

HABITAT CONSERVATION PLAN
Technical Advisory Committee
November 15, 2005 3:00 – 5:00pm
Arizona Game and Fish Department Conference Room
555 North Greasewood Road
Tucson, Arizona 87545-3612

MEETING SUMMARY

Attendees: Ann Phillips, Dennis Abbate, Trevor Hare, Ralph Marra, Linwood Smith, Guy McPherson, Rich Glinski, Daniel DeBorde (City of Tucson – Environmental Services), Cathy Blasch (AGFD), Marit Alanen (USFWS), Michael Wyneken (City of Tucson – Planning), Leslie Liberti (City of Tucson – City Manager’s Office), Jessica Lee (SWCA), James Feldmann (SWCA), Amanda Best (Westland)

1) Update on Recent TAC Meetings/Upcoming Meetings

a. *Scheduled SAC Meetings:*

- **December 7**, 3-5 pm, @ AGFD. Tentative Topics: Monitoring and Adaptive Management Program and implementation/funding options; Next steps – beginning Phase 2 of the HCP process.

b. *Scheduled TAC Meetings:*

- **November 29**, 1-4 pm, @ AGFD. Tentative Topics: Critical questions and approaches to resolving data gaps in the draft HCP; Next steps – beginning Phase 2 of the HCP process.

2) Old Business

a. *Meeting Minutes – August 23, September 6 and 28, and October 11, 2005 Minutes*

Trevor said he did not receive the August 23 minutes. Guy and Rich both sent comments by email to Jessica and they were incorporated into the meeting minutes. The committee approved the meeting minutes.

b. *Action Items Identified in the Previous Technical Advisory Committee Meeting – Ground Snake and Tucson-shovel Nose Snake Discussion*

Trevor said that he had not yet gotten the chance to speak with Phil Rosen about the snakes and would report back to the committee at the next meeting.

3) New Business

a. *Review Conservation Measures Summary for Southlands and Conservation Strategies for Avra Valley*

Leslie said that the goal of this meeting was to begin pulling together all the information for both planning areas. She said that the majority of the November 29 meeting would be

spent talking about Phase II of the HCP. Leslie said that at the last SAC meeting, the committee talked about what they envisioned the HCP process and meeting structure be during Phase II. The SAC discussed how to keep working on implementation issues most effectively. Leslie said the next SAC meeting is December 7, which was rescheduled to enable the TAC to meet once more before providing their recommendations. Leslie said at the last SAC meeting, they discussed the progress thus far on the conservation measures. The SAC talked about how the HCP could connect with other regional coordination efforts. They discussed the three planning areas, and talked about where other jurisdictions are going and what the City is doing outside the HCP. Leslie said that Mayor and Council would be considering the creation of a natural resource Advisory Committee for the City this evening. She said that this advisory committee would make recommendations to Mayor and Council on broader natural resource issues. Leslie said the advisory committee could provide coordination for the various Santa Cruz River restoration projects.

Leslie noted that the TAC have not spent much time discussing the Santa Cruz River planning area because it is unclear what is going to happen with the three U.S. Army Corps of Engineers (Army Corps) river restoration projects. She noted that all three projects are on different timelines. Paseo de las Iglesias Feasibility Report recently got the final stamp of approval from the Army Corps. She said that with Tres Rios project, the Army Corps is still dealing with minor details and that the Feasibility Report and draft EIS is not yet out for public review. She said that El Rio Medio project just got kicked off this summer. Leslie said she hopes that a good public outreach effort will begin early next year before the Army Corps gets too far in the planning process. Leslie said that one topic has come up is doing a local planning discussion on the Santa Cruz River, as well as other main water courses in the Tucson area. She said that there is hope that it will be possible to integrate the three river restoration projects, the HCPs, and other local planning processes. She said that in addition to the three Army Corps plans and the three HCPs in the area (Tucson, Marana, Pima County), there is also the river multiuse benefit plan, the West Branch landowners' plan, the City's Rio Nuevo project downtown, and various regional parks and recreation plans. The goal would be to come up a plan that makes sense for our rivers, with an effort to balance water needs with habitat restoration and recreational opportunities.

Leslie said that the Southeast Arterial Roadway Plan has been sent to jurisdictions for approval. She said that TAC's recommendations for wildlife-friendly roadways has been drafted by the City and sent to Pima Association of Governments (PAG). Leslie said that PAG was open to inserting the TAC recommended language in the draft document. Leslie said the scope of work for Arizona State Land Department's (ASLD) conceptual land use process has also been sent out for jurisdictional comments. Leslie said it is important to link the HCP and the land use plan together, so that the biological goals of the HCP are reflected in their plan. She said that URS is their consultant. Leslie said a scope is out for the Lee Moore Watershed Basin Management Plan study for the Greater Southlands. The focus of the study is to evaluate the hydrology in the area, and to identify needs for regional detention/retention infrastructure. She said that there are opportunities for this study to complement the HCP. Leslie said the SAC would be involved in taking the TAC's recommendations and determine how to integrate this information process.

Leslie said that the SAC has come as far as they can with recommendations about the conservation program, implementation and funding until the conservation strategies are

better defined. She said that the SAC has suggested they could be the tracking group for all the other regional efforts that are on going. Another other idea is that SAC would not meet formally, but would rather sit in on the TAC meetings. Trevor said he likes that that option because he has heard complaints about the proportion of City Departments to citizen members on the SAC. Leslie noted that some SAC members have difficulty making the meetings. Leslie said that the committee is fairly balanced, if everyone came to the meeting. Trevor asked who would make up the natural resource Advisory Committee. Leslie said that the committee would be broader than just natural resource type people. She said there are two functions of the group: natural resource issues and evaluating the United Nations Urban Environmental Accords. She said the accords were drafted and signed by 50 mayors from around the world and includes 21 elements. Leslie said that since it was drafted to be an international document, some of the elements are less applicable for Tucson. Leslie said that one accord that seems unfeasible is the local production of foods. She said that this committee would be looking at these accords and developing refined measures that are appropriate for the Tucson region. Trevor asked what was the City's reason for doing this, especially since the federal government did not support the UN Environment Day. Leslie said a Council Member introduced the accords. She said that there is general support throughout the City for sustainability. Leslie noted that are some issues that are not addressed in the accords that Tucson should be worried about such as the urban heat island. She said that the committee would take the lead in coordination with the dozen other City advisory committees already in existence, that are doing work relevant to a sustainability program.

Ann asked about the buffelgrass resolution that the TAC decided to write and an update on the buffelgrass committee. Ann said that she talked to Travis Bean (University of Arizona Desert Lab) today, and he said that the Weed Management Association has been resurrected. Ann passed out a list of possible partners to work with the City and University to tackle buffelgrass and asked the TAC to review the list. Ann also passed out the draft resolution she drafted and a copy of a report of a recent local brush fire, caused by buffelgrass, which killed a person. Michael noted that he is not sure what too do with the buffelgrass recommendation because the committee was not established to make recommendations directly to Mayor and Council. Rich said that the TAC agreed that the buffelgrass issue needs to be addressed by the committee because it could impact the habitats that they are trying to protect in the HCP. He suggested including a comment on buffelgrass in the introduction to the draft HCP. Michael suggested it could be an overarching conservation measure throughout the draft HCP.

Dennis said that in the CFPO recovery plan, for example, they address managing fire. Dennis said that the TAC might need to think more specifically about what actions should be taken into account for each species. Ann said there are two things going on. She said the first is the City's response to the buffelgrass invasion right now, and asked the TAC for feedback on the documents she prepared. Dennis said that if the TAC is addressing each species of concern in the plan, then we should relate the threat of fire to each species in their respective action plans. Guy said that he thinks that the buffelgrass problem is an overarching issue, but that the fire threat is different for each species. Dennis said that if there is language that deals with restoration in areas for CFPO, that there needs to be some language that discusses managing for fire. He suggested making a plan of action, in respect to each species. Leslie said that, for the HCP, it might be better to address buffelgrass in the respective threats and stressors section for each species. Leslie suggested that the TAC might want to revisit the threats

list and see if the buffelgrass threat is greater than was originally thought. This might help to figure out how to integrate buffelgrass in for each of the specific species. She said that once buffelgrass is addressed in the threats and stressors section, it would have to be carried out in the impacts assessment, conservation program, and the managing and monitoring section for each species.

Rich stressed still putting a paragraph detailing the general buffelgrass threat into the introduction of the draft HCP. Rich suggested making edits to Ann's paragraph and taking out any language that does not discuss specifically habitat conservation. Dennis said in the threat and stressors section of each species, he advocates draft language that would detail the specific action of assessing the level of invasion for the different areas of concern. He suggested a buffelgrass mapping effort in areas of concern. He said that Travis Bean had suggested the first action point should be to aggressively map buffelgrass. Ann said that the remote sensing department has been working with Tumamoc Hill to study optical options for eradication treatment. Leslie said that the language Rich suggested could be appropriate in the baseline section of the draft HCP. This topic could fit into the description of the natural condition because the City will be dealing with environments that have been altered by buffelgrass. Leslie said that emphasizing the threat of buffelgrass could be reiterated appropriately in the species-specific sections. The group thought that was a good idea. Trevor suggested Ann talk to Tom van Davenport, with the Arizona-Sonora Desert Museum, because he has received grant money to do an initial buffelgrass-mapping project.

Leslie passed out an excerpt of the burrowing owl conservation program in the draft Marana HCP, to provide an example of what the Tucson HCP document will eventually look like. Leslie went through the handout, discussing how the information the TAC has accumulated for each species will fit into the draft HCP format. Leslie said that the conservation measures should spell out exactly the City's responsibility in fulfilling the goals of the HCP. She said that it requires a great level of detail, noting specific City ordinances and biological requirements. She said that once the specific measures have been listed in the draft, the adaptive managing and monitoring section follows it. She said that the monitoring and adaptive management section of the draft HCP is not something that will be completed this year. She said that an effective managing and monitoring plan is important because it will tell us how well the proposed conservation plan is working. She said that once the monitoring mechanism has been established, then the adaptive management and monitoring program will be written with benchmark goals. Leslie said interpreting data from the monitoring program is difficult because success of the conservation program could be affected by natural variability and conditions in which the City does not have control over. She said that if it is determined that the benchmark goals are not being met, then the management and monitoring plan will lay out actions the City can take to improve the success of the conservation program. She said the final section in the conservation program is an evaluation of the effects of the HCP.

Ann asked about the timeline for the HCP and if the benchmarks would cover the entire length of the permit. Leslie said yes, but that the plan could be written specifically to meet the individual goals for each species. Leslie said that depending on the species, the adaptive management might be timed differently, with more or less frequent monitoring and benchmark goals. Leslie said that the City wants to write as much of the conservation program as we can by the end of the year, while acknowledging that there are still many unanswered questions. Leslie noted that there is an "ongoing adaptive

management” paragraph that deals with monitoring into perpetuity. Leslie noted that eventually, the final HCP would have a greater level of detail. Rich said that the Marana plan for burrowing owl would be good to apply in the Southlands and Avra Valley.

Leslie suggested the TAC switch to discussing the Southlands. Leslie passed around comments to the conservation measures summary matrix from Guy and Dennis for Pima pineapple cactus (PPC) and cactus ferruginous pygmy-owl (CFPO). Leslie asked Dennis to review his thoughts for CFPO conservation by evaluating the goals and objectives for with respect to the environmental resource zone (ERZ) and Native Plant Preservation Ordinance (NPPO) ordinances. Trevor noted that the ERZ ordinance does not protect the upland connectivity of washes to each other. Dennis said that CFPO do not necessarily disperse through the washes, but rather hop between riparian areas. Dennis suggested planting/conserving trees in the upland to provide cover for the owl while they disperse between washes. Trevor mentioned in the critical linkages section there is no mention of connectivity over Interstate 19. Leslie said it was not specifically noted because the City does not have control over the linkages in this area. Trevor noted that the ASARCO property is of importance to CFPO and PPC.

Leslie said regional coordination has been ongoing for PPC. The new Priority Conservation Area (PCA) identifies two potential reserve areas, one centered on the Santa Rita Experimental Range and the other in Altar Valley. Leslie said the main issue is how to conserve the separate populations while also providing connectivity between them. Leslie noted that any on-site set-asides in the Southlands could be entirely isolated by development south of the City in Pima County. Leslie noted that at the regional coordination meetings for PPC, people have been discussing how to provide connectivity between the Southlands and Santa Rita Experimental Range. She mentioned, for example, that the Hook M Ranch is coming in for rezoning south of the Southlands. Trevor said PPC conservation should be piggybacked on CFPO conservation because they both involve flying creatures (bee pollinators). Trevor stressed the importance of the western edge of the Southlands reserve area. Dennis said that his concern is the characteristics of Interstate 19 itself as a potential barrier to CFPO dispersal, in particular with its high traffic volume. Leslie suggested that there are opportunities to add language to the HCP about the City coordinating with Arizona Department of Transportation (ADOT) to study where and how the owls are crossing Interstate 19 and Nogales Highway.

Leslie suggested going through the conservation measures summary by species. She noted that the watershed reserve strategy captures 100 percent of the potential CFPO habitat. The linkages that are important for CFPO are the connections to Pima County Regional Park and through the Davis Monthan Air Force Base paddle. Dennis suggested that these connections could be emphasized by the NPPO. Trevor suggested amending the ERZ ordinance to increase the buffer around the washes. Michael said the wash ordinance has a 50-foot buffer and the ERZ says the buffer is in the 100-year floodplain. Michael said that the City is slowly moving forward at relooking at combining or redoing the ERZ and wash ordinances. Leslie said it is good to look ahead regarding how to integrate the HCP goals into the changes in ordinances when they come up for review. Leslie said that under the “protect habitat elements” section, protecting native and diversity composition is important to create good dispersal habitat. Leslie said that there is also a possibility to integrate dispersal habitat with the habitat enhancement from future retention/detention basins, resulting from the Lee Moore Watershed Basin

Management Study. Trevor noted that domestic cats could also become a barrier to movement.

Leslie asked Dennis if there is any guidance for appropriate CFPO-friendly roadway design. Dennis said that they are struggling to understand recent data dealing with the specific locations of where owls did cross roads, and would be producing a report for ADOT within the next few months. Dennis said that the ERZ ordinance does not address the possibility of what would happen in the event that a dispersing owl is seen or a nest was found. Leslie said there is standard protocol for modifying construction activities and that could be incorporated into the matrix. Leslie said that she feels USFWS and AGFD have a good handle on where owls are, thus there could be triggers established of actions to be taken if a CFPO is moving through a construction zone. Marit requested Leslie talk with Scott Richardson (USFWS) because currently, USFWS requires two years of surveys in the Southlands area. Leslie asked Dennis if had any more specific details to his general recommendation of "fencing and wall guidelines." He said there is some antidotal evidence that some fencing structures could affect CFPO. Leslie asked Dennis what would be the next steps to learning more about the impacts of fences. Dennis suggested meeting with Scott to review AGFD records to see what types of fencing might have caused problems in the past. Dennis suggested a literature search and additional consultation with USFWS. Leslie said she would talk with Scott before the next meeting. Dennis said as an overall thought, the smaller the mesh size in a fence structure, the greater the collision and loss potential. Trevor noted that chain link fences are not good for biodiversity in general.

Leslie said she would ask Mima Falk to give an update on the PPC coordination at the next meeting. Trevor mentioned that again he saw signs with a City ordinance in the wash prohibiting off-road vehicles near Speedway Boulevard and Houghton Road.

For needle-spined pineapple cactus (NSPC), Leslie said that Marc Baker noted the 5-acre area where he found the cacti. Trevor asked if that small area would be preserved in place. Leslie said that for now, the City plans to recommend preserving the NSPC in place, then to look at their population and range in more detail in if the planning area is expanded. Trevor noted that Pima County is going to move the PPC mitigation bank from Section 15 to the Altar Valley. Trevor said that 1,600 acres of NSPC habitat is part of this exchange, which is located north of Cienega Creek.

Leslie noted that Linwood is not present to discuss pale Townsend's big-eared bat (PTBB). She said that PTBB foraging habitat was modeled broadly, and that Linwood noted the edges of the washes are highest priority for the bat. Linwood had suggested protecting the washes within the City through the ERZ ordinance. He also suggested maintaining stock tanks for where bats could drink. Trevor noted that it is important to keep lights from new developments away from these high priority foraging areas so the bats are not impacted. Leslie said she talked to Susan Shobe about research on the affects of lighting on PTBB, but there were not any studies on the negative effects of lighting on bats. Trevor said that he thought Linwood's point was that, while some bats benefit from lights, lights affect the PTBB negatively. Guy asked if anyone has talked to Sandy Wolf about her video footage of lesser long-nosed bats (LLNB) drinking in hummingbird feeders within the City. Sandy believes there are too many LLNB for there not to be a colony that is currently unaccounted for.

Leslie turned the conversation to burrowing owl. Trevor and Rich said they think that two burrowing owl management areas (BOMAs) could be appropriate in the Southlands.

The TAC switched to talking about the Avra Valley planning area. Michael brought the next iteration of the map showing conservation priorities and land ownership in Avra Valley. Michael noted that while there are arrows indicating connectivity corridors on the map, the widths have yet to be specified. Michael mentioned that CAVSARP was involved in Section 7 consultation with USFWS regarding the recharge basins. Ralph thought it happened around 1999 and 2000.

Ann said that the map does not indicate the corridor further north on the Santa Cruz River through the Simpson Farm site. Trevor mentioned that Pima County is working hard to acquire lands to provide connectivity. Ann also noted that the Santa Cruz River channel itself is labeled as a riparian area on the map. Ann suggested adding "Harris" to the riparian designation so people know who is characterizing the riparian habitat.

Ann pointed out that the Simpson Farm Site has a 99-year contract for land conservation, thus those areas should be marked as conservation corridors. Ann advocated for including more lands around the Simpson Farm site, not only because it is right in the middle of the Santa Cruz River floodway, but also due to its proximity to the Pima County's land acquisition and presence of wet water and cottonwood/willow habitat. Trevor noted that the corridor through SAVSARP is not captured in the City of Tucson habitat conservation strategy in Avra Valley. He advocated trying to protect the western edge of that parcel while acknowledging that the recharge basins have yet to be platted out. Ralph noted on the map where the development will go and what areas may be impacted. The group concluded the map adequately portrays the corridors. Michael noted that the north-south corridor focused on the riparian systems, while the east-west corridors were on upland areas, trying to connect Ironwood Forest National Monument to Saguaro National Park West. Ralph explained that, depending on what type of water quality the City wants, future decisions would impact the City-owned lands in Avra Valley. Ralph said Mayor and Council could make the decision for the new total dissolved solid level for Central Arizona Project (CAP) water in approximately a year and a half. He said that increased water treatment would require more land for these facilities. Trevor said, that with the comments given on the map today, he is comfortable with the conservation recommendations visually shown on the map.

Michael said that next step would be to show this map to USFWS. Ralph said that he believes that land will be needed to treat the brine stream in 2015 or 2020, unless the City acquires more surface water rights to CAP water. He stressed that brine treatment involves a large area (in square miles) of evaporation ponds. He stressed that new research may prove alternatives to evaporative ponds. Ralph noted that some companies are looking into making brine concentrate into a product from Colorado River water, but that with effluent it is a different story. Ralph said the brine ponds that are being suggested in the long-range plan, are based on research and opportunities available to the City right now. Rich suggested there would be an opportunity to plan trees along the edges of the evaporation ponds.

There was a discussion about Avra Valley ground water and the thought processes behind Tucson Water's proposed strategy to maintain water security. Ralph noted that 22,000 acres in Avra Valley were obtained by the City for water development purposes. He said that SAVSARP will be able to, eventually, recharge 100,000 acre feet per year,

while CAVSARP currently recharges approximately 80,000 acre feet. The group talked about the ecopaths over the CAP canal and where they were in proximity to the mapped corridor paths.

Trevor said he would get more information about the Blanco Wash. Michael said he would make sure the TAC comments would be integrated into the next iteration of the Avra Valley map.

4) Call to the public

No members of the public spoke.

5) Next Steps/Future Meetings

The TAC will finish up their recommended conservation programs for Avra Valley and Southlands at the November 29 meeting.