



February 4, 2021

Ms. Kimberley Jenkins  
Principal Environmental Scientist  
Desert Conservation Program  
Clark County Department of Air Quality  
4701 W. Russell Road, Suite 200  
Las Vegas, Nevada 89118

**Subject:** Submittal of Draft Chapter 6, Part 4 Clark County Multi-Species Habitat Conservation Plan Amendment (MSHCP) Reporting

Dear Ms. Jenkins:

This letter with attachment provides the Draft Chapter 6-Part 4, describing the reporting requirements for the MSHCP Amendment. The reporting requirements are based on the preliminary biological goals and objectives (BGOs), avoidance and minimization measures (AMMs), and monitoring and adaptive management plan (MAMP) sections of draft Chapter 6. We have added the reporting information in the appropriate column of Table 6-1 and included that table in this submittal. In addition, Table 6-1 has been updated to incorporate some comments received on the BGOs and MAMP. Not all comments have been addressed and some comments require continued discussion with the County on approach. However, this is to note revisions have been made and the non-reporting column information in the table has been updated since the last Chapter 6 submittal.

If you have any questions or comments please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Patricia Valcarcel'.

Patricia Valcarcel, CWB®  
Senior Wildlife Biologist

## 6.0 Conservation Strategy

Table 6-1. Summary of biological goals and objectives for the MSHCP Amendment. Sub-objectives and related avoidance and minimization measures (AMM) which support the objectives are also described. Reporting measures to document achievement of the objectives are provided.

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting	
<b>Biological Goal 1. Maintain or improve habitat quality within Reserve System lands to promote resiliency, redundancy, and representation for Covered Species.</b>					
<b>Objectives</b>	1A	Manage invasive plant species to maintain a percent cover at or below baseline conditions.	GCM-4 (erosion control) and GCM-5 (weed management plan) in Section 6.2.2	6.4.1.1.1 Weed Management Plan to be developed and approved within the first 2 years of MSHCP implementation.	Report on weed management actions in Ten-Year Monitoring Report. Any additional details to be included in Annual Progress or Ten-Year Monitoring Reports will be detailed in the Weed Management Plan.
	1B	Acquire, enhance, or restore riparian habitat for the riparian Reserve System to ensure that habitat quality and quantity for riparian-dependent Covered Species is maintained or increased, relative to impacts from Covered Activities in the Plan Area, as measured by habitat quantification assessments.		6.4.1.1.2 Use habitat quantification assessment methods outlined in Chapter 5 to compare impacts and mitigation, and to target habitat acquisition in high quality areas.	Annual Progress Report habitat quantification assessment summary of impacts and preserved riparian habitat in the Reserve System

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting
	1C	Protect and increase the quantity and quality of suitable habitat for Covered Species, using habitat suitability models and habitat quantification assessments.	6.4.1.1.2	Ten-Year Monitoring Report summarizing existing habitat quality changes in the Plan Area, including impacts and the Reserve System.
	1D	Incorporate natural ecological processes into restoration design and implementation. On an annual basis, review all restoration projects to determine appropriate natural processes are being included in all projects and document in annual reporting.	6.4.1.3	Document review was completed and all projects incorporated appropriate natural processes using best available scientific and commercial information shall be included in Annual Progress Report.
	1E	Acquire, restore and/or enhance essential occupied habitat for Pahrump Valley buckwheat for inclusion in the Reserve System prior to impacts to this species.	PLANT-3 in Section 6.2.3.1 6.4.1.2.11	Provide an update on acquisitions, restoration, and enhancement activity in Annual Progress Report.
<b>Biological Goal 2. Avoid and minimize impacts to maintain the quality of habitat for Covered Species within the Plan Area.</b>				
<b>Objectives</b>	2A	Ensure the best available scientific and commercial information are being incorporated into habitat management efforts for Covered Species including	6.4.1.1.2  Habitat suitability models reviewed every 10 years.	Ten-Year Monitoring Report updates on management, restoration, and enhancement activities, and updates on

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting
	use of but not limited to current distribution and habitat suitability models.			habitat suitability model review.
2B	Project designs that minimize indirect effects of Covered Activities will be adopted into County code including lighting, runoff and erosion, and other edge effects for Covered Activities at the boundary with undeveloped habitats.	Project design AMMs to minimize post-construction (Section 6.2.1) effects; General Construction (6.2.2) and Species-Specific (6.2.3) AMMs to minimize effects during construction.	6.4.1.3 A subsample of projects reviewed each year to verify designs are adhering to AMMs.	Project review results included in Annual Progress Reports for first 3 years, after 3 years, only waivers to the Project Design or General Construction AMMs will be included in the Annual Progress Reports.
2C	Identify sediment sources for plant Covered Species that are dependent on specific substratum including threecorner milkvetch and sticky buckwheat, and avoid, minimize, mitigate impacts as feasible.		6.4.1.1.3 The DCP will review and identify essential sediment sources, if found, for threecorner milkvetch and sticky buckwheat habitats within the first year of MSHCP implementation to these species habitats, whichever comes first.	Essential sediment source review included in Annual Progress Report in the year it is completed. First Ten-Year Monitoring Report will include summary of review and any recommendations for avoidance. Subsequent Ten-Year Monitoring Reports will include status updates of impacts to the sediment sources, if any.
2D	Support invasive species early eradication efforts in the Plan Area.		6.4.1.1.1 The DCP will develop and approve the Early Detection Rapid	Early Detection Rapid Response Program reported in Annual Progress Report in the year it is completed. Any

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting
			Response Program in cooperation with Clark County Vector Control or other applicable agencies/entities within the first three years of MSHCP implementation.	additional details to be included in Annual Progress or Ten-Year Monitoring Reports will be detailed in the Early Detection Rapid Response Program.
2E	Identify high priority connectivity and genetic exchange issues in essential movement corridors and increase connectivity and genetic exchange for species movement in X corridors every five years.		6.4.1.1.4 The DCP will develop a Connectivity Management Plan in the first 3 years of MSHCP implementation.	Document completion of connectivity improvement projects in Annual Progress Reports in the year conducted. Ten-Year Monitoring Reports will summarize all improvements made within the previous ten years and any additional details/changes as described in the Connectivity Management Plan.
2F	Limit development in areas of occupied and potentially suitable habitat for gypsophile species to 9% of baseline occupied and potentially suitable habitat within the Plan Area.		6.4.1.1.3	Document amount of cumulative impacts to potentially suitable habitat in Annual Progress Report. Include percent impacted under MSHCP.

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting	
<b>Biological Goal 3. Maintain stable or increasing populations of Covered Species occurring within Reserve System lands.</b>					
<b>Objectives</b>	3A	Average population sizes of Covered Species are maintained over time. Population trends will be characterized over 5-10 years depending on the species and associated monitoring approaches.		6.4.1.2 Species monitoring protocols/methodologies to be developed and peer-reviewed by the Science Advisory Panel within the first 18 months of MSHCP implementation or prior to first monitoring surveys, whichever comes first.	Any survey results to be reported in Annual Progress Report in the year surveys conducted.  Ten-Year Monitoring Reports will include a summary of survey results and an analysis of population trends in the Reserve System. Any additional data noted in species monitoring protocols will also be included.
	3B	Identify and protect maternity roosts of spotted bat. If a Townsend's big-eared bat roost is detected in the reserve system and potentially impacted by Covered Activities, it shall be protected.	BAT-1 (pre-construction surveys) in Section 6.2.3.8	6.4.1.2.8	Annual Progress Report will include any maternity roost identified within the reporting year. It will also be noted if the roost was impacted in any manner or measures implemented to avoid or minimize impacts.  Ten-Year Monitoring Report will provide a summary of all maternity roosts identified within the Plan Area.

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting	
	3C	Identify and protect essential populations of plant Covered Species and their habitat.	Plant species-specific AMMs (Section 6.2.3.1)	6.4.1.2.10 and 6.4.1.2.11	Any new populations of plant Covered Species will be identified in the Annual Progress Report in the year detected.  Ten-Year Monitoring Reports will include a summary of all essential plant Covered Species locations and if any impacts have occurred to these populations.
<b>Biological Goal 4. Foster community and stakeholder engagement to benefit covered species.</b>					
Objectives	4A	Ensure input is obtained from key partner agencies on mitigation/restoration project plans being implemented on jointly managed land.		6.4.1.3	Summary of mitigation, restoration, and enhancement projects implemented in year of reporting to be included in Annual Progress Reports and a summary of recommendations or input provided by partner agencies, if applicable.
	4B	Educational material is provided online and signage is posted at major entrances and junctions on the BLM ACEC Reserve System lands to inform recreational visitors of responsible use.	Wild Desert Tortoise Outreach (Section 6.2.4.2)	6.4.1.3	Any new or revised educational material posted including location posted will be summarized in the Annual Progress Report. A summary of outreach related to wild

Goals and Objectives		Avoidance and Minimization Measures (AMM) Supporting Objective (if applicable)	Monitoring Section & Timing Considerations	Reporting
				desert tortoises will also be provided in the Annual Progress Report for the first three years and every ten years thereafter.
4C	Deter unauthorized land use with X patrol hours and other appropriate measures per Reserve System site per year. DCP planning documents shall include activities to deter unauthorized use.	Developer Outreach (Section 6.2.4.1) Wild Desert Tortoise Outreach (Section 6.2.4.2)	6.4.1.3	The patrol hours within the Reserve System, any additional data per Reserve System lands, and number of incidents in Reserve System lands within the reporting year will be documented in the Annual Progress Report.
4D	Project proponents and construction personnel follow best management practices for Covered Species and associated reporting procedures.	General Construction (6.2.2) and Species-Specific (6.2.3) AMMs to minimize effects during construction; Developer Outreach (6.2.4.1)	6.4.1.3	A summary of compliance with General Construction and Species-Specific Measures for the projects reviewed in the reporting year will be summarized in the Annual Progress Report. A summary of outreach related to wild desert tortoises and to developers will also be provided in the Annual Progress Report.



## 6.1 Reporting

The DCP will prepare, on a regular basis, planning documents and implementation reports to demonstrate compliance with the MSHCP Amendment, monitoring data, and its associated authorizations and to facilitate interagency coordination, scientific exchange, and public outreach. At a basic level, the USFWS' handbook requires reporting to provide information on permittee compliance with the permit and HCP, progress towards meeting the BGOs, effectiveness of the HCP conservation program, and if there is need for adaptive management to improve the conservation program. The reporting frequency can vary dependent on scale and timeframe of the HCP. For the MSHCP Amendment, the DCP will, over the term of the MSHCP, submit reports on an annual basis focused on compliance and progress, and every decade provide a more detailed report summarizing monitoring and effectiveness. These reports to the USFWS serve the following purposes:

- Provide the necessary data and information to demonstrate that the MSHCP is being properly implemented
- Identify the effect of MSHCP implementation on covered species and on the effectiveness of the Conservation Strategy at advancing the MSHCP's BGOs
- Document actions taken under the adaptive management program (e.g., process, decisions, changes, results, corrective actions)
- Describe schedules and costs related to the implementation of actions over ten-year timeframes

Throughout the course of MSHCP implementation, the DCP will prepare and submit to the USFWS the following documents:

- Annual Progress Report
- Annual Project Symposium
- Ten-Year Monitoring Report

The totality of these documents will enable the range of interested public and private stakeholders, and the general public, to assess on an ongoing basis the progress and performance of the MSHCP toward meeting the BGOs and make informed recommendations to the DCP regarding matters relating to MSHCP implementation. To accommodate access to this information, these reports will be available to the public. Additional information on these reports is described below.

### 6.1.1 Annual Progress Reports

This section describes the contents of the Annual Progress Reports, which must be prepared by the DCP and submitted to the USFWS for permit compliance documentation. The Annual Progress Report will be the primary document in support of USFWS-required status reports for permit continuance. The primary focus of the Annual Progress Report will be to quantify impacts of Covered Activities, status of Reserve System lands, and financial analysis. Information identified in Table 6-1 to be included in the Annual Progress Report is also provided in the list below for clarity of reporting requirements. At a minimum, all MSHCP Annual Reports will include the following information:

- Number and acreage of each Covered Activity implemented during the reporting period categorized by Covered Activity (per Chapter 2). Reporting will include a map of Covered Activity locations.

- A year-to-date and cumulative summary (i.e., from the start of the Permit Term) of permanent and temporary impacts on all MSHCP ecosystem types. Reporting will include a map of impacted locations.
- A year-to-date and cumulative summary of impacts to modeled habitat quantification assessments (Chapter 5 methodology) for Covered Species habitat quality. For the gypsophile Covered Species group, provide the percentage of cumulative impacts in comparison to baseline conditions at the start of the MSHCP Amendment. Reporting will include a map of impacted areas.
- A year-to-date and cumulative summary of the total impacts to Critical Habitat of desert tortoise and southwestern willow flycatcher, and to Covered Species plant occurrences. Reporting will include a map of Critical Habitat impacts.
- Describe the review of sediment sources for threecorner milkvetch and sticky buckwheat habitats, results, and recommendations for management, if any.
- For the first three years, document review of a subsample of projects and confirm project designs included Project Design AMMs (Section 6.2.1). If not, provide an explanation of why a waiver was granted.
- A list of all exceptions to any Avoidance and Minimization Measure (Section 6.2) granted in the year of reporting will be listed including all emergency activities that were conducted within setbacks or seasonal work window restrictions and waivers granted to Project Design or General Construction Measures.
- A description of all restoration and enhancement implemented during the reporting period and documentation that all projects were reviewed and incorporated natural processes where appropriate. Reporting will identify restoration and enhancement efforts conducted within the ACEC Reserve System lands, non-ACEC Reserve System lands, and outside of the Reserve System. Reporting will include a map of restoration and enhancement project locations.
- A year-to-date and cumulative summary of the acreage and habitat quantification assessment acreage of riparian or other habitat preserved, restored, and/or enhanced outside of the ACEC Reserve System. The success rate for restoration and enhancement projects will also be documented. For each riparian Reserve System parcel acquired, document whether it was purchased in fee title or protected under a conservation easement. If conservation easements were used, the report will describe who holds the easements. Maps and GIS shapefiles will be provided identifying which parcels have been acquired and whether acquisition was via fee title or easement. The extent of modeled habitat quality (habitat quantification assessment) preserved and added to the Reserve System will be calculated by overlaying the most current species habitat quantification assessment. Reporting will include a map of modeled habitat quality (habitat quantification assessment) for each newly added Reserve System area.
- A copy of all easements recorded during the reporting year. Reporting will include a map of easements.
- A summary of all Townsend's big-eared bat or spotted bat maternity roosts observed in the Plan Area during the reporting year.
- Any new populations of plant Covered Species detected during the reporting year will be described and maps included.
- A description of all connectivity improvement projects or other connectivity analyses that were completed during the reporting year.
- A summary of monitoring results conducted during the reporting period, including species status and trends, if appropriate.
- A summary of compliance with General Construction and Species-Specific Measures for the projects reviewed in the reporting year.

- A description of the adaptive management process utilized during the reporting period.
- A summary of the recommendations or advice provided by the USFWS and Science Advisory Committee regarding adaptive management and monitoring.
- Any items noted to be reported annually in the Weed Management Plan, Early Detection Rapid Response Program, and Connectivity Management Plan shall be included.
- The patrol hours implemented by the MSHCP and number of incidents on Reserve System lands.
- A summary of outreach and education materials provided related to wild desert tortoises conducted in the reporting year including outreach to developers, location materials were posted in Reserve System or elsewhere, and if any material has been revised or new material produced.
- An accounting of all revenues received, spent, and an assessment of progress towards total revenue goals. Funding from local, state, and federal sources must be tracked separately. Any fee adjustments must also be reported.
- A summary of any administrative changes, minor modifications, or major amendments proposed or approved during the reporting year.

### 6.1.2 *Annual Project Symposium*

In addition to the Annual Progress Reports described above, the DCP will host an Annual Project Symposium for the public. The Symposium will provide the public with progress summaries of the MSHCP Amendment including any amendments or modifications and presentations of projects funded by the MSHCP Amendment including monitoring or other research topics. The purpose of the public Symposium will be to foster data sharing, collaboration, and stakeholder engagement.

### 6.1.3 *Ten-Year Monitoring Report*

Every ten years, a more detailed analysis of the compliance and effectiveness monitoring of the Conservation Strategy will be conducted and reported. This will be a report separate from the Annual Progress Report. Information identified in Table 6-1 to be included in the Ten-Year Monitoring Report is also provided in the list below for clarity of reporting requirements. The following information will be included in the Ten-Year Monitoring Report:

- A summary of all restoration and enhancement activities undertaken on and off the Reserve System and a discussion of the management issues facing the DCP.
- A review and analysis of all connectivity improvement projects or analyses that were conducted in the 10-year reporting period. Analysis should include determination of success of the project and recommendations for future projects. Review the Connectivity Management Plan, and provide recommendations for updates to the Plan, if any.
- A summary of all monitoring survey results and an analysis of population trends in the Reserve System. Table 6-3 should be reviewed and documented if targets are being met or if adaptive management is required.
- A summary of all Townsend's big-eared bat or spotted bat maternity roosts observed in the Plan Area during Covered Activities or monitoring efforts.
- A summary of all essential plant Covered Species locations, if impacts have occurred in these locations, and management concerns, if any. A map will be included showing locations of these populations.
- An evaluation of the economic assumptions on which the MSHCP was based (e.g., MSHCP costs, revenue rates and grant funding projections).
- An assessment of progress toward a complete funding strategy for implementation after the Permit Term.

- A summary of the changes in habitat quality over the previous 10 years based on the habitat quantification assessment
- An assessment of the efficacy of the MSHCP private Reserve Management Program (for riparian and other non-ACEC Reserve System properties), including lessons learned and recommended changes to the Reserve Management Program based on interpretation of monitoring results and research findings.
- An assessment of the efficacy of habitat restoration and/or enhancement methods in achieving performance objectives (if applicable) and recommended changes to improve the efficacy of the methods.
- An assessment of ACEC Reserve System lands and the actions undertaken by the DCP to document the additional support the MSHCP funds provide in managing ACEC for Covered Species.
- A summary of impacts, if any, to sediment sources for threecorner milkvetch and sticky buckwheat habitats, and if there are any management recommendations.
- A description of all MSHCP special studies undertaken during the ten year reporting period; a summary of study results; and a description of integration with monitoring, assessment, and compliance elements.
- A description of all monitoring as described in Section 6.4 completed during the ten-year reporting period including species status and trends.
- A summary of outreach related to wild desert tortoises and an assessment of effectiveness of materials with recommendations on revisions of materials or strategy, if needed.
- An assessment of the appropriateness of any monitoring targets and triggers (Table 6-3) based on the results of monitoring, and recommended changes to these criteria.
- A description of any actions taken or expected regarding changed circumstances, including remedial actions.
- A description of any unforeseen circumstances that arose and responses taken.
- Any items noted to be reported every 10 years in the Weed Management Plan, Early Detection Rapid Response Program, and Connectivity Management Plan shall be included in the Ten-Year Monitoring Report.