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Community Advisory Committee

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

Draft Summary of Committee Feedback from July 14, 2011



Summary

Community Advisory Committee, July 14, 2011, 2:00 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) members present on July 14, 2011.

Agenda

1. Opening and Introductions
2. Public Comment
3. Progress to Prepare a Draft Amended MSHCP
4. Results of Financial Analysis of Amended MSHCP
5. Receive Input from the CAC on the Draft Amended MSHCP and Financial Analysis
6. Public Comment
7. Meeting Wrap Up and Closing

Appendix A - Agenda

Appendix B - Presentation on Progress for Draft Amended MSHCP

Appendix C - Financial Analysis Presentation

Appendix D - Summary of Alternatives

Appendix E - Handout on Western Burrowing Owl

Appendix F - Economic Analysis Report & Costs

1. Opening and Introductions

Eric Hawkins, Facilitator, began at 2:06 p.m. and noted that a quorum was not present but there are no action items on the agenda. Eric reviewed the agenda and goals with the committee.

2. Public Comment

Eric opened the meeting for public comment. There were no comments at this time.



3. Discussion on the Progress to Prepare a Draft Amended MSHCP

John Tennert gave a presentation on the Amended MSHCP process to the Committee. John reviewed the four goals of permit amendment with the Committee (address the acreage cap, re-evaluate the list of covered species to refocus attention on those species most at risk and most directly impacted by take, re-evaluate covered activities and overall conservation/mitigation strategy, and to re-evaluate the structure and implementation of the plan). He then reviewed the Committee's recommendations with the current draft of the Amended MSHCP.

The first topic addressed by the Committee was the acreage cap. The Committee recommended that the amended permit request an additional 215,000 acres of take based on the amount of land potentially developable in Clark County. John noted that an updated GIS analysis has refined the amount of land in Clark County available for development above what is currently permitted to about 200,000 acres.

The second major recommendation dealt with the issue of covered species. The Committee expressed strong support for reducing the covered species list to focus efforts and funding on those species most at risk. The Committee recognized the value of covering unlisted species and rare plant species, but only if including these additional species did not increase the complexity or cost of the program. The Committee also recognized that conservation actions for species removed from the list would be adequately protected through other agreements and processes. John stated that based on the Committee's recommendations regarding covered species, the species list has been reduced further from 22 to 16 species. Jim Rathbun, Education, asked which bird species had been dropped from the list and John replied two thrashers and the phainopepla.

The next set of recommendations addressed concerns related to the proposed minimization measures. The Committee recognized that U.S. Fish and Wildlife Service (Service) will require additional minimization measures to reduce the incidents of lethal take resulting from development activities. To address this issue, the amendment will identify impact zones where minimization is appropriate. Minimization measures would include desert tortoise and burrowing owl clearances outside of urbanized area. Consistent with the Committee's recommendations, the draft Amended MSHCP proposes impact zones for the Las Vegas Valley, Boulder City, Mesquite, Moapa/Logandale, and Laughlin where clearance surveys would not be required because of the likely absence of covered species. The draft Amended MSHCP proposes a streamlined clearance protocol for desert tortoise outside of the Zone A and recognized uncertainty related to how and what will be done for the burrowing owl.

During its deliberations regarding the development of the mitigation strategy for the Amended MSHCP, the Committee recommended that the Permittees move away from the current expenditure based approach



and develop a Reserve System consisting of BLM land that would be managed by the Permittees for conservation of covered species and habitat. The Committee recommended that the Reserve System protect historical and existing uses provided they are consistent with conservation of covered species.

The proposed Reserve Units have been refined to include an additional unit at the recommendation of the Service (Bird Springs). The Reserve System has also been designed to phase-in units based on the rate of disturbance, as opposed to taking on the entire Reserve System all at once. To this end, Clark County has been working with the BLM and the Service to develop a cooperative management agreement. Staff has also prepared draft legislation that would lease the proposed Reserve System to the Permittees and forwarded it to the Nevada Delegation for consideration. The Reserve System would protect existing and historical uses and allow for hunting, camping and shooting in designated areas, allow for off-highway vehicles on designated roads, and prohibit off-highway vehicle races. The one historical use that remains inconsistent with the conservation needs of the area is off-highway vehicle race events such as the Mint 400. Mike Ford, Mesquite, asked what the difference was between use of designated roads versus off-highway use. John replied that the nature of disturbance that occurs and the amount of restoration when it is a race versus casual use. Marci added that the experience on the Boulder City Conservation Easement (BCCE) makes it difficult to propose a conservation reserve that simultaneously allows racing.

The final recommendation made by the Committee involved reviewing major aspects of plan implementation to improve the overall efficiency and effectiveness of the program. The Committee recommended that the governance of the MSHCP should have balanced representation of all Permittees, the fee collection and other aspects of implementation should only be centralized if it increases efficiency and does not impact cost or complexity for customers, should continue use of the independent science advisor and peer review, and implement annual financial review and/or audit. The Permittees are currently evaluating options aimed at balancing representation and the options include revising the interlocal agreement, transfer governance to an existing regional board (such as the SNRPC), or creating a new board. The implementation will also include analyzing the fee collection process to increase efficiency and reduce complexity for customers.

John summarized that from a structural perspective the draft Amended MSHCP is a good plan and is consistent with the Committee's key recommendations with the exception of cost. Based on the results of the financial analysis, it is clear the plan cannot be adequately funded based on the existing fee structure. John noted that Dr. David Sunding will be presenting the results of the analysis and asked if there were any questions.

Jane Feldman, Environmental, voiced there still exists controversy among the various environmental stakeholders regarding the use of federal lands. Some stakeholders are still very concerned that public lands



would be used for mitigation of private development and private gain but it looks like the alternative would need to use legislation and she asked if we have support from the delegation. John responded that Clark County has continued to work closely with BLM but it is not clear if the BLM has the authority to do all the things we need to do so we have been following parallel tracks and looking at other alternatives. Jane asked if there is an opportunity at some point to engage with Clark County on the Environmental Impact Statement and Marci responded yes.

Marci elaborated on two options. We are pursuing two parallel opportunities. One is based on what we can do administratively through a cooperative management agreement, but there is much negotiating that needs to take place to come to a happy medium with BLM. In terms of the logistics, staff has been working with the BLM to make comments to their revision of the Resource Management Plan so we can allow these areas to be set up as areas of critical environmental concern (ACEC). BLM has received our ACEC nominations and we are awaiting their findings. The second track we have identified is federal legislation to authorize the Secretary to enter into a lease so the Permittees can manage these lands. Jim Rathbun, Education, asked what specific parameters are still in flux. Marci responded that things like law enforcement, types of uses within the reserve, and BLM's authority to limit uses like mining claims or grazing permits may be problematic for the BLM and this is why legislation is preferred. Jim Rathbun, Education, asked how a lease arrangement would operate and whether the costs would be reflected in the take amount. Marci replied that we propose no monetary considerations so we would not pay for the lease.

Eric stated at this point we hope to receive feedback from the committee on the information presented by posting their considerations, objections or concerns on the board. There were no comments so the committee moved forward to the next agenda item.

4. Results of the Financial Analysis of Amended MSHCP

John introduced Dr. David Sunding, Ph.D., The Brattle Group, who conducted the financial analysis. Dr. Sunding is a former Senior Economist with the Council of Economic Advisors under President Clinton, and is currently a professor of economics with the University of California at Berkeley specializing in natural resource economics and a visiting professor at Stanford University.

Dr. Sunding provided an overview of the analysis. A cost analysis was conducted over the life of the plan amendment and incorporated current endowment and projected revenues from future development. The analysis assumed that revenues would come from the existing mitigation fee and that no other reliable funding sources were available. The plan costs include required avoidance and minimization measures, habitat restoration and enhancement, public outreach, adaptive management, law enforcement, overhead



and other costs. The analysis assumes that the term of the amendment is 50 years, the amended MSHCP seeks 200,000 acres of take, will cover 16 species, much of the land will come from the BLM and will be incorporated into the Reserve System at no cost to the MSHCP, and the Boulder City Conservation Easement, which is 86,000 acres in size, will be incorporated into the MSHCP Reserve System at no cost to the MSHCP.

Dr. Sunding explained the growth forecasts used in the analysis to project future take are based on projections prepared by the Center for Business and Economic Research (CBER) at the University of Nevada Las Vegas. The analysis utilized the Clark County 2011 population forecasts to 2050, converted to acres of development using local density data from the U.S. Bureau of the Census, allocated growth to Riparian Zone, Zone A and Zone B, with most growth allocated to Zone B (89%). Other factors considered include present high housing vacancy rate. The analysis assumes that any growth in population in the initial years of the amendment will be accommodated by existing vacancies resulting in essentially no land development until 2013. Based on the CBER forecasts, approximately 250,000 acres of development would be forecasted between 2012 and 2061.

The analysis also included the current fund balance available for the amendment. Assuming the fund balance is roughly 12% encumbered, the revenue stream was calculated to cover costs over 50 years and leave the endowment at a level sufficient to cover basic management of the Boulder City Conservation Easement in perpetuity, and it assumed a 4.5% rate of return that is a risk free rate.

The analysis also assumes that the revenue would be adjusted for inflation over the life of the permit, noting that the current mitigation fee is not indexed for inflation. The cost recovery strategy for most HCP's are indexed to the inflation rate (CPI) as fixed fees have declining real value. For example, \$550 in 1996 is equivalent to \$817 today and \$550 in 2060 will have the purchasing power of \$160 in today's dollars. A constant fee leaves the plan vulnerable to future inflation, therefore reducing coverage.

Based on the results of the analysis, the amended plan will cost roughly \$1,600 per acre of development, including a sufficient endowment. The plan's actual financial performance will be tied to a number of factors, i.e. the rate of housing development. If there is more growth than forecast, then costs and revenues are higher than forecasted.

Viewed in context, the cost of the plan is relatively small on a per-house basis compared to other large regional HCP's. For example, Coachella Valley MSHCP is \$6,000 per acre, Santa Clara NCCP/HCP is \$20,000 per acre, and East Contra Costa County HCP is \$24,000 per acre. The cost is also comparable to similar to recent Nevada HCP's. While the Lincoln County HCP mitigation fee is \$550 per acre, additional on-site measures such as tortoise fencing and clearance surveys will likely double the actual cost to



developers and overall staff believes the plan underestimates costs. Similarly, the Coyote Springs MSHCP is \$800 per acre, with additional on-site measures.

Overall, the benefits of the plan to developers exceed the costs particularly when compared with the costs associated with complying with the ESA absent a regional HCP. Under Section 7 developers would likely pay a fee, complete a biological assessment at \$35,000-\$50,000, an EA at \$60,000-\$80,000, perform on-site mitigation measures, and the process is filled with delay and uncertainty. Under Section 10 developers must have a draft implementing agreement at the cost of \$120,000-\$140,000, and EA \$80,000, perform on-site mitigation measures, perform off-site conservation measures, and the process is filled with delay and uncertainty.

Dr. Sunding asked the committee if anyone had any questions. Mindy Unger-Wadkins, Henderson, asked if the current \$550 per acre can sustain the current MSHCP and Marci replied yes because the obligations under the current permit are based on expenditures so we are solvent under the current plan. Dr. Sunding stated we would significantly dip into the principle balance eventually if the fee continued at \$550 per acre.

5. Receive Input from the CAC on the Draft Amended MSHCP and Financial Analysis

Allison Stephens, North Las Vegas, asked at what point would the program run so low on the fund balance that it affects the program? Marci responded if you look at our overhead costs and operating costs and assume we were to spend \$500,000 a year on conservation expenses we would be solvent for roughly 25-30 years, but that would involve reducing expenditures way down. Mindy Unger-Wadkins, Henderson, asked whether that would not do anything more for the species. Marci replied we are in talks with the Service to understand where we would get the most conservation for the money under the current plan as we are obligated to coordinate conservation expenditures with the Service. Jane Feldman, Environmental, asked if the revenue stream and the endowment is enough to cover the BCCE now if the Reserve System is created won't that incur costs past the point of the endowment? Marci responded the proposal is the Reserve System would revert back to either BLM or USFWS at the end of the permit and the designations would remain the same. The amendment is not proposing to fund the management once it reverts back to the federal managers.

Jim Rathbun, Education, asked that if we went with the 200,000 acres and the Reserve System it costs \$1600 per acre, where does the \$1600 come from? Dr. Sunding explained that the \$1600 is the result of the analysis in order to meet our target at the end of the plan. This will allow you to cover your conservation in perpetuity. Jim then asked how much it costs to run the BCCE at the end and Dr. Sunding replied the costs are very small as the major costs are operational.



Mike Ford, Mesquite, commented that basically if we want to fund the Amendment as drafted it will essentially cost an additional \$1050 per acre. Dr. Sunding agreed and stated that if you wait, the cost will likely go up over time. Allison Stephens, North Las Vegas, asked if the \$1600 is good for the life of the HCP with risk analysis, are you saying we need \$1600 now and Dr. Sunding replied it is the latter, so its \$1600 plus the growth of inflation so if you do not have inflation the fee stays constant and this is how most HCP's are constructed.

John noted that one of the concerns staff has heard is that the analysis overestimates the amount of land that the community is likely to absorb at the current development rates and asked how that affects the overall projection? Dr. Sunding explained the \$1600 result is relatively invariant to the short term timing of development and the reason is we are factoring in inflation and a rate of return on the endowment so it really has very little impact on the \$1600 because you shift your costs back.

Mindy Unger-Wadkins, Henderson, noted that one of the things that Clark County staff has proposed in the legislation is for 10% of proceeds from Southern Nevada Public Lands Management Act (SNPLMA) to be allocated to the Amended MSHCP. Assuming there are no other revenue sources, Mindy stated that SNPLMA funds would reduce the \$1600, adding that we do not know what the result of that request will be. Secondly, I know there is some thought about holding off because of the cost and maybe we should think of it as a step process where we stay at \$550 for the 67,000 remaining acres and then increase the fee over time to another number so it is an increase of money over time, but we have to work with the reality that fees will eventually have to increase.

Terry Murphy, Developer/Homebuilder, stated that is a good point because as of now we have 67,000 acres and we have overpaid and met our obligation so we should get the life out of the value of this permit and that any new permit should not take affect until the current permit has expired so we don't necessarily have to rush into having a new permit as we are not going to develop 67,000 acres in the next five years. Mindy Unger-Wadkins, Henderson, responded I do not want to wait on the new permit though. Tom Warden, Las Vegas, commented that he believes the projections are too rosy and he does not see development coming back at the rate it was before. Dr. Sunding stated that the forecasts are based on the best available data and assume that development will take place at a higher density than current development patterns.

Scot Rutledge, Environmental, stated that the cost to the consumer is spread out with the higher density and he would like to see a land graph to see how much land is still being held by developers as the raw land costs and construction costs are significantly lower now. Tom Warden, Las Vegas, responded that what actually happens in a market like this is that people are less likely to buy. John clarified that the forecast assumes about 5,000 acres will be developed per year and at the end would leave about 17,000



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acres. Terry Murphy, Developer, reminded the Committee that the current economy in Southern Nevada is driven by hotel rooms. While there is talk about diversification of the economy, the reality is that this won't happen anytime soon. Mindy Unger-Wadkins, Henderson, stated that the 67,000 acres could last us until 2031, but we have built momentum to look at a reserve-based plan, the plan we have now is not really working so why aren't we continuing to work on legislation to get conservation lands in place and later switch to the conservation based system on a step by step basis even if we do not decide on a price today for the fee.

Mike Ford, Mesquite, stated that the community is in dire economic situation we shouldn't talk about an increase and asked why we shouldn't instead revisit the plan in five years, noting that we will not see the kind of development we have seen in the last 20 years again. Sean Skaggs, Counsel, replied that most of the work would be lost and we would have to restart negotiations from the beginning. Sean recommended that we lock in the permit now, and phase in the amendment in 15 years. We can build in flexibility as to how we bring the permit amendment on-line while obtaining the regulatory assurances and can bring on the Reserve System when we have the right revenues. Terry Murphy, Developer, commented that we could say we would like to pursue the amendment in five years but not today. Marci replied we can do that, but with the understanding that we would essentially be starting over. For example, the BLM's RMP process will likely be completed in five years whereas now we have the opportunity to put in our language now and be aligned with that process. Scot Rutledge, Environmental, commented he is not shocked the plan will cost more and that while he is not sure he will be here in 5 years to complete the process, we should not walk away from the work done just over the fee.

Terry Murphy, Developer, commented that the Committee recommendations were based on the assumption that we would not be doubling the fee. Jane Feldman, Environmental, stated that is not true - that the Committee would wait to see once the analysis was done. Tom Warden, Las Vegas, stated that policy makers had already stated that they did not want this to be an exercise that resulted in higher fees. Terry Murphy, Developer, commented the reality is we have fifteen years left on this permit and we have met our obligations and from a practical standpoint the developers preference is to continue at \$550.

Allison Stephens, North Las Vegas, asked if it is possible to have the fee at \$550 plus CPI and gradually increase the fee in some way and account for inflation once the economy improves. Marci replied it would be up to the willingness of the Service to give us that deal. Mindy Unger-Wadkins, Henderson, stated she would like to continue to pursue legislation and not stop the process. Jane Feldman, Environmental, commented we must have long term thinking or we jeopardize ourselves and we cannot make short-term decisions on our quality of life. Terry Murphy, Developer, commented we should put off implementation but not the application process. Tom Warden added that this needs to continue to be a collaborative



effort and with these economic times the development industry cannot afford this kind of an increase. Implementation after that fact would make it easier for business to deal with a fee increase.

Eric asked if staff had a good understanding of the feedback from the Committee. Marci replied that what she heard is that what we originally discussed - moving forward with the 200,000 acres and leaving the fee at \$550 - the Committee acknowledges that this cannot be done and that what we have presented is that it will cost \$1600 per acre. She stated that what she has heard is that for now this is a non-starter and people feel that we have 67,000 acres remaining and that will get us through 2031 and what people may be interested in pursuing is looking at living within the existing plan while also setting up the amendment to kick-in at a later time after the 67,000 acres or 2031 is exhausted.

Jane Feldman, Environmental, stated that this is like adding one more alternative to the sheet of alternatives presented to the Committee. Jim Rathbun, Education, stated that looking at a phased process makes sense and build the process at 5 year intervals. Allison Stephens, North Las Vegas, stated we need to recognize the \$550 is not \$550 next year or the year after and we need to pursue something different on the phasing and not leave the existing plan in place and that she is not in favor of waiting. Mindy Unger-Wadkins, Henderson, commented that we should actually add two alternatives. The first would be to keep the 67,000 keep in place with the \$550 per acre, but essentially doing a permit amendment that phases in after that 67,000 is exhausted and the other alternative would be if we get the Reserve System and we want to start to implement the Reserve System within the \$550 fee structure how far can we get before we have to increase the fee or phase the increase to change the accountability and impact of the plan. Marci responded that as we move forward our obligation is to spend the fund balance on conservation actions in coordination with the Service so we would need to re-run the economic analysis because the fund balance is included in the \$1,600 per acre cost, it will not be \$1,600 if we move forward in this fashion. Dr. Sunding added that the longer you wait to the higher the cost will be and you also will not have that down payment.

Terry Murphy, Developer, asked why we can't start putting money aside for a Reserve System. Catherine Jorgenson, District Attorney Clark County, stated that the current plan and permit reads that whatever funds we have at the end of the permit need to be spent on conservation actions until it is exhausted. Even though we have met our obligations under the current plan early, the remaining fund balance still needs to be allocated to conservation actions so in her opinion we could not just set aside money and not be able to spend it. Mindy Unger-Wadkins, Henderson, asked if we can designate to spend it on a future project and Catherine replied that every other year we must submit a budget and implementation plan and need to show and do conservation actions until it is exhausted. Terry Murphy, Developer, asked can't those actions include actions in the future that lead to management of the Reserve System and Sean Skaggs



replied every year we will have carry over measures but the problem is the land is BLM land and there are risks involved.

Mike Ford, Mesquite, stated that he is not opposed to an increase but when is an acceptable time to not further impact the economy, but not to put things off so the state of our environment is in jeopardy. Allison Stephens, North Las Vegas, commented she is in favor of the fee increase if it is done over time.

Eric directed the committee to the handout regarding the burrowing owl. Marci read the options to the group. Eric then went around the room and asked each member for their option preference. Each member chose option one to include the burrowing owl.

6. Public Comment

Elise McAllister, Partners In Conservation, my first comment is about the fee increase because now when the public hears there will be an increase to \$1600 there will be a lot of negativity to the desert tortoise specifically because of what happened 15-20 years ago when there came a fee of \$550 and right now peoples pocket books are hurting badly and that will be a bad perception to the public somehow that \$1000 increase will affect the public in a bad way. The second comment I have to make is about the current program not working and that is only perception because the program is working. There are many wonderful factors that have happened and I have seen this with my own eyes and protecting the species and habitat basically boils down to changing peoples behavior. I have examples like the kids that follow Mojave Max around at the fair, and I know people that used to drive instead walk to the top of a hill that don't do that anymore. Behavior is being changed and when this changes we are protecting the habitat so I disagree that the program is not working and the program should be given more credit.

6. Wrap Up and Closing

Eric stated that Marci and John have received your feedback and will go ahead and implement that feedback. Marci commented that the Permittees are weighing their options and wanted this feedback so they could hear the feedback from the Committee and we will summarize that feedback and get it to the Permittees and then we can decide where to go from there after we provide them with all of the options given the revised direction.



Committee Members Present	Attendance	
	Clark County Staff	Others In Attendance
Jane Feldman, Environment/Conservation	Jodi Bechtel	Vicki Adams
Mike Ford, City of Mesquite	Lee Bice	Tracy Foutz
Terry Murphy, Developer/Homebuilder	Marci Henson	Jason Gross
Joe Pantuso, Developer/Homebuilder	Ann Magliere	Hermi Hiatt
Jim Rathbun, Education	Denise McConnell	Bonnie Leavitt
Scott Rutledge, Environmental	Mark Silverstein	Elise McAllister
Allison Stephens, City of North Las Vegas	Randy Tarr	Anthony Miller
Mindy Unger-Wadkins, City of Henderson	John Tennert	Sara Moffat
Tom Warden, City of Las Vegas	Sue Wainscott	Jim Moore
	Lewis Wallenmeyer	Rob Mrowka
	Sara Zimnavoda	Tiffany Parson
		Cheng Shih
		Mark Silverstein
		Chris Tomlinson
		Eric Hawkins (Facilitation Team)



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Appendix A
Meeting 22 Agenda



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, July 14, 2011, beginning at 2:00 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 or may be combined for consideration. The Community Advisory Committee may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

1. **Opening and Introductions**
2. **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.
3. **Progress to Prepare a Draft Amended MSHCP**
Goal: • To review the key components of the Draft Amended MSHCP and how it aligns with the CAC's recommendations from October 2010
4. **Results of Financial Analysis of Amended MSHCP**
Goal: • To review the findings of the Financial Analysis
5. **Receive Input from the CAC on the Draft Amended MSHCP and Financial Analysis (For possible action)**
Goal: • To receive input from the Committee on the Draft Amended MSHCP and Financial Analysis for consideration by the Permittee governing boards
6. **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.
7. **Meeting Wrap Up and Closing**
8. **Adjourn**

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Committee members are asked to remain at the meeting until adjournment so that items requiring action are able to be heard as needed. Reasonable efforts will be made to assist and accommodate physically handicapped persons desiring to attend the meeting. Please call Ann Magliere at (702) 455-3536 at least 24 hours in advance of the meeting so that arrangements may be conveniently made.

MDH:aem

Dated: July 8, 2010

The above notice/agenda of a meeting of the Multiple Species Habitat Conservation Plan Desert Conservation Program Advisory Committee scheduled for Thursday, July 14, 2011, at 2:00 p.m. was posted on or before the third working day before the meeting per Open Meeting Law requirements at the following locations:

Clark County Government Center Lobby
Clark County 3rd Street Building Lobby
Clark County Courthouse Annex
Laughlin Community Center
Sahara West Library

Las Vegas Library
Paradise Community Center
Winchester Community Center
Searchlight Community Center



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Appendix B
Presentation on Progress for
Draft Amended MSHCP



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Community Advisory Committee

July 14, 2011




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Permit Amendment



1. Address acreage cap
2. Re-evaluate the list of covered species to refocus attention on those species most at risk and most directly impacted by take
3. Re-evaluate covered activities and overall conservation/ mitigation strategy
4. Re-evaluate the structure and implementation of the plan



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Acreage cap/take

Committee Recommendation

- Committee recommended that the amended permit request an additional 215,000 acres of take
 - Based on the amount of land potentially developable in Clark County

Draft Amended MSHCP

- Revised GIS analysis has refined that figure to 200,000 acres



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Covered Species

Committee Recommendation

- Committee expressed strong support for reducing the covered species list from 78 to 22 species to focus effort and funding
- Committee recognized the value of covering unlisted species and rare plant species, but only if including these additional species did not increase the complexity or cost of the program
- Committee recognized that conservation actions for species removed from the list would be adequately protected through other agreements and processes

Species List – 12/10/2009

Common Name	Scientific Name	Current Federal Status	Current State Status
Birds			
Arizona bell's vireo	<i>Vireo belli</i>		Protected
Bendire's thrasher	<i>Toxostoma bendirei</i>		Protected
LeConte's thrasher	<i>Toxostoma lecontei</i>		Protected
Phainopepla	<i>Phainopepla nitens</i>		Protected
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	Endangered	Endangered
Western huttoning owl	<i>Aethya curvirostris huttonis</i>		Protected
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate	Sensitive
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered	Endangered
Amphibians			
Relict leopard frog	<i>Rana onca</i>	Candidate	Protected
Mammals			
Desert subalpine rat	<i>Dipodomys deserti</i>		
Desert pocket mouse	<i>Chaetodipus penicillatus sobrinus</i>		
Spotted bat	<i>Euderma maculatum</i>		Threatened
Townsend's big-eared bat	<i>Corynorhinus townsendi pallescens</i>		Sensitive
Reptiles			
Desert tortoise	<i>Gopherus agassizi</i>	Threatened	Threatened
Banded Gila monster	<i>Heloderma suspectum circum</i>		Protected
Vascular Plants			
Parakee (Pahrump Valley) buckwheat	<i>Eriogonum bifurcatum</i>		
Las Vegas bearpoppy	<i>Arctostemon californicus</i>		Critically Endangered
Las Vegas Valley buckwheat	<i>Eriogonum corymbosum var. nitens</i>	Candidate	
Stony buckwheat	<i>Eriogonum viscidulum</i>		Critically Endangered
Threemane milkvetch	<i>Astragalus grayi var. inquetus</i>		Critically Endangered
White-margined beardtongue	<i>Penstemon albomarginatus</i>		
Yellow two-tone beardtongue	<i>Penstemon bicolor</i> ssp. <i>bicolor</i>		



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Covered Species

Draft Amended MSHCP

- Removed three birds, two bats, one amphibian and one plant
 - Cost of covering not commensurate with risk of future listing
- Added one subspecies (rose yellow beardtongue) to list at the recommendation of the Service
- Reduced list from 22 species to 16

Species List – 07/14/2011

Common Name	Scientific Name	Current Federal Status	Current State Status
Birds			
Arizona bell's vireo	<i>Vireo bellii</i>		Protected
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	Endangered	Endangered
Western burrowing owl	<i>Athene cunicularia hypugaea</i>		Protected
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate	Sensitive
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered	Endangered
Mammals			
Desert kangaroo rat	<i>Dipodomys deserti</i>		
Desert pocket mouse	<i>Chaetodipus penicillatus sobrinus</i>		
Reptiles			
Desert tortoise	<i>Gopherus agassizii</i>	Threatened	Threatened
Banded Gila monster	<i>Heloderma suspectum cinctum</i>		Protected
Vascular Plants			
Las Vegas bearpoppy	<i>Arctomecon californica</i>		Critically Endangered
Las Vegas Valley buckwheat	<i>Eriogonum corymbosum var. nilesii</i>	Candidate	
Slickly buckwheat	<i>Eriogonum viscidulum</i>		Critically Endangered
Threecones milkvetch	<i>Astragalus geyeri var. triquetrus</i>		Critically Endangered
White-margined beardtongue	<i>Penstemon albomarginatus</i>		
Yellow and rosey two-tone beardtongue	<i>Penstemon bicolor ssp. bicolor</i>		

Committee Recommendation

- Amendment would identify impact zones where minimization is appropriate
- Minimization would include tortoise and burrowing owl clearances outside of urbanized areas
- Additional minimization is likely to be required by the Service in any amendment to the existing permit

Draft Amended MSHCP

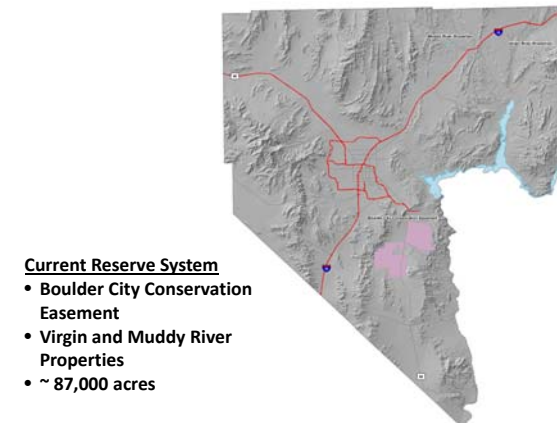
- Have proposed impact zones (Zone A) for the Las Vegas Valley, Boulder City, Mesquite, Moapa/Logandale and Laughlin
- Developed a streamlined clearance protocol for desert tortoise outside of Zone A
- Uncertainty related to how/what will be done for burrowing owl

Committee Recommendation

- Recommended the development of a Reserve System to be managed by the Permittees for conservation of covered species and habitat
- Reserve system should protect historical and/or existing uses on BLM land provided they are consistent with conservation of covered species
- Environmental/conservation representatives expressed support for the proposal provided that it adequately funded and mitigated for take and did not involve ownership transfer

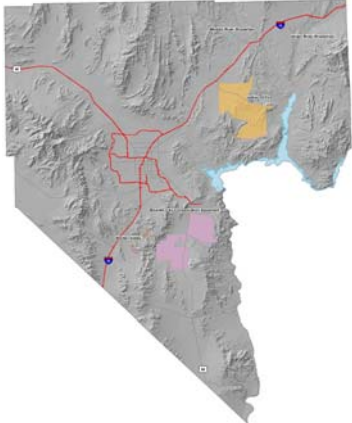
Draft Amended MSHCP

- Refined proposed reserve unit boundaries
 - Added one unit (Bird Springs Valley) at recommendation of the Service
 - Strategy designed to phase-in units based on the rate of disturbance



Phase I

- Valley of Fire Unit
- Hidden Valley Units
- ~ 112,000 acres

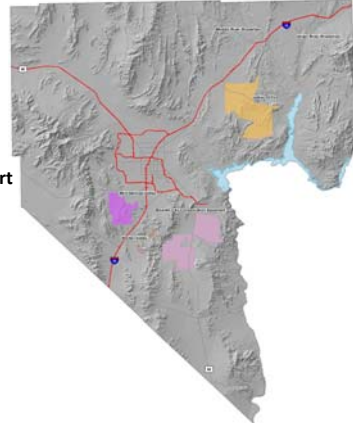


Phase I

- Valley of Fire Unit
- Hidden Valley Units
- ~ 112,000 acres

Phase II

- Bird Spring Valley/Desert Tortoise Conservation Center Unit
- ~ 37,256 acres



Phase I

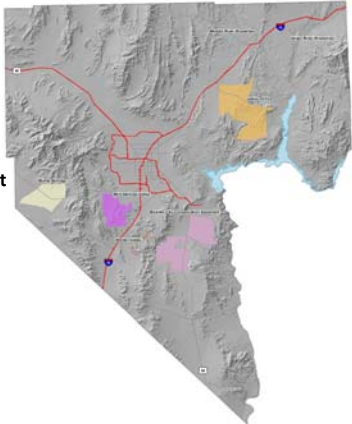
- Valley of Fire Unit
- Hidden Valley Units
- ~ 112,000 acres

Phase II

- Bird Spring Valley/Desert Tortoise Conservation Center Unit
- ~ 37,256 acres

Phase III

- Stump Springs Unit
- ~ 47,453 acres



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Mitigation Reserve System

Draft Amended MSHCP

- Working with BLM and the Service to develop a cooperative management agreement
- Have also prepared draft legislation for a lease of the proposed reserve system for consideration by the Nevada Delegation
- Protecting existing and historical uses
 - Allow hunting
 - Allow camping and shooting in designated areas
 - Allow off-highway vehicles on designated roads
 - Prohibit off-highway vehicle races

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Implementation

Committee Recommendation

- Governance of MSHCP should balance representation of all Permittees
- Fee collection and other aspects of implementation should only be centralized if it increases efficiency and does not impact cost or complexity for customers
- Continue use of independent science advisor and peer review
- Implement annual financial review and/or audit

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Implementation

Draft Amended MSHCP

- Permittees are currently evaluating options aimed at balancing representation
 - Options include revising interlocal agreement, transfer governance to an existing regional board (such as SNRPC) or creating a new board
- Analyzing fee collection process to increase efficiency and reduce complexity for customers
- Continue use of independent science advisor and peer review
- Implement annual financial review and/or audit



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Questions?



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Appendix C
Financial Analysis
Presentation

Economic/Financial Analysis of the Clark County Amended MSHCP

David Sunding, Ph.D
The Brattle Group
July 14, 2011

Introduction

- Conducted cost analysis over the life of the plan amendment
- Incorporated current endowment and projected revenues from future development
- No other reliable funding sources
- Plan costs include required avoidance and minimization measures, habitat restoration and enhancement, public outreach, adaptive management, law enforcement, overhead, other costs

2

Major Assumptions

- The term of the Amended MSHCP is 50 years
- The Amended MSHCP seeks 200,000 acres of take
- The Amended MSHCP covers 16 species
- Much of the land in the Amended MSHCP will come from the Bureau of Land Management and will be incorporated into the Reserve System at no cost to the MSHCP
- The Boulder City Conservation Easement, which is ~86,000 acres in size will also be incorporated into the MSHCP Reserve System at no cost to the MSHCP

3

Growth Forecasts

- Based on projections prepared by Center for Business and Economic Research at UNLV
- 2011 County Population Forecasts to 2050
- Converted to acres of development using local density data from Bureau of the Census
- Allocated growth to Riparian Zone, Zone A and Zone B
- Most growth allocated to Zone B (89%)

4

Growth Forecasts

- Other issues:
 - High housing vacancy rate at present
 - Assumed growth is accommodated by current vacancies, then development
 - Essentially no land development until 2013
 - UNLV forecasts consistent w/approx. 250,000 acres of development between 2012 and 2061

5

Endowment

- About 12% is encumbered
- Revenue stream calculated to cover costs over 50 years and leave endowment at a level sufficient to cover basic management of the Boulder City Conservation Easement in perpetuity
- Assumed 4.5% rate of return (risk-free rate)
 - More risk on investments would greatly reduce fee

6

Cost Recovery

- Most HCPs are indexed to the inflation rate (CPI)
- Fixed fees have declining real value
 - \$550 in 1996 equivalent to \$817 today
 - \$550 in 2060 has the purchasing power of \$160 in today's dollars
 - Constant fee also leaves the plan vulnerable to future inflation, reducing coverage (or other negative outcomes)

7

Results

- Amended Plan will cost roughly \$1,600 per acre of development, including a sufficient endowment
- Assumes the cost recovery will be indexed to the CPI
- Plan's financial performance is tied to a number of factors, i.e. the rate of housing development. If there is more growth than forecast, then costs and revenues are higher than forecasted.

8

Results in Context

- Cost is small on a per-house basis
 - Only a few hundred dollars per housing unit
- Cost is small relative to other large regional HCPs
 - Coachella Valley MSHCP: \$6,000/ac
 - Santa Clara NCCP/HCP: \$20,000/ac for development on raw land
 - East Contra Costa County HCP: \$24,000/ac

9

Results in Context

- Cost is similar to recent Nevada HCPs
 - Lincoln County MSHCP:
 - \$550/ac fee (increase if state law is changed)
 - On-site measures likely to easily double cost to developers
 - Plan underestimates cost
 - Coyote Springs MSHCP:
 - \$800/ac
 - On-site measures not included
 - Other conservation measures not included in fee (law enforcement)

10

Benefits

- Benefits of the plan to developers far exceed the costs
 - Small development
 - Section 7 fee of \$774/ac
 - On-site mitigation measures
 - Delay and uncertainty

11

Benefits

- Larger development
 - Section 7:
 - Section 7 fee
 - Biological Assessment (BA) at \$35,000-\$50,000
 - EA at \$60,000-\$80,000
 - On-site mitigation measures
 - Delay and uncertainty
 - Section 10:
 - Draft Implementing Agreement (IA) at \$120,000-\$140,000
 - EA at \$80,000
 - On-site mitigation measures
 - Off-site conservation costs
 - Delay and uncertainty

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Appendix D
Summary of Alternatives

Summary of Alternatives for the Amended MSHCP

	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Remaining take	67,000 acres	67,000 acres	67,000 acres	67,000 acres
Additional take	0 acres	200,000 acres	112,000 acres	25,000 acres
Proposed reserve system	92,000 acres	292,000 acres	204,000 acres	86,000 acres
Participation	Mandatory	Voluntary	Mandatory	Mandatory
Projected cost	\$36,850,000	\$413,170,346	\$409,907,523	\$50,600,000
Projected per acre cost	\$550	\$1,600	\$2,070	\$550
Projected per acre value	N/A	Up to \$7,674	Up to \$7,204	N/A
	<p>PROS</p> <ul style="list-style-type: none"> No fee increase No change to overall costs No additional minimization required <p>CONS</p> <ul style="list-style-type: none"> Does not achieve goal of eliminating the gap between what is available and what is permitted to be developed Work and cost amending the MSHCP will not be transferable No assurance that additional take will be available in the future if needed Will be more expensive if it is needed Continue to provide funding to and rely upon federal agencies for mitigation 	<p>PROS</p> <ul style="list-style-type: none"> Allows private property owners option to participate in MSHCP or pursue compliance independently Achieves goal of providing permitted take for what is available for development Allows Permittees to phase-in mitigation as needed Provides maximum long-term assurances and flexibility for the Permittees <p>CONS</p> <ul style="list-style-type: none"> Requires additional revenue Increase in minimization and mitigation requirements to offset impacts Insufficient funding if too many opt-out 	<p>PROS</p> <ul style="list-style-type: none"> Provides coverage for projected population growth Reduces amount of mitigation required Potentially reduces some costs of mitigation <p>CONS</p> <ul style="list-style-type: none"> Requires additional revenue Does not achieve goal of eliminating the gap between what is available and what is permitted Does not reduce the per acre cost of the Amended MSHCP Population projections have not been reliable over the long-term No assurance that additional take will be available in the future if needed Will be more expensive if it is needed 	<p>PROS</p> <ul style="list-style-type: none"> No revenue increase Reduced overall program costs Small increase in take authorization <p>CONS</p> <ul style="list-style-type: none"> Has not been discussed with FWS Increase in minimization and mitigation requirements to offset impacts Does not achieve goal of eliminating the gap between what is available and what is permitted No assurance that additional take will be available in the future if needed Will be more expensive if it is needed Will not be a reserve-based plan Will require substantial revisions to the proposed conservation strategy



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Appendix E
Handout on Western
Burrowing Owl

Western Burrowing Owl and the Migratory Bird Treaty Act

Western Burrowing Owls are protected by the Migratory Bird Treaty Act (MBTA) in the United States and Mexico and are listed as a bird of conservation concern by the U.S. Fish and Wildlife Service (USFWS) in many regions, including the Pacific and Southwest Regions. Burrowing Owls breed throughout Nevada and are primarily found in salt desert scrub habitat. Primary threats to the Burrowing Owl include habitat loss due to land conversions for agriculture and urban development.

During Burrowing Owl breeding season, which generally occurs from mid-March through August, developers must avoid active nests until eggs hatch and the owls fledge (acquire the feathers necessary for independent activity), which can take up to ten to twelve weeks.

Issue

The take prohibitions in the MBTA can conflict with incidental take authorizations issued for Habitat Conservation Plans (HCPs) developed under the Endangered Species Act (ESA). The USFWS issues special purpose permits under MBTA to authorize relocation of nests, eggs and fledglings, but do not allow for incidental take.

Under the MBTA, it is illegal to “take” migratory birds, their eggs, feathers or nests. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof.

Options for Burrowing Owl related to the Amended MSHCP

Option 1 – Cover Burrowing Owl under Amended MSHCP

The Plan Administrator could pursue obtaining a Special Purpose Permit from USFWS to relocate nests and owls during breeding season, and incorporate this into the minimization and mitigation strategy. The species and their habitat would benefit from increased conservation actions, including management of suitable habitat in reserve areas, and this could prevent potential delays to construction schedules during breeding season.

Developers would be asked to consider avoiding construction activities during breeding season when owls are present and establish a buffer of at least 250 feet around active nests. If developers cannot do this, they must provide justification to proceed under the Special Purpose Permit, at which point surveys must be conducted and would include nests and owls being removed from the site. How this activity could be incorporated with the desert tortoise clearances, how to deal with Zone A and Zone B (owl removal would have to occur in both Zones), and how the additional costs associated with owl clearances would be handled would have to be determined. All work would have to follow an USFWS approved protocol.

USFWS and/or Nevada Department of Wildlife would be required to provide receiving locations for relocated owls.

Option 2 – Do Not Cover Burrowing Owl under Amended MSHCP

Developers would be required to comply with MBTA requirements, including avoiding active nests during breeding season. However, developers could analyze their site prior to breeding season and determine if owls are present and then implement construction schedule changes or work with USFWS to remove owls from the construction site prior to breeding season.

Relocation of owls during breeding season would not be allowed unless the developer pursued a Special Purpose Permit with USFWS themselves. Clearance workers conducting MSHCP desert tortoise clearances that encounter Burrowing Owls would have to avoid them and would notify the Developer and USFWS of Burrowing Owl presence.

Option 3 – “On Ramp” to Cover Burrowing Owl under Amended MSHCP if listed under ESA in future

The activities presented under Option 2 would still pertain to this option until such time as the Burrowing Owl is listed under ESA. The Plan Administrator could negotiate with the USFWS the option of developing a minimization and mitigation package to cover owls that would be implemented if and when the Burrowing Owl is listed as a threatened or endangered species.



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Appendix F
Economic Analysis Report &
Costs

Economic Analysis of the Clark County Amended MSHCP

July 14, 2011

Prepared by

David Sunding, Ph.D

1. Introduction

The Clark County Multiple Species Habitat Conservation Plan (2000 MSHCP) is being amended from its original version which has been in place since 2000. The amendment is needed to ensure all covered activities will fall under the take permit in the future and that the permit will adequately protect all covered species. Since 2000, projections regarding the amount of land disturbance in the County have changed and therefore the number of acres covered by the 2000 MSHCP needs to be expanded. The Amended MSHCP will address these issues as well as revise the overall minimization and conservation strategy.¹

This economic analysis aims to measure the financial costs and economic benefits of the revised conservation strategy and Amended MSHCP. In the first section of this analysis, we describe the growth projections for Clark County which will be used to estimate both the costs and revenues associated with the MSHCP. Next, we estimate the costs of implementing the Amended MSHCP, including expenditures associated with the revised conservation strategy. The third portion of this report quantifies the revenues available to fund Amended MSHCP conservation activities, taking into consideration variations on the location and timing of urban development as well as uncertainties regarding outside public funds. Then, this report estimates the amount of funding that would need to be retained in a non-wasting endowment fund for the purposes of long-term management of the reserve system beyond the 50-year term of the Amended MSHCP permit. In the next section, the report compares the existing funding streams available to the program with the costs. Finally, the analysis conducts a cost-benefit analysis of the value of the proposed Amended MSHCP to the Clark County community.

¹ Clark County Desert Conservation Program website, "Permit Amendment," accessed at: <http://www.clarkcountynv.gov/Depts/dcp/Pages/PermitAmendment.aspx> on May 18, 2011.

2. Background

The 2000 MSHCP was put in place to provide compliance with the Federal Endangered Species Act (ESA) through a Section 10(a)(1)(b) incidental take permit. It is designed to provide regional ESA compliance without requiring project-by-project consultation with the U.S. Fish and Wildlife Service for impacts to threatened and endangered species.

Development of the 2000 MSHCP began in 1996. The plan provided protection for 78 species of plants and animals and their habitats in Clark County. In addition, the 2000 MSHCP ensured funding and implementation mechanisms for the protection measures. The 2000 MSHCP was completed in 2000 and the U.S. Fish and Wildlife Service issued the incidental take permit in 2001.²

The 2000 MSHCP grew out of the efforts of the Clark County Desert Conservation Program (DCP), which was established in 1989 and aimed to provide mitigation for the desert tortoise. The desert tortoise was listed as an endangered species under the ESA in 1989. Clark County responded to the wild tortoise listing by implementing efforts to protect habitat for tortoises and other desert plants and animals under the DCP while allowing for continued development in Clark County.³

The 2000 MSHCP had a 30-year permit beginning February 2001 and it stipulated that take of endangered or threatened species should not exceed 145,000 acres. It covered all non-Federal (private, municipal, state) lands within Clark County. The funding sources for the original MSHCP came from a Section 10 mitigation fee of \$550 per acre and the Southern Nevada Public Lands Management Act (SNPLMA).⁴

The Amended MSHCP will re-evaluate several issues. First of all, the 145,000 acre cap has been found limiting for the amount of development projected to occur in Clark County. The amendment will revise the list of covered species to refocus attention on those species most at risk and most directly impacted by take. The overall mitigation and conservation strategy as well as the covered activities will be reviewed. Finally, the Amended MSHCP will re-evaluate the structure and implementation of the permit and plan.⁵

The Community Advisory Committee for the MSHCP amendment has recommended increasing the number of acres covered by the plan from 145,000 to 200,000 and decreasing

² Clark County Desert Conservation Program website, "What is the MSHCP," accessed at: http://www.clarkcountynv.gov/Depts/dcp/Documents/Library/symposium/2010/20100810%20Tuesday/01_CC%20what%20is%20MSHCP.pdf on May 18, 2011.

³ Clark County Desert Conservation Program website, "About Us," accessed at: <http://www.clarkcountynv.gov/Depts/dcp/Pages/About.aspx> on May 18, 2011.

⁴ Clark County Desert Conservation Program website, "What is the MSHCP," accessed at: http://www.clarkcountynv.gov/Depts/dcp/Documents/Library/symposium/2010/20100810%20Tuesday/01_CC%20what%20is%20MSHCP.pdf on May 18, 2011.

⁵ Clark County Desert Conservation Program website, "Amending the Clark County Multiple Species Habitat Conservation Plan," accessed at: http://www.clarkcountynv.gov/Depts/dcp/Documents/Library/symposium/2010/20100810%20Tuesday/05_CC%201011%20Permit%20Amendment.pdf on May 18, 2011.

the number of covered species from 78 to 16. In addition, the Advisory Committee supports a revised conservation strategy. The revised conservation strategy will implement species monitoring and management and will focus on reserve units that support covered species. In addition, the revised MSHCP will provide for more on-site minimization to avoid direct take of covered species to meet the U.S. Fish and Wildlife Service permit issuance criteria. The amended MSHCP and permit are expected to be completed in spring of 2012. The amended MSHCP will grant a take permit for an additional 50 years from the time it is approved although the length of the take permit may have to be reduced to 30 years, depending on Service approval.⁶

3. Forecasted Land Development in Clark County

Some of the measures associated with the revised conservation strategy – discussed in more detail below – will depend on when and where land disturbances will occur in Clark County over the next 50 years. Additionally, the revenue available to the MSHCP from the land disturbance fee will be directly related to the location and timing of development. In this section of the report, we describe the growth forecasts for the County and the methodology used to arrive at these numbers.

3.1. Methodology and Data Sources

The University of Nevada, Las Vegas Center for Business and Economic Research publishes County-wide population growth forecasts each year. For this analysis, we relied upon the 2011 Clark County Population Forecast for 2012 through 2050.⁷ The CBER forecasts are considered the most reliable and comprehensive for Clark County.

To estimate the number of acres that will be developed to accommodate future population, we relied on the average density from the U.S. Bureau of the Census. Then, we allocated the forecasts at the County level to each Zone. We assumed Zone A would be completely built out over fifty years and that one percent of growth would occur in the Riparian Zone. The remainder of the projected growth is expected to occur in Zone B (89%).

Housing vacancy in 2010 was unusually high. It is well known that Las Vegas and the surrounding area recently experienced an exceptional housing boom and bust. According to the 2010 U.S. Census, vacancy in Clark County was 14.87%, much higher than the 8.5% vacancy rate in 2000. We corrected for the current surplus in housing stock by assuming development would be stagnant for 2011 and 2012 before returning to pre-surplus levels. Given the CBER growth projections in 2011 and 2012, this will be enough time for the excess vacancy to be filled.

The CBER forecasts only went to 2050; we extended them to 2060 using the growth rate at the end of the CBER forecast period. To evaluate the sensitivity of the economic viability of the Plan, we also present high-end and low-end forecasts.

⁶ *Ibid.*

⁷ “Population Forecast through 2050,” Clark County, Nevada, Department of Comprehensive Planning.

3.2. Forecasted Growth Results

Table 1 displays the results of the forecast, presenting the acres of development expected to occur in each year in each MSHCP Zone. The same caveats and assumptions outlined in the CBER Report apply to the forecast below.

Table 1. Forecasted Acres of Development

Year	Zone A Annual Development	Zone B Annual Growth	Riparian Zone Annual Growth
2011	0	0	0
2012	0	0	0
2013	640	5,696	64
2014	640	5,696	64
2015	614	5,468	61
2016	602	5,354	60
2017	563	5,012	56
2018	550	4,899	55
2019	512	4,557	51
2020	512	4,557	51
2021	512	4,557	51
2022	486	4,329	49
2023	486	4,329	49
2024	486	4,329	49
2025	474	4,215	47
2026	486	4,329	49
2027	474	4,215	47
2028	474	4,215	47
2029	474	4,215	47
2030	474	4,215	47
2031	461	4,101	46
2032	461	4,101	46
2033	461	4,101	46
2034	461	4,101	46
2035	474	4,215	47
2036	474	4,215	47
2037	474	4,215	47
2038	474	4,215	47
2039	474	4,215	47
2040	486	4,329	49
2041	486	4,329	49
2042	486	4,329	49
2043	486	4,329	49
2044	486	4,329	49

2045	525	4,671	52
2046	525	4,671	52
2047	525	4,671	52
2048	525	4,671	52
2049	525	4,671	52
2050	525	4,671	52
2051	525	4,671	52
2052	525	4,671	52
2053	525	4,671	52
2054	525	4,671	52
2055	525	4,671	52
2056	525	4,671	52
2057	525	4,671	52
2058	525	4,671	52
2059	525	4,671	52
2060	525	4,671	52
2061	525	4,671	52

4. Costs Associated with the Amended MSHCP

Table 2 presents the base cost estimates associated with implementing the Amended MSHCP. The analysis estimates the costs associated with implementing the avoidance and minimization measures and creating the desert and riparian reserve systems. The analysis also covers staffing and additional conservation measures. We considered two cost scenarios: one in which all of the 289,105 acres of the Reserve System are made active in 2012 and one in which the Reserve System lands are phased commensurate with the rate of development. The average annual costs of implementing the Amended MSHCP are roughly \$8.5 million without a phased Reserve System and \$8.1 million under the phasing scenario.⁸

The cost analysis was based on a number of assumptions regarding the eventual development of the Amended MSHCP and the unit cost of many items. Unit cost estimates are based on the best available information and represent average unit costs. The actual costs of individual items will fluctuate above and below these averages. The total cost presented in this cost analysis therefore reflects a planning-level estimate to aid in the determination of the eventual amount of funding likely to be necessary to implement the MSHCP. In addition, when many of these costs are incurred by the program will likely vary as well. For example, the cost analysis assumes that conservation easements for burrowing owl in Zone A will be acquired in Year 1 of the Amended MSHCP. However, this is strictly done for purposes of accounting for the cost and may not be completed until well after implementation begins.

The costs incurred in each year vary depending on the rate of land development and the County's phasing schedule. The majority of the costs come from the clearance surveys (\$2.0 million per year); reserve monitoring (\$1.0 million per year); and staffing (\$1.6 million per

⁸ These figures do not control for inflation.

year). Miscellaneous operation costs are also highly variable, costing at most \$1.4 million per year and \$680,000 per year on average.

5. Revenues available to the MSHCP

The primary source of funding for the 2000 MSHCP comes from a \$550 per acre land disturbance fee. This fee was set when the Desert Conservation Plan was adopted in 1995 and has not been revised since. A portion of the revenue from the land disturbance fee will be set aside in an endowment. Interest income earned on the endowment will fund management of the Reserve System beyond the 50-year time frame of the MSHCP permit. The principal and/or interest income in the endowment could also be tapped during the 50-year term of the permit in years when the costs of the MSHCP exceed revenues from the land disturbance fee. Additional funding may come from the Southern Nevada Public Lands Management Act. However, as further explained below, this source of funding is considered largely unreliable.

5.1. Survey of Development Fees

The Amended MSHCP is currently funded primarily through the land disturbance fee, which is currently set at \$550 per acre of take. Funds from the mitigation fee could also support enhancement and restoration of desert and riparian habitat, above and beyond the minimum level required by the Service. Funds raised through the mitigation fee will support not only the measures undertaken during the 50-year permit term, but also long-term management of the habitat reserve system in perpetuity.

We have reviewed the mitigation fees established under several other regional habitat conservation plans. The plans surveyed vary in terms of the number of species covered and acres covered. Some plans need to purchase land to establish their habitat reserves, while others will rely primarily on public and quasi-public land donations to create their reserves.

One aspect that all of the plans reviewed have in common is that they allow their per-acre land disturbance fee to be adjusted over time. All plans allow for the development fee to readjust annually according to the Consumer Price Index for their respective Metropolitan Statistical Area. Furthermore, all of the plans allow for an additional reevaluation of the development fee about every five years.

Another similarity between all of the plans is their reliance on funds in addition to the per-acre land disturbance fee. All of the plans intend to use grant money, taxes, or even debt financing through the issuance of bonds to fund their land purchases conservation actions.

The Draft Santa Clara Valley Habitat Conservation Plan / Natural Community Conservation Plan (HCP/NCCP) was published in 2010. It covers a total of 519,506 acres and plans to set aside 58,000 at most in its preserve system. The Santa Clara Valley HCP / NCCP plans to restore 566 acres of habitat and 12.6 miles of streams. Most of the land anticipated to be included in the preserve system will be purchased by the Plan, and thus the land disturbance

fees are relatively high. The Santa Clara Valley HCP /NCCP will charge \$19,720 per acre of development on natural land.⁹

The East Contra Costa County HCP / NCCP charges \$23,838 per acre for development on natural land, which was established in 2006. Most of the 30,300 acres in its reserve system will need to be purchased by the plan; however a small portion of the reserve system will be acquired from local agencies. Overall, the East Contra Costa County HCP / NCCP covers 174,018 acres and has a permit term of 30 years.¹⁰

The Coachella Valley Multi-Species Habitat Conservation Plan is different from the Santa Clara Valley and East Contra Costa County HCP / NCCP plans in that most of the land that will be set aside in its reserve will be assembled from public land. Only about 90,000 acres of the 745,900 acres of the reserve system need to be purchased by the Plan. The per-acre fee on development on natural lands was set at \$5,730 in 2007. The Coachella Valley MSHCP has a 75- year permit term and authorizes approximately 120,000 acres of take. It covers roughly 1.1 M acres.¹¹

5.2. The Southern Nevada Public Lands Management Act

The Southern Nevada Public Lands Management Act (SNPLMA) became law in October 1998. It allows the Bureau of Land Management to sell public land within a specific boundary around Las Vegas, Nevada. The revenue derived from land sales is split between the State of Nevada General Education Fund (5%), the Southern Nevada Water Authority (10%), and a “Special Account” available to the Secretary of the Interior. The Special Account can be spent on the development and implementation of the MSHCP, among other things.¹²

Over the past twelve years, the MSHCP has received funding from the SNPLMA sporadically. The SNPLMA committed \$4,648,334 to the MSHCP during on June 26, 2001; \$15,851,237 on October 28, 2003; \$25,115,145 on February 7, 2006; and \$1,407,120 on February 20, 2008. No funding has been received by the MSHCP since 2008.¹³

The SNPLMA funding can be used for activities related to the development and implementation of the Amended MSHCP, including habitat monitoring and plan development. For example, the SNPLMA money granted to the 2000 MSHCP has been used to fund the following actions:

- Upper Muddy River Restoration and Land Management Plan;

⁹ Santa Clara Valley Habitat Conservation Plan / Natural Community Conservation Plan website, accessed at: http://www.scv-habitatplan.org/www/site/alias__default/341/public_draft_habitat_plan.aspx on May 20, 2011.

¹⁰ East Contra Costa County Habitat Conservancy website, accessed at: <http://www.co.contra-costa.ca.us/depart/cd/water/HCP/documents.html> on May 20, 2011.

¹¹ Coachella Valley MSHCP website, accessed at: http://www.cvmshcp.org/Plan_Documents.htm on May 20, 2011.

¹² US DOI, Bureau of Land Management, Southern Nevada Public Land Management Act website, accessed at <http://www.blm.gov/nv/st/en/snplma.html> on May 17, 2011.

¹³ SNPLMA, “Southern Nevada Public Land Management Act Revenues and Funding Allocated: Data through December 31, 2010,” accessed at http://www.blm.gov/pgdata/etc/medialib/blm/nv/field_offices/las_vegas_field_office/snplma/pdf/reports.Par.12863.File.dat/4%20REVENUE%20and%20EXPENDITURE.pdf on May 17, 2011

- Ecological site inventory and soil survey for wild horse and burro herd management areas;
- Field monitoring and plant inventory;
- Monitoring and analysis (GIS);
- Bat inventory;
- Rare plant inventory and monitoring, alien plant inventory;
- Wildlife surveys and monitoring;
- Data collection and analysis for MSHCP development;
- Proactive interpretation / environmental education program;
- Inventory and monitoring – species of concern;
- Inventory and monitoring – recreation use;
- Muddy River watershed assessment;
- Desert NWR – Law enforcement and public outreach plan; and
- MSHCP Adaptive Management Plan.¹⁴

Many of these activities overlap with the habitat restoration and enhancement measures in the Amended MSHCP. If additional funding from the SNPLMA were to be granted to the MSHCP in the future, the money could be used to fund some of the optional habitat restoration and enhancement measures discussed above. However, because the amount and timing of SNPLMA is unpredictable, we do not consider this money available to fulfill the mitigation obligations of the Amended MSHCP.

5.3. The Amended MSHCP Endowment

Since the 2000 MSHCP, revenues raised as a result of the land disturbance fee have covered the cost of avoidance and minimization measures, staffing costs, and plan development. Additional revenues have been set aside in an endowment for the long-term management of the Reserve System. The Desert Conservation Program's endowment balance is pooled with those of other county funds and invested by Clark County in short- and long-term securities. Earnings from those investments are then redistributed, as a prorated share, on a monthly basis to the funds.

The total fund balance during FY 2010 was \$59,874,308. On average, between 2006 and 2010, the net interest earned before adjustments was \$2,350,492 (i.e. an average return of over four percent). The endowment can be relied upon for future Amended MSHCP funding needs. The net interest earned will provide a constant revenue stream. In years when the costs of the Amended MSHCP exceed revenues generated from the land disturbance fee, the Desert Conservation Program can extract funds from the unencumbered endowment

¹⁴ SNPLMA, "Decision Document: Expenditure of the Southern Nevada Public Land Management Act Special Account," June 26, 2001, accessed at: http://www.blm.gov/pgdata/etc/medialib/blm/nv/field_offices/las_vegas_field_office/snplma/pdf/decision_documents.Par.45170.File.dat/Rd2Decision.Doc.pdf, on May 17, 2011.

principal to make up the difference. Approximately 12% of the total fund balance is already encumbered.

At the end of the 50-year term of the permit, the endowment balance needs to arrive at a minimum of \$19.5 million in order to fund the ongoing minimum level of management in the Boulder City Conservation Easement. Assuming the endowment generates 4.5% interest (a risk-free rate of return), this balance would cover the cost of law enforcement and law enforcement training on the Boulder City Conservation Easement in perpetuity.

The other HCPs reviewed in this report plan to fund the management of their reserve systems with endowment interest or taxes. The final balance of the Santa Clara Valley HCP / NCCP endowment is expected to be \$178 million which is anticipated to generate an average annual interest income of to be \$3.4 million. The East Contra Costa HCP / NCCP intends to rely on taxes to fund the management of its reserve system in perpetuity. The Coachella Valley MSHCP will reinvest the interest income from its savings fund over the 75 year lifetime of the permit. The final balance of the Coachella Valley Plan endowment is expected to be \$860.7 million.

6. Adequacy of Funding

In order to achieve the minimum level of funding in the endowment and cover the costs of the Amended MSHCP, the land use impact fee will need to be raised. Under the scenario in which the all 289,105 acres are incorporated into the Amended MSHCP in 2012, the fee will need to be approximately \$1,630 per acre. Under the scenario in which lands are phased into the Reserve System over time, keeping pace with the growth forecasts, the fee will need to be raised to \$1,565 per acre.

Our estimate of the land disturbance fee assumes that costs will increase at the rate of inflation (i.e. the Consumer Price Index) over 50 years and that the fee itself will automatically adjust at the same CPI rate. A constant fee would leave the Amended MSHCP vulnerable to future inflation, reducing coverage or resulting in other unfavorable outcomes.

Although these fees are nearly three times higher than the current \$550 per acre, they are still considerably lower than the fees charged by other plans which ranged from \$5,730 to \$23,838. Furthermore, consider the purchasing power of \$550 over time. The level of conservation measures that could be paid for by a \$550 per acre fee in 1995 would cost around \$817 today. In 2060, the purchasing power of \$550 will be \$160.

Finally, a cost of about \$1,600 per acre is quite affordable viewed in the context of overall prices of homes and land. Assuming a common rural density of six houses per acre, the \$1,600 per acre equates to \$267 per house. Presently, the cost per acre of purchasing raw land for residential development in the Las Vegas community is roughly \$105,000 per acre. The \$1,600 development fee is only about 1.5% of the cost of land.

7. Community Benefits of the Clark County MSHCP

The costs to developers of independently obtaining the necessary environmental permits are expected to be considerably higher than participating in the MSHCP. To comply with the

National Environmental Policy Act (NEPA), the federal agency such as the US Fish and Wildlife Service may require the developer to prepare the NEPA document. If this happens, the federal agency would most likely require the preparation of an Environmental Assessment (EA) which would cost the developer roughly \$60,000 to \$80,000. In addition, the developer would have to pay the Section 7 fee and implement on-site minimization measures. In 2010, the U.S. Fish and Wildlife Service Section 7 fee was \$774 per acre of development.¹⁵ In addition, most developers choose to be involved in the development of the biological assessment to avoid any surprises once the Biological Opinion is published. The cost of drafting the biological assessment is \$35,000 to \$50,000 to the developer. For a development that was 100 acres in size, the cost of independently complying with Section 7 would cost between \$145,000 and \$250,000 (\$1,450 to \$2,500 per acre) including onsite surveys and minimization measures.

Certain development projects cannot go through Section 7 and are instead required to comply with Section 10. In this instance, the developer must pay to prepare an Environmental Assessment at a cost of approximately \$80,000. Furthermore, the developer must prepare a Habitat Conservation Plan and Implementing Agreement at a cost of roughly \$120,000 to \$140,000 including meetings and drafting. In addition, there would be the costs of on-site minimization and mitigation measures. A 100 acre development would pay approximately \$200,000 to \$250,000 (\$2,000 to \$2,500 per acre) to independently comply with Section 10 including onsite minimization and avoidance measures.

In Clark County, the average development over the past decade has been roughly 5 acres in size. For these smaller developments, the federal agency would most likely require the developer to prepare a low-effect HCP and complete a NEPA screening form in lieu of an EA at a cost of \$35,000 to \$50,000 (\$7,000 to \$10,000 per acre).

Based on the estimates described above, a regional compliance plan will save land developers on the cost of environmental permitting, particularly for smaller developments. Not only will the per-acre cost of complying with environmental regulation be lower for developers under the MSHCP, there is the added benefit of certainty. Under the MSHCP, there will be no concern for project-by-project variations in the cost of compliance. The regional plan removes the uncertainty in the minimization measures associated with obtaining an environmental permit. Furthermore, the MSHCP will reduce the economic revenue lost to project delay because the regional plan will streamline the permitting process.

¹⁵ Electronic communication with Clark County, November 24, 2010.