

HABITAT CONSERVATION TECHNICAL COMMITTEE
for the Washington County Habitat Conservation Plan (HCP)

A regular meeting of the Habitat Conservation Technical Committee (TC) was held in the conference room of the Washington County Administration Building, **JANUARY 10, 2013**

Members present were:

Tim Croissant, Chairperson	Bureau of Land Management (BLM)
Ann McLuckie, Vice Chairperson	Utah Division of Wildlife Resources (UDWR)
Gary McKell	Local Biologist
Kristen Comella	Snow Canyon State Park (SCSP)
Nathan Brown	U.S. Fish and Wildlife Service (USFWS)

Absent and excused:

Cameron Rognan	Wash Co. Habitat Conservation Plan (HCP)
----------------	--

Also present were:

Bob Sandberg	Washington County HCP Administrator
Amber Stocks	Washington County HCP Recorder
Alan Gardner	County Commissioner
Marc Deshowitz	Dixie State College, Roads Scholars

1. CALL TO ORDER

Chairperson Croissant noted a quorum existed and called the meeting to order at 9:35 a.m.

2. APPROVAL OF MINUTES

a. October 11, 2012

The following changes were made:

Page 2, General Business, line 7: changed,

From: "Bob Sandberg stated that the previous TC meeting was tabled to allow the TC time to review and discuss the Public Use Plan (PUP) and Biological Opinion (BO)."

To: "Bob Sandberg stated that the previous TC sand dune discussion was tabled to allow the TC time to review and discuss the Public Use Plan (PUP) and Biological Opinion (BO)."

Page 3, paragraph 3, sentence 7: changed,

From: "People could recreate wherever they wanted and ~~gazing was used in the area until 1998.~~"

To: “People could recreate wherever they wanted and grazing occurred in the Park until 1998.”

Page 3, paragraph 4, sentence 1: changed,

From: “Nathan Brown reiterated that mitigation cannot be mitigated and Ann ~~felt~~ the TC should attend the HCAC meeting.”

To: “Nathan Brown reiterated that mitigation cannot be mitigated and Ann recommended the TC should attend the HCAC meeting per their request.”

Page 3, paragraph 5, sentence 1: added,

From: “Nathan Brown will present the Managers Oversight Group (MOG) to the HCAC, at their request, to help them better understand the document.”

To: “Nathan Brown will present the Managers Oversight Group (MOG) compensation ratios to the HCAC, at their request, to help them better understand the document.”

Page 3, paragraph 5, sentence 2 and 3: changed,

From: “To compensate for devaluing the Reserve’s design, the compensation needs to ~~be greater, not just equal~~.”

To: “To compensate for devaluing the Reserve’s design, the compensation needs to offset fragmentation into the Reserve.”

Page 4, paragraph 5, sentence 2: changed,

From: “The BLM’s planning process is behind and the BLM has been trying to press their consultants to ~~hire more~~ staff.”

To: “The BLM’s planning process is behind and the BLM has been trying to press their consultants to assign different staff.”

<p><u>MOTION</u> by Kristen Comella to approve the minutes as amended. <u>Seconded</u> by Ann McLuckie. <u>Discussion</u>: None. <u>Vote was taken</u>: All voted aye. <u>Motion passed</u>.</p>

3. GENERAL BUSINESS

a. Snow Canyon State Park Sand Dunes

Kristen Comella reported she spoke with Marc Deshowitz, a geologist with Dixie College Road Scholars and Janice Hayden a geologist with Utah Geological Survey (UGS) about the Snow Canyon State Park (SCSP) sand dunes. They discussed how the sand dunes were formed and potential impacts that might occur if vegetation is removed. Kristen introduced Marc and invited him to explain the geology of the SCSP sand dunes.

Marc used the whiteboard to explain (exhibit 3-a-2). The SCSP sand dunes are about 190 million years old. The sand grains that comprise the SCSP sand dunes are millions of years old. In SCSP you can tell which way the wind was blowing during the Jurassic period by looking at the cross bedding (which are dune layers shown as it migrates) which was held together by vegetation. Most rock layers are laid down horizontal but these were laid down crossing the horizontal plane. In SCSP the sand supply is the western wall of the canyon. The walls are eroding very slowly from wind and rain and there is not an abundance of supply.

Rain on the dunes establishes a mild water table, allowing vegetation to grow. The dunes outside of the deflation basin have a minimal water table (perched water table). When vegetation is removed the sand fills in the deflation basin. In SCSP the Whiptail trail is cutting off some of the sand supply but sometimes the wind will whip it across the trail. If vegetation is removed from the east side of the trail, the sand will start to remobilize and migrate because it won't be anchored anymore. A deflation basin will start to be created, undercutting the Whiptail trail.

Aerial photography shows that the dunes have been fairly stable since at least 1977. Marc noted the vegetation on the dunes exterior have stabilized the dunes. If the vegetation is removed closer to the road then the dunes would start to migrate closer to the road and eventually there might be a sand problem on the road.

Kristen looked to exhibit 3-a-1, explaining that the HCAC has given the TC the task of deciding what vegetation can be removed from the interior of the dune to create more open recreation. Marc explained that vegetation allows the sand to pile up against it, becoming the nucleus of the dune. If it is taken out from the depression area, the dune won't migrate; it will start to erode because the wind will blow it onto the next dune. What will be left is an even larger deflation area because future nucleus sites would be removed and it would disrupt the natural process of dune development. The further deflated area will start to cannibalize the other dune and eventually all the sand will be somewhere to the south. It's a delicate balance.

Commissioner Gardner explained that the growth in the deflation basins wasn't there in the 1960's. Marc replied that dunes change with time. The crest may be vegetated and when wind blows over into the basin, it is part of the dune migration process. By creating a barrier such as a sand fence, it will help to stabilize the dune. SCSP has examples of small nucleation sites where sand gathers and piles up against a small amount of vegetation. The wind comes across the dune and when the air space expands the velocity of the wind drops and the sand then drops on the leeward face.

Nathan asked if removing vegetation in the open space will have less of an effect than removing vegetation elsewhere. Marc said the biggest impact is people. The amount of destruction from people is amazing but after awhile the dunes restores itself.

Kristen said that Janice pointed out the sand supply is a limited resource. With wind and water erosion, the cliffs slowly wear away. Anything on the dune that can catch the wind will capture the grains of sand and slowly build up the dunes over time. Right now the dunes are fairly stable. If vegetation is removed the migration process will speed up. If you want to keep as much sand in place as possible it is better to leave the vegetation in place. Marc added there is very low maintenance of the SCSP dunes, it is almost in equilibrium.

Commissioner Gardner explained that the County Commissioners had proposed to restore the SCSP sand dunes back to their original size in the 1960's to allow for better recreation. Marc reiterated that if the vegetation is removed, the unintended consequences will be an acceleration of sand migrating south. Marc has studied sand dunes for 40 years and has seen areas get totally wiped out because of good intentions. In almost every case the sand dunes were remobilized and the growth sped up.

Commissioner Gardner explained that the HCAC had a fieldtrip to the dunes and looked at opening up the trail from the lower parking lot to the main dune so that people, especially the handicap can have better access to the dune. They also looked at opening up a smaller play area near the main parking lot.

Marc reiterated that aerial photography shows good balance in the dunes between sand supply and migration. It's a self replenishing system that is wonderful. He worried about taking away vegetation because it would take the footings away and the current dunes would begin to cannibalize. Bob Sandberg mentioned that SCSP staff and volunteers have been actively removing weeds in the Park. Marc said that removing tumbleweeds and puncture vine would be fine and the balance should remain.

Nathan Brown stated that the SCSP deflation basin goes south and east. One of the main concerns from this is the vegetation on the trail coming from the north parking lot to the crest of the dunes. Maintaining a small open trail through the vegetation probably wouldn't hurt anything. The vegetation near the parking lot is what is keeping the dunes in place. If the vegetation was removed from about 28 acres, it would create a system where sand would move into the deflation basin and make its way down across the road and into the wash and water would become inaccessible. Funneling traffic on a trail will help to impact vegetation in only one spot instead of all over the deflation basin.

Kristen explained that the roadside parking lot will be expanded as discussed and approved. The trail is clearly there with a visible beaten path. The trail from the north parking lot is a moving target. The trail marker is always moving due to the shifting sand. It should be easy to trim back the vegetation and make the trail more visible. Returning back to the parking lot from the dunes is harder because people are disbursed and don't necessarily use the same path that they went in on.

The north parking lot has a mini sand dunes play area with vegetation all around it. In 1998 the horse concessions were removed and since then the Park's goal has been to keep it open for those who don't want to hike to the larger dune. SCSP tried to remove the vegetation and it didn't work due to the horse manure that had been dumped there previously. SCSP installed drift fencing which helped to build up the mini sand dunes and it was very successful.

If the goal is to maintain the recreation opportunities then the vegetation should probably remain on the large dune structure so that it is not lost. The roadside parking can be expanded and maintenance can be done to the existing trails. Drift fencing may be an option to employ periodically.

The primary wind direction is north to south. Any obstacle that can capture the sand will help to build up the dunes. It may be good to look at the mini sand dune area more closely for recreation since it is closer to the parking lot. The drift fence was removed from the mini dune area because it was successful in building up sand. It got buried and became a hazard to trip over.

Nathan stated the TC can recommend actions that will affect tortoises but other actions should not be recommended by the TC. SCSP can remove vegetation on the interior without it being a *take* of tortoise habitat. Ann felt that based on the geologists' perspectives, the non-native vegetation can be removed and the trails at the two parking lots should be maintained.

Marc added that if the area is destabilized it may blow into the wash, absorbing the water or causing the water to jump the bank, finding a secondary channel which could be the road. Commissioner Gardner would still like to see expansion of the upper area. Kristen replied it would require drift fencing and may take three or four years for the sand to build up and it would need continual monitoring.

Marc left at 10:35 a.m.

Kristen felt it important to note that removing vegetation was a good idea but after consulting with two geologists the TC came to the realization that the opposite effect could occur. The reversal of the TC's path is based on information from the geologists.

MOTION by Ann McLuckie to recommend that because of information provided by two geologists, the TC's intended goal of expanding the dunes by removing vegetation would not work, therefore the TC recommends that removal of vegetation be limited to the goals of removing non-native vegetation and maintaining trail access at the two parking lots.

Seconded by Gary McKell.

Discussion: The group discussed having SCSP continue to pursue the concept of a boardwalk and the use of drift fencing to build dunes.

Vote was taken: All voted aye.

Motion passed.

b. Follow Up on Recovery Actions for Upper Virgin River RIT

Ann McLuckie and Bob Sandberg stated the team needs to respond with any comments by January 18th.

c. Committee Terms, 2013 Chairman and Vice Chairman

The committee reviewed exhibit 3-c-1, a history of TC chairmanship.

MOTION by Kristen Comella to nominate Ann McLuckie as the chairman and Nathan Brown as the vice chairman.
Seconded by Gary McKell.
Discussion: None.
Vote was taken: All voted aye.
Motion passed.

4. OTHER BUSINESS

a. Consider a Change of February Meeting Date

Bob Sandberg reported that the Desert Tortoise Council will have a fieldtrip on February 14th and a symposium the 15th-17th. The TC agreed to reschedule their next meeting to February 13th so that those who desire to attend the fieldtrip can go.

b. Repaved Road in Ivins

Ivins wants to expand and repave their road from the Vermillion Cliffs development on Snow Canyon Drive to the south entrance station of SCSP. Their intent is to have it completed before the Iron Man in May.

Kristen Comella explained that the project will be within Ivins' right-of-way (ROW). The west side of Snow Canyon Drive has tortoise mesh fencing along it but was never formally surveyed. The only location where the project may potentially impact SCSP property is still within Ivins' ROW. Exhibit 4-b-1 shows where the project will be located. On the west side of the road where it says, "End of Project" they will trench a channel for water to flow, leading it south to an 18" culvert they would like to add. There was question on how far the culvert will need to expand on the east side of the road and on the east side of the paved trail (which is now SCSP property).

Bob Sandberg said that Ivins had expressed that the culvert will not encroach on the existing trail which is on the east side of the road. Bob spoke with a surveyor who indicated that the ROW extends mostly to the east and the fence may not be affected.

UDOT is helping Ivins with a grant for the project. Ann McLuckie recommended that they follow the Utility Development Protocol (UDP) in the active period. Even though it

is fenced there have been tortoises found outside of the fence so it would need to be checked before the project starts.

Bob felt that they can use a silt fence on the west side and bend and burry it so that it isn't penetrable. One of the problems is where to stop the fence. The entrance station to SCSP is open. Ann said if there is a ditch by a culvert it would be good to fence around it so that tortoises don't get trapped in there and make sure there is a biological monitor assigned who will continuously check the roadway.

Bob added he will talk with Ivins about what conservation measures they can put in their environmental document.

c. Tuacahn Fencing

Ann McLuckie mentioned that the chain link fence which is next to Tuacahn Road runs up the hill and abruptly stops. Ann inquired as to the property boundaries for SCSP and Tuacahn. The group talked about the boundaries with the section of tortoise habitat in the Reserve which is blocked off from the rest of the Reserve and the tortoises that are trapped in the area. Ann felt an option to fix this would be to remove the fence going up the hill and install a low line fence along the Tuacahn boundary line. Tuacahn is receptive to the idea but they do not want to pay for it.

Kristen Comella suggested that the additional fence going up the hill which was recently added be removed. A portion of the Padre trail goes through the area and there is a gate which helps SCSP manage the trail's seasonal closure. If the whole fence is removed the Park would not be able to manage the seasonal closure. The Padre Canyon seasonal closure extends back to the Johnson Canyon parking lot. Originally that section of trail was eliminated from the Public Use Planning process in exchange for the Toe trail. In 2004 the Padre Canyon trail was brought back with a caveat that it would be for hiking only with a seasonal closure.

Kristen explained that people park along the road, just outside of the Tuacahn property to access the trail. There is a current issue with horses coming onto a trail that has not been designated for horses. They primarily use the wash. Kristen explained what portions are designated as horse trails and what portions are not. Horses have to be on designated trails in SCSP.

Nathan Brown said the fence could be retrofitted with culverts or something to help tortoises flow through. Bob said that without the fence the tortoises end up on the road and get run over. Ann added that to say a fence is needed to prevent tortoises from getting on the roadway is not consistent with Snow Canyon Drive where there is no fencing and there are a lot more mortalities. Bob said if Tuacahn is required to fence their boundary it is foolish because it will be a maintenance nightmare and will never be kept up. The fence would have to be built somewhere else. The TC talked about retrofitting the fence with something that would allow tortoises to pass through. Bob added that tortoises come up the wash and head to the grass and water at Tuacahn.

Ann said that there are many places in this area that are no longer accessible to tortoises, such as the Layton property, so to have a great piece of tortoise habitat within the Reserve that is not accessible to the tortoises does not make sense. Kristen suggested making a formal administrator's assignment and having the TC go on a fieldtrip to the area. In the meantime Ann will update the tortoise mortality areas across the Reserve and identify problem areas.

d. Ivins Detention Basin

JP Excavating is working on the Ivins Detention Basin and may go into the active season by two or three days which does not make Ivins City happy. At a meeting a couple days ago the consensus was to see where they get to and what the weather is doing. Ultimately the FWS authorized the project and said it could be done during the inactive season. Ann McLuckie stated the only difference in active verses inactive season is that they will need their biological tortoise monitor to be more present on site. The Utility Development Protocol (UDP) doesn't make any allowance for temperatures if it goes beyond the date of February 15th. The TC felt that a common sense approach would be helpful if the weather is too cold as it would be an added expense to Ivins to have the biological monitor there 24/7. Nathan added that Ivins is covered to kill some tortoises. Ann said we should follow the UDP protocols and if it is more expensive than it emphasizes the need to get work done during the inactive period. Bob added that Ivins will press their contractors to finish on time. Ann said the UDP is reasonable and is created to minimize the impacts to tortoises, so people should follow it. Just because there are allowances for *take* doesn't mean the requirements can be relaxed.

5. NEXT MEETING DATES

a. February 13, 2013

6. ADJOURN

MOTION by Kristen Comella to adjourn the meeting.
Seconded by Nathan Brown.
Discussion: None.
Vote was taken: All voted aye.
Motion passed.

The meeting was adjourned at 11:35 a.m.
 Minutes prepared by Amber Stocks.