HABITAT CONSERVATION ADVISORY COMMITTEE

for the Washington County Habitat Conservation Plan (HCP) Work meeting – AUGUST 26, 2008

A work meeting of the Habitat Conservation Advisory Committee (HCAC) was held in the County Commissioner's Chambers at the Washington County Administration Building, 197 E. Tabernacle St., on August 26, 2008.

Committee members present were:

Karl Wilson, Chairman Chris Blake, Vice Chairman Marc Mortensen Larry Crist Reed Harris Jeff Morby Bill Mader, Administrator	Mayors Association Environmental Organization Citizen-at-Large U.S. Fish & Wildlife Service (USFWS) Utah Dept. of Natural Resources (UDNR) Local Development Washington County - HCP
Absent and excused:	
Todd Christensen	Bureau of Land Management (BLM)
Also present were:	
Neil Perry Rhett Boswell Jason Vernon Bruce Bonebrake Danny Summers Ann McLuckie Dr. Howard Horton Jack Staub Alan Gardner Dave Corry Bob Douglas Kim Leany Dr. Durant McArthur Jim Crisp Bob Sandberg Tom Webster Brad Young, Recorder Laura Taylor	Utah Division of Wildlife Resources (UDWR) Utah Division of Wildlife Resources (UDWR) Agriculture Research Service (USDA, ARS) Agriculture Research Service (USDA, ARS) Washington County Commissioner Bureau of Land Management (BLM) Bureau of Land Management (BLM) Bureau of Land Management (BLM) Rocky Mountain Research Station (USDA, USFS) Washington County - HCP Washington County - HCP Washington County - HCP Washington County - HCP

<u>SYNOPIS</u>: The topics of this work meeting were presentations and discussions regarding post-fire restoration and reseeding. No motions or decisions were made.

1. CALL TO ORDER

Chairman Karl Wilson noted that at least five committee members were present and a quorum existed. He called the meeting to order at 9:35 A.M. Jeff Morby joined the meeting at approximately 10:35 A.M.

2. PRESENTATIONS

a. Kim Leany – Presentation on the BLM Fire Rehabilitation Plan and an update on rehabilitation successes and failures.

Mr. Leany did not have a handout or an exhibit. He posted a large map of Washington County showing burned areas dating back several years. He referred to the BLM Fire Stabilization Plan (90 pages) and explained that the plan dictates how the land will be restored post-fire. Funding for post-fire rehab is approved by Washington, D.C.

Mr. Leany stressed that soil conditions, precipitation and natural vegetation growth are the key factors in post-fire restoration. The BLM does not consider cheatgrass areas suitable for rehabilitation because there is a record of non-success. Mr. Leany talked about kochia. He said, even though it is non-native, it does well, and it competes with cheatgrass. He added that trees and shrubs are options but are not widely used.

Mr. Leany stressed that soil preparation is important. Chances of success are greatly improved if the seed is incorporated into the soil. Rocky soils hold up well to erosion, but are difficult to reseed.

Mr. Leany added that steel fences are used wherever possible because they don't burn. Livestock are prohibited for one year in an area that is being naturally reseeded and there is a two-year prohibition if the area is being artificially reseeded. Public facilities and roads are also addressed in the plan. Furthermore, there are protocols specific to the Red Cliffs Desert Reserve.

Lastly, Mr. Leany stressed that Mother Nature and funding are the biggest factors in the success or failure of a rehabilitation project.

b. Bob Sandberg - Discussion / presentation on rehab efforts and apparent success / failure; species and amount of seed used, timing of seeding, seeding methods and seed bed preparation, site description.

Bob spoke about JBR's rehabilitation and reseeding efforts in five projects. Again, seed bed preparation was emphasized. JBR used hand rakes, and in some cases they used ATV's to drag an implement to imbed the seed. January and February seemed to be the best months to reseed.

Bob gave a PowerPoint presentation showing before and after reseeding projects. A copy of that presentation is included as Exhibit 2-b-1 HCAC Wrk Mtng – 082608.

c. Neil Perry - Discussion presentation on Turkey Farm rehab efforts and apparent success / failure; species and amount of seed used, timing of seeding, seeding methods and seed bed preparation.

Mr. Perry talked using a PowerPoint presentation showing the rehabilitation project at the old turkey farm. A copy of that presentation is included as Exhibit 2-c-1 HCAC Wrk Mtng – 082608.

The turkey farm site is approximately 100 acres and the rehabilitation effort is on 20 acres on the west side. Mr. Perry discussed the methods and techniques used in soil preparation and seeding. Plateau[®] was used in advance of the soil preparation.

d. Danny Summers and **Jason Vernon** - Mill Creek study plots – what they have shown us so far.

Mr. Summers discussed a 2006 rehabilitation study effort. He used a PowerPoint presentation to show site plots in the Mill Creek area. A copy of that presentation is included as Exhibit 2-d-1 HCAC Wrk Mtng – 082608.

Mr. Summers described how they employed permanent transects in conducting a vegetation survey of the test plots. In his presentation, Mr. Summers showed the transects in 2006 - with and without Plateau[®] treatment. The same test plots were shown in a series of 2008 photographs.

Mr. Summers emphasized:

- Broadcast seeding was less than successful,
- Plateau[®] was successful in reducing cheatgrass, red brome and storksbill (filaree),
- Forage kochia was less than successful due to lack of moisture and no soil disturbance.

For future rehabilitation projects, Mr. Summers recommended:

- Incorporate the seed into the soil,
- Use plant species that can compete with invasive annuals and reduce fire,
- Learn how to establish kochia.

Dr. Howard Horton added that seeding kochia in the fresh ash of a fire has shown to be successful. Also, the use of Plateau[®] inhibits the emergence of unwanted species and allows desirable native species to compete.

e. Dr. Durant McArthur - Results of a field study at Twist Hollow.

Dr. McArthur also used two PowerPoint presentations to facilitate his discussion. Copies of those presentations are included as Exhibit 2-e-1 HCAC Wrk Mtng – 082608 and Exhibit 2-e-2 HCAC Wrk Mtng – 082608.

Dr. McArthur discussed plant research relating to restoring western range and wild lands and tortoise food plant species. He elaborated on sagebrush species and their importance to the desert ecosystem.

In the second phase of his presentation, Dr. McArthur spoke about the Twist Hollow restoration study – The Vegetation Dynamics at a Mojave Desert Restoration site – 1992-2007. He also provided a 23-page handout which summarizes the study – Exhibit 2-e-3 HCAC Wrk Mtng – 082608.

The objectives of the project were to:

- Remove disturbance
- Improve aesthetic appearance
- Stabilize soil
- Improve tortoise habitat
- Restore native vegetation.

The plots were recorded before and after the rehabilitation efforts.

Dr. McArthur stressed that the effects of precipitation dwarfs all other factors, and that rehabilitation efforts timed with abundant precipitation are more likely to succeed. Dr. McArthur went on to say that aerial reseeding will likely fail unless the soil is disturbed. Studies show that disturbed soil responds better that undisturbed soil. Dr. McArthur discussed rehabilitating pockets and/or strips – polygons – instead of large-scale aerial reseeding.

There was discussion regarding the biggest threat to tortoises and their habitat. Is it fire, or human disturbance and impact, or invasive plant species? There was no clear answer.

3. UPDATE and STATUS

a. Washington County Growth and Conservation Act of 2008

Commissioner Gardner briefly explained that there is nothing new to report regarding the Land Bill. The legislators are waiting to add it as an amendment to a bill that is passing the Congress.

4. DISCUSSION ITEM

a. Cooperative facility opportunity (Marc Mortensen)

Marc Mortensen talked about the advantages of a partnership between HCP, St. George City and the Washington County Water Conservancy District in creating an educational opportunity. He introduced Laura Taylor, the St. George City Parks Planning Manager.

Ms. Taylor distributed a one-page concept plan showing a proposed desert garden – Exhibit 4-a-1 HCAC Wrk Mtng – 082608 and a three-page description and diagram – Exhibit 4-a-2 HCAC Wrk Mtng – 082608.

Ms. Taylor spoke about the concept of a desert botanical garden located at Pioneer Park. The vision is for an amphitheater, pavilion, restrooms and parking area. Marc asked the committee members to consider this concept when visiting the Arizona-Sonora Desert Museum on August 27, 2008. Marc emphasized that a botanical desert garden is an excellent opportunity for a partnership.

There were no other presentations or items to discuss.

The meeting was adjourned at 12:31 P.M.

Minutes prepared by Brad Young.