she still did not understand the relationship between minimization and mitigation. Terry asked if the cost of surveying for and moving species would be better spent on the species in the wild.

5. Public Comment

Rob Mrowka, Center for Biological Diversity, stated that he had three comments to make. Regarding the screening criteria, when you are discussing rescue, you have to have a suitable place to which to be rescued. Is there a suitable habitat where these animals can be moved? He suggested that a criteria be added that addresses whether there is a suitable habitat available for rescued animals. Most of the plants are very soil sensitive and endemic and cannot be transferred easily.

Regarding the desert tortoise, he asked how it could be considered highly detectable. Scientists have commented on how difficult they are to detect. He commented that to shade that column in as a full moon for the desert tortoise was questionable.

Regarding translocation, Rob commented that a translocation study on desert tortoises at Ft. Irwin in California showed that over a two-year period, over 50% of translocated tortoises died.

Rob stated that his final comment was that he hoped Zone A would encourage infill development, but he had a hard time seeing the difference between Zones B and C. He also commented that using the flood control Ultimate Development Boundary did not make any sense to him.



6. Wrap Up and Closing

Ruth reviewed the remaining meeting dates and asked the committee to note that the proposed November meeting date was on a Wednesday.

Mindy commented that she thought there was going to be a lot of work to do at the next two meetings and suggested the committee work until 5:00 p.m. Ruth asked if the next meeting looked too full, would the committee be OK with starting at 2:00 p.m. and going to 5:00 p.m. Joe suggested that the committee agree to allow for some flexibility in the time with a maximum length of 2:00 p.m. to 5:00 p.m. John asked if the committee wanted to plan for this for the next meeting. Ruth also mentioned the quorum issue given that the start of this meeting was delayed because there was not a quorum in attendance.

The meeting adjourned at 4:32 p.m.



Attendance

Committee Members Present

Gary Clinard, Off Highway Vehicles
Jane Feldman, Environmental/Conservation
Stan Hardy, Rural Community
Paul Larsen, Business/Small Business
Terry Murphy, Developer/Homebuilder
Joe Pantuso, Developer/Homebuilder
Jim Rathbun, Education
Scot Rutledge, Environmental/Conservation
Allison Stephens, City of North Las Vegas
Mindy Unger-Wadkins, City of Henderson
Darren Wilson, Nevada Taxpayers Assn.

Clark County Staff

Marci Henson
Ann Magliere
John Tennert

Others In Attendance

Michael N. Johnson
Jeri Krueger
Ken MacDonald
Sara Moffat
Rob Mrowka
Carolyn Ronning
Cheng Shih
Mark Silverstein
Cris Tomlinson
John Willis
Paul Yadro
Eric Hawkins (Facilitation Team)
Doug Huston (Facilitation Team)
Ruth Nicholson (Facilitation Team)
Sean Skaggs (DCP Legal Counsel)



Flipcharts

Notes:

Agenda

1. Opening and Introductions
2. Adopt February CAC Meeting Notes
3. Review and Adopt CAC Guiding Principle on Mitigation
4. Overview of Avoidance, Minimization and Mitigation
5. Public Comment
6. Wrap Up and Closing

Goals

- To adopt Feb. CAC notes
- To adopt CAC Guiding Principle on Mitigation (Conservation Strategy)
- To discuss avoidance and minimization measures for an amended permit

Guiding Prin. 4

- Activities related to the mitigation of take should seek to:
 - Have a measurable impact on species and habitat conservation
 - Promote efforts that are efficient and have value
 - Improve our knowledge of local conditions
 - Balance burdens among stakeholders and permittees
 - Allow for and recognize the value of a variety of uses of land and resources

Parking Lot

- Answer legal questions from last meeting, page 9.



Flipcharts

Notes:

Action Items

| Who? | What? | When? |
|------|------------------------------------|-----------------------------|
| DCP | Answer to questions where possible | ASAP - Before April meeting |

Notes

- With take, we avoided maps
 - How do zones accommodate this?
 - Effective as of date of permit issuance
 - Re-evaluated periodically
- How much?
- Need clarification from FWS on what's proposed - what will be required?
- What about proactive/creative activities to save species?
 - Goes back to accountability

Notes

- Still not a good enough answer from FWS on whether mitigation works - would minimization be more effective?
- Next meeting from 2:00 to 5:00 ?
 - TBD



Appendix A Meeting 14 Agenda

Desert Conservation Program Community Advisory Committee Meeting County Of Clark, State Of Nevada

NOTICE IS HEREBY GIVEN that a meeting of the Desert Conservation Program Community Advisory Committee (CAC) has been called and will be held on Thursday, March 18, 2010, beginning at 2:30 p.m. at the Regional Transportation Commission Building, 600 Grand Central Pkwy, Room 108, Las Vegas, Nevada. Below is an agenda of all items scheduled to be considered. Unless otherwise stated, items may be taken out of the order presented on the agenda.

1. **Opening and Introductions**
2. **Approval of Meeting Notes from the February 2010 CAC meeting - Action Item**
3. **Review & Adopt CAC Guiding Principle on Mitigation - Action Item**
4. **Discussion of Avoidance, Minimization and Mitigation - Action Item**
 - Goal: • To continue discussions regarding mitigation required for an amended MSHCP
5. **Public Comment**

No action may be taken upon a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action will be taken. Speakers are asked to sign in to speak. Speakers are asked to introduce themselves with their name and affiliation, if any, before speaking. Each speaker will be limited to three minutes.
6. **Meeting Wrap Up and Closing**
 - Goals: • To recap meeting results and identify follow-up activities
 - To outline agenda topics for the next meeting
7. **Adjourn**



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Appendix B
Revised 2010 Meeting Dates



Community Advisory Committee Meeting Dates

Committee meetings will be held from 2:30 p.m. to 4:30 p.m. at the Regional Transportation Commission Building, 600 Grand Central Pkwy, Room 108, Las Vegas, Nevada. The scheduled meeting dates are listed below:

| Meeting | Date |
|-------------|--|
| Meeting #12 | Thursday, January 14, 2010 |
| Meeting #13 | Thursday, February 18, 2010 |
| Meeting #14 | Thursday, March 18, 2010 |
| Meeting #15 | Thursday, April 8, 2010 **This meeting held from 2:00pm-5:00pm** |
| Meeting #16 | Thursday, May 20, 2010 |
| Meeting #17 | Thursday, June 10, 2010 |
| Meeting #18 | Thursday, July 15, 2010 |
| Meeting #19 | Thursday, August 26, 2010 |
| Meeting #20 | Thursday, September 16, 2010 |
| Meeting #21 | Thursday, October 7, 2010 |
| Meeting #22 | **Wednesday, November 17, 2010 |
| Meeting #23 | Thursday, December 9, 2010 |



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Appendix C
Presentation on Avoidance, Mitigation & Minimization Measures



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Avoidance, Minimization and Mitigation

March 18, 2010



In developing a conservation strategy, the following criteria are being used to evaluate specific conservation measures:

- 1. FWS Recommended/Required**
- 2. Biologically Necessary and Purposeful**
- 3. Practical**
- 4. Measurable Effect/Impact**
- 5. Cost Effective**



Section 10(a)(2)(A) of the ESA:

- **HCP must specify steps to minimize and mitigate the impact of the taking**

Section 10(a)(2)(B) of the ESA:

- **FWS will approve HCPs if the impacts of the take are minimized and mitigated to the maximum extent practicable**



What constitutes “maximum extent practicable”?

- Is the mitigation scientifically and rationally related to the level and impact of taking?
- Is the minimization and mitigation commensurate with the taking?
- Does the mitigation address all covered species?
- Practicable as “reasonably capable of being accomplished”



The following criteria were used to evaluate each of the proposed covered species to determine if specific avoidance and minimization measures are warranted:

- 1. Relative Impact**
- 2. Range**
- 3. Detectability**
- 4. Rescue Success**
- 5. Persistence with Disturbance**



1. Relative Impact

- Measures the relative impact of covered activities on known occurrences and potential habitat within the plan area.
- Species with relatively high impacts would have a greater need for avoidance and minimization measures to reduce impacts and thus would be more suitable for avoidance and minimization measures.

| Species | Evaluation Criteria | | | | | Candidate for AMM? |
|--|---------------------|-------|---------------|--------|-------------|--------------------|
| | Impact | Range | Detectability | Rescue | Persistence | |
| BIRDS | | | | | | |
| Yuma clapper rail (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Western yellow-billed cuckoo (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Burrowing owl | ● | ◐ | ● | ● | ● | Yes |
| Southwestern willow flycatcher (nesting) | ◐ | ◐ | ◐ | ◐ | ◐ | Yes |
| Arizona Bell's vireo (nesting) | ◐ | ◐ | ◐ | ◐ | ● | Yes |
| Bendire's thrasher | ◐ | ○ | ○ | ◐ | ◐ | No |
| LeConte's thrasher | ◐ | ○ | ◐ | ◐ | ● | No |
| Phainopepla | ◐ | ○ | ● | ◐ | ● | No |
| MAMMALS | | | | | | |
| Spotted bat | ● | ◐ | ● | ● | ● | Yes |
| Townsend's big-eared bat | ● | ● | ● | ● | ● | Yes |
| Desert pocket mouse | ○ | ○ | ◐ | ◐ | ◐ | No |
| Desert kangaroo rat | ○ | ○ | ◐ | ◐ | ◐ | No |
| PLANTS | | | | | | |
| Las Vegas bearpoppy | ◐ | ○ | ● | ○ | ○ | No |
| Threecorner milkvetch | ○ | ○ | ○ | ◐ | ◐ | No |
| Pahrump Valley buckwheat | ● | ● | ◐ | ◐ | ◐ | Yes |
| Las Vegas buckwheat | ● | ● | ● | ● | ● | Yes |
| Sticky buckwheat | ○ | ◐ | ○ | ◐ | ◐ | No |
| White-margined beardtongue | ● | ● | ◐ | ● | ● | Yes |
| Yellow twotone beardtongue | ○ | ◐ | ◐ | ◐ | ● | No |
| REPTILES | | | | | | |
| Banded Gila monster | ◐ | ○ | ○ | ● | ○ | No |
| Desert tortoise | ● | ○ | ● | ● | ◐ | Yes |



2. Range

- **Species with restricted ranges are more likely to need avoidance and minimization measures than species with wider ranges that will not benefit biologically as much from these measures.**

| Species | Evaluation Criteria | | | | | Candidate for AMM? |
|--|---------------------|-------|---------------|--------|-------------|--------------------|
| | Impact | Range | Detectability | Rescue | Persistence | |
| BIRDS | | | | | | |
| Yuma clapper rail (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Western yellow-billed cuckoo (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Burrowing owl | ● | ◐ | ● | ● | ● | Yes |
| Southwestern willow flycatcher (nesting) | ◐ | ◐ | ◐ | ◐ | ◐ | Yes |
| Arizona Bell's vireo (nesting) | ◐ | ◐ | ◐ | ◐ | ● | Yes |
| Bendire's thrasher | ◐ | ○ | ○ | ◐ | ◐ | No |
| LeConte's thrasher | ◐ | ○ | ◐ | ◐ | ● | No |
| Phainopepla | ◐ | ○ | ● | ◐ | ● | No |
| MAMMALS | | | | | | |
| Spotted bat | ● | ◐ | ● | ● | ● | Yes |
| Townsend's big-eared bat | ● | ● | ● | ● | ● | Yes |
| Desert pocket mouse | ○ | ○ | ◐ | ◐ | ◐ | No |
| Desert kangaroo rat | ○ | ○ | ◐ | ◐ | ◐ | No |
| PLANTS | | | | | | |
| Las Vegas bearpoppy | ◐ | ○ | ● | ○ | ○ | No |
| Threecorner milkvetch | ○ | ○ | ○ | ◐ | ◐ | No |
| Pahrump Valley buckwheat | ● | ● | ◐ | ◐ | ◐ | Yes |
| Las Vegas buckwheat | ● | ● | ● | ● | ● | Yes |
| Sticky buckwheat | ○ | ◐ | ○ | ◐ | ◐ | No |
| White-margined beardtongue | ● | ● | ◐ | ● | ● | Yes |
| Yellow twotone beardtongue | ○ | ◐ | ◐ | ◐ | ● | No |
| REPTILES | | | | | | |
| Banded Gila monster | ◐ | ○ | ○ | ● | ○ | No |
| Desert tortoise | ● | ○ | ● | ● | ◐ | Yes |



3. Detectability

- **Ease of detection of a species is a measure of how difficult or expensive surveys will be to determine presence/absence of species.**
- **Species that are easy to detect will have much lower costs for avoidance measures and are thus more suitable for avoidance and minimization measures.**

| Species | Evaluation Criteria | | | | | Candidate for AMM? |
|--|---------------------|-------|---------------|--------|-------------|--------------------|
| | Impact | Range | Detectability | Rescue | Persistence | |
| BIRDS | | | | | | |
| Yuma clapper rail (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Western yellow-billed cuckoo (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Burrowing owl | ● | ◐ | ● | ● | ● | Yes |
| Southwestern willow flycatcher (nesting) | ◐ | ◐ | ◐ | ◐ | ◐ | Yes |
| Arizona Bell's vireo (nesting) | ◐ | ◐ | ◐ | ◐ | ● | Yes |
| Bendire's thrasher | ◐ | ○ | ○ | ◐ | ◐ | No |
| LeConte's thrasher | ◐ | ○ | ◐ | ◐ | ● | No |
| Phainopepla | ◐ | ○ | ● | ◐ | ● | No |
| MAMMALS | | | | | | |
| Spotted bat | ● | ◐ | ● | ● | ● | Yes |
| Townsend's big-eared bat | ● | ● | ● | ● | ● | Yes |
| Desert pocket mouse | ○ | ○ | ◐ | ◐ | ◐ | No |
| Desert kangaroo rat | ○ | ○ | ◐ | ◐ | ◐ | No |
| PLANTS | | | | | | |
| Las Vegas bearpoppy | ◐ | ○ | ● | ○ | ○ | No |
| Threecorner milkvetch | ○ | ○ | ○ | ◐ | ◐ | No |
| Pahrump Valley buckwheat | ● | ● | ◐ | ◐ | ◐ | Yes |
| Las Vegas buckwheat | ● | ● | ● | ● | ● | Yes |
| Sticky buckwheat | ○ | ◐ | ○ | ◐ | ◐ | No |
| White-margined beardtongue | ● | ● | ◐ | ● | ● | Yes |
| Yellow twotone beardtongue | ○ | ◐ | ◐ | ◐ | ● | No |
| REPTILES | | | | | | |
| Banded Gila monster | ◐ | ○ | ○ | ● | ○ | No |
| Desert tortoise | ● | ○ | ● | ● | ◐ | Yes |



4. Rescue Success

- **The chance of success of translocating individuals to another site. Species that respond positively to translocation/salvage efforts tend to be more suitable for avoidance and minimization.**

| Species | Evaluation Criteria | | | | | Candidate for AMM? |
|--|---------------------|-------|---------------|--------|-------------|--------------------|
| | Impact | Range | Detectability | Rescue | Persistence | |
| BIRDS | | | | | | |
| Yuma clapper rail (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Western yellow-billed cuckoo (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Burrowing owl | ● | ◐ | ● | ● | ● | Yes |
| Southwestern willow flycatcher (nesting) | ◐ | ◐ | ◐ | ◐ | ◐ | Yes |
| Arizona Bell's vireo (nesting) | ◐ | ◐ | ◐ | ◐ | ● | Yes |
| Bendire's thrasher | ◐ | ○ | ○ | ◐ | ◐ | No |
| LeConte's thrasher | ◐ | ○ | ◐ | ◐ | ● | No |
| Phainopepla | ◐ | ○ | ● | ◐ | ● | No |
| MAMMALS | | | | | | |
| Spotted bat | ● | ◐ | ● | ● | ● | Yes |
| Townsend's big-eared bat | ● | ● | ● | ● | ● | Yes |
| Desert pocket mouse | ○ | ○ | ◐ | ◐ | ◐ | No |
| Desert kangaroo rat | ○ | ○ | ◐ | ◐ | ◐ | No |
| PLANTS | | | | | | |
| Las Vegas bearpoppy | ◐ | ○ | ● | ○ | ○ | No |
| Threecorner milkvetch | ○ | ○ | ○ | ◐ | ◐ | No |
| Pahrump Valley buckwheat | ● | ● | ◐ | ◐ | ◐ | Yes |
| Las Vegas buckwheat | ● | ● | ● | ● | ● | Yes |
| Sticky buckwheat | ○ | ◐ | ○ | ◐ | ◐ | No |
| White-margined beardtongue | ● | ● | ◐ | ● | ● | Yes |
| Yellow twotone beardtongue | ○ | ◐ | ◐ | ◐ | ● | No |
| REPTILES | | | | | | |
| Banded Gila monster | ◐ | ○ | ○ | ● | ○ | No |
| Desert tortoise | ● | ○ | ● | ● | ◐ | Yes |



5. Persistence with Disturbance

- The chance of persistence on a fragmented development site if the species was avoided on site.
- Species that are more adaptable to disturbance are more suitable candidates for avoidance and minimization.

| Species | Evaluation Criteria | | | | | Candidate for AMM? |
|--|---------------------|-------|---------------|--------|-------------|--------------------|
| | Impact | Range | Detectability | Rescue | Persistence | |
| BIRDS | | | | | | |
| Yuma clapper rail (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Western yellow-billed cuckoo (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Burrowing owl | ● | ◐ | ● | ● | ● | Yes |
| Southwestern willow flycatcher (nesting) | ◐ | ◐ | ◐ | ◐ | ◐ | Yes |
| Arizona Bell's vireo (nesting) | ◐ | ◐ | ◐ | ◐ | ● | Yes |
| Bendire's thrasher | ◐ | ○ | ○ | ◐ | ◐ | No |
| LeConte's thrasher | ◐ | ○ | ◐ | ◐ | ● | No |
| Phainopepla | ◐ | ○ | ● | ◐ | ● | No |
| MAMMALS | | | | | | |
| Spotted bat | ● | ◐ | ● | ● | ● | Yes |
| Townsend's big-eared bat | ● | ● | ● | ● | ● | Yes |
| Desert pocket mouse | ○ | ○ | ◐ | ◐ | ◐ | No |
| Desert kangaroo rat | ○ | ○ | ◐ | ◐ | ◐ | No |
| PLANTS | | | | | | |
| Las Vegas bearpoppy | ◐ | ○ | ● | ○ | ○ | No |
| Threecorner milkvetch | ○ | ○ | ○ | ◐ | ◐ | No |
| Pahrump Valley buckwheat | ● | ● | ◐ | ◐ | ◐ | Yes |
| Las Vegas buckwheat | ● | ● | ● | ● | ● | Yes |
| Sticky buckwheat | ○ | ◐ | ○ | ◐ | ◐ | No |
| White-margined beardtongue | ● | ● | ◐ | ● | ● | Yes |
| Yellow twotone beardtongue | ○ | ◐ | ◐ | ◐ | ● | No |
| REPTILES | | | | | | |
| Banded Gila monster | ◐ | ○ | ○ | ● | ○ | No |
| Desert tortoise | ● | ○ | ● | ● | ◐ | Yes |

| Species | Evaluation Criteria | | | | | Candidate for AMM? |
|--|---------------------|-------|---------------|--------|-------------|--------------------|
| | Impact | Range | Detectability | Rescue | Persistence | |
| BIRDS | | | | | | |
| Yuma clapper rail (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Western yellow-billed cuckoo (nesting) | ◐ | ● | ◐ | ◐ | ◐ | Yes |
| Burrowing owl | ● | ◐ | ● | ● | ● | Yes |
| Southwestern willow flycatcher (nesting) | ◐ | ◐ | ◐ | ◐ | ◐ | Yes |
| Arizona Bell's vireo (nesting) | ◐ | ◐ | ◐ | ◐ | ● | Yes |
| Bendire's thrasher | ◐ | ○ | ○ | ◐ | ◐ | No |
| LeConte's thrasher | ◐ | ○ | ◐ | ◐ | ● | No |
| Phainopepla | ◐ | ○ | ● | ◐ | ● | No |
| MAMMALS | | | | | | |
| Spotted bat | ● | ◐ | ● | ● | ● | Yes |
| Townsend's big-eared bat | ● | ● | ● | ● | ● | Yes |
| Desert pocket mouse | ○ | ○ | ◐ | ◐ | ◐ | No |
| Desert kangaroo rat | ○ | ○ | ◐ | ◐ | ◐ | No |
| PLANTS | | | | | | |
| Las Vegas bearpoppy | ◐ | ○ | ● | ○ | ○ | No |
| Threecorner milkvetch | ○ | ○ | ○ | ◐ | ◐ | No |
| Pahrump Valley buckwheat | ● | ● | ◐ | ◐ | ◐ | Yes |
| Las Vegas buckwheat | ● | ● | ● | ● | ● | Yes |
| Sticky buckwheat | ○ | ◐ | ○ | ◐ | ◐ | No |
| White-margined beardtongue | ● | ● | ◐ | ● | ● | Yes |
| Yellow twotone beardtongue | ○ | ◐ | ◐ | ◐ | ● | No |
| REPTILES | | | | | | |
| Banded Gila monster | ◐ | ○ | ○ | ● | ○ | No |
| Desert tortoise | ● | ○ | ● | ● | ◐ | Yes |



Where are avoidance and minimization measures appropriate/necessary?

- **Not all covered species occur in all parts of the plan area (Clark County)**
- **Not all parts of the plan area are suitable habitat for covered species**



- **Majority of vacant land near or adjacent to developed land**
- **Wild desert tortoises and burrowing owls are absent or are very unlikely to occur**
- **Would also be developed for Mesquite, Boulder City and other communities where applicable**
- **Roughly commensurate with no pick-up boundary for pet tortoises**
- **No specific AMMs are recommended for these areas; call hotline for pick-up if a tortoise is seen on-site**



- **Generally characterized by natural land-cover types with varying levels of disturbance and development**
- **Las Vegas Valley-delineated as area between the Zone A and either the Ultimate Development Boundary or BLM Disposal Boundary**
- **Other areas may have similar boundaries defined by city limits at time of permit issuance**
- **AMMs would focus on the avoidance of take of individual animals detected by surface observation and limited surveys (i.e. tortoise and burrowing owl clearance surveys)**



- All areas in the study area (Clark County) that are not in Zones A or B
- Areas with no development or limited, low-density development surrounded by large amounts of natural land cover
- More likely to be adjacent to conservation areas for a variety of covered species
- AMMs would focus on more intensive surveys and avoidance measures to increase the likelihood of detection, and minimize the chances of harming individual covered species, such as desert tortoise and burrowing owl



| Proposed Avoidance and Minimization Measures | Zone A Urban Areas | Zone B Future Urban Areas | Zone C All Other Areas |
|--|-----------------------|------------------------------|---------------------------|
| <i>Planning surveys</i> | No | No | No |
| <i>Pre-construction surveys</i> | | | |
| Burrowing owl | No | Yes | Yes |
| Desert tortoise | No | Yes | Yes |
| Riparian birds | No | If potential habitat | If potential habitat |
| Other species | No | No | No |
| Plants | No | If potential habitat | If potential habitat |
| <i>Construction monitoring</i> | | | |
| Fencing | No | No | Yes |
| On-site monitor | No | No | Yes |
| Employee training program | Yes | Yes | Yes |
| Translocation/relocation | No | Yes | Yes |
| <i>On-site waste management</i> | No | Yes | Yes |
| <i>Urban-wildland interface measures</i> | No | Boundary edge only | Boundary edge only |



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Questions?



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Appendix D
Letter from FWS regarding Burrowing Owl



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Nevada Fish and Wildlife Office

4701 North Torrey Pines Drive

Las Vegas, Nevada 89130

Ph: (702) 515-5230 ~ Fax: (702) 515-5231

February 22, 2010

Las Vegas Home Builders Association

FEB 25 2010

Dear Builder:

We are writing to you because of our concern for the western burrowing owl (*Athene cunicularia hypugea*). This small, ground-dwelling owl is declining in numbers throughout much of its western U.S. range. Habitat destruction as a result of human encroachment is a major threat to this species, especially in southern Nevada. Because of its status, the burrowing owl is considered a sensitive species by the Nevada Bureau of Land Management and is regarded by the U.S. Fish and Wildlife Service (Service) as a bird of conservation concern.

The western burrowing owl is a protected species under the Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). The Service has conservation responsibilities and management authority for migratory birds under the MBTA. Therefore, we ask that proposed projects such as home building be evaluated for potential impacts to migratory birds, including the burrowing owl. Under the MBTA, nests (nests with eggs or young) of migratory birds may not be harmed, nor may migratory birds be killed. Such destruction may be in violation of the MBTA. Land clearing, or other surface disturbance associated with building projects, should be conducted outside the avian breeding season to avoid potential destruction of bird nests or young, or birds that breed in the area. If this is not feasible, a qualified biologist should conduct a survey of the area prior to land clearing.

If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the area avoided to prevent destruction or disturbance to nests until they are no longer active.

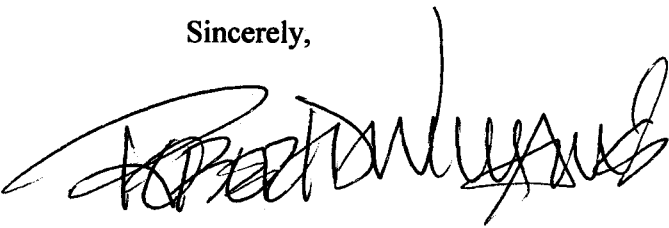
We have attached our pamphlet, "Protecting Burrowing Owls at Construction Sites in Nevada's Mojave Desert Region. The pamphlet contains information on how to determine the presence of breeding pairs or of active burrowing owl nests and measures to avoid impacts to this species. If burrowing owls occur within your project area, the measures in this pamphlet should be incorporated into your project planning.

Consideration of sensitive species during project planning and early coordination with the Service contribute greatly to species conservation efforts and will help prevent the need for

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Federal listing under the Endangered Species Act in the future. We thank you for your time and consideration. If you require further assistance, please call us at the Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5230.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Williams", written in a cursive style.

Robert D. Williams
State Supervisor



Appendix E
Committee Responses to Data Gathering Exercise
What do You Like About it?

- Easy to see/follow how each species ranks over the full range of criteria.
- Zones are a good approach
- Zones
- I agree with measures! Seems simple to process/put in place
- Summarizes lots of data
- I agree with the Zone A-B-C approach
- Impact zones very well defined
- Hopefully incentivises infill development (Zones)



Appendix E

Committee Responses to Data Gathering Exercise

What Additional Information Do You Need?

- Impact of minimization vs. mitigation. How much do we get out of minimization techniques vs. just doing mitigation?
- How much more will B and C cost to developers?
- Table 1 needs legend: source info and reference too.
- Future growth boundaries change the rules
- Rehabilitation breeding programs to propagate species credit back to HCP
- How/when/why is the burrowing owl now on par with the desert tortoise?
- What end of the scale - AMM (hard to detect or easy to detect; large range or small range)
- Money for AMMs - Developer performs and pays?
- Is zone designation fluid along the continuum?
- What is a limited survey?
- What does "Additional species specific avoidance and minimization measures" mean for zone B?
- How has the lack of survey and relocation in LVV impacted long term survival?
- How do long term survey and relocation benefit long term survival in the wild?
- What problem is driving the addition of avoidance measures?
- Have relative impacts of amount of take to date been measured?
- Who funds activities under B?
- If fees don't increase, how do we fund?
- Is it possible that \$ spent on surveys and avoidance better spent on mitigation in the wild? How do we know?
- Is it legal to designate "zones" for avoidance? - On future lands - public
- What is real difference between A and B as relates to habitat?
- Are tortoises detectable? What is the criteria?
- Are there going to be incentives (financial or otherwise) to concentrate development (1) Zone A, (2) Zone B, (3) Zone C?



Appendix E
Committee Responses to Data Gathering Exercise
What Are Your Concerns?

- Too many unknowns e.g. - rescue a gila monster by moving her but will she survive? For how long?
- Flexing zones - why have a baseline then?
- Flexing the zones over 50 years could result in very little conservation.
- Definition of terms. Need to revisit "minimize vs. mitigation"
- Not sure what Flood Control based Ultimate Boundary on.
- No increase in fees! Accountability of \$ any future project . Pre- and post-accounting!
- In my experience "experts" have such a vested interest in their species that they are never really objective.



Appendix E
Committee Responses to Data Gathering Exercise
Other Thoughts?

- Fees should be commensurate with zones
- Looking forward to hearing from scientist



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Appendix F

Southern Nevada Homebuilders Association Statement before the CAC

SNHBA STATEMENT FOR THE RECORD BEFORE THE CAC

On behalf of the Southern Nevada Home Builders Association (SNHBA), I am respectfully submitting our position, for the record, on a couple of matters that are before the Community Advisory Committee as we consider changes in the nature of mitigation measures as part of the overall HCP amendment process.

As we approach the section of our work in reviewing the appropriate mitigation measures for incorporation into the MSHCP for the protection of species and their habitats, we want to emphasize that those measures must be realistic, practical and, most importantly, cost effective. We also hold that the measures selected must be easily implemented, and not necessitate an augmentation in the current fee of \$550/acre. As you are fully aware, the development community has been contributing into the fund that runs this program at a rate of \$550/acre paid as land has been developed. If there is any possibility of increases in fees, the SNHBA will adamantly oppose those increases locally and in state law. We request that other funding mechanisms be identified if there is the possibility that the current rates could potentially increase.

From a philosophical point of view, the association holds that the funding of conservation and mitigation measures to protect species and their habitats is the responsibility of every citizen of Clark County and should not be the sole responsibility the building industry.

On a related matter, the SNHBA was surprised when it recently received a notice from the Fish and Wildlife Service regarding the western burrowing owl and new requirements to avoid the disturbance of their nests under the Migratory Bird Treaty Act of 1918. We believe this matter needs to be addressed by this committee. Most importantly, whatever the outcome of a discussion regarding the burrowing owl, if any new, additional mitigation measures are incorporated into the HCP, they too must be accomplished within the current fee structure of \$550/acre. If they can not, other funding sources must be identified, for the economically depressed building industry can not sustain any additional fees whatsoever, excessive additional mitigation measures or impediments for public or private sector projects.