

HABITAT CONSERVATION PLAN
Technical Advisory Committee
June 6, 2006. 9:00 – 11:00 am
Arizona Game and Fish Department Conference Room
555 North Greasewood Road
Tucson, Arizona 85745-3612

MEETING SUMMARY

Attendees: Rich Glinski, Ann Phillips, Linwood Smith, Trevor Hare, Dennis Abbate and Cathy Crawford (Arizona Game and Fish Department), Ralph Marra (Tucson Water Department), Lori Anderson (Coalition for Sonoran Desert Protection), Jennifer Becker (Pima County Flood Control District), Michael Wyneken (City of Tucson – Planning), Leslie Liberti (City of Tucson – City Manager’s Office), Jessica Lee and Geoff Soroka (SWCA)

1) Upcoming Meetings TAC Meetings

- a. *Recent/Scheduled TAC Meetings:*
- **June 20, 9am - noon @ AGFD.**

2) Old Business

- a. *Meeting Minutes – March 21, 2006; April 4, 2006; April 18, 2006; May 2, 2006*

Leslie said that due to the May fieldtrips, the approval of meeting minutes was postponed until today’s meeting. She said that the meeting minutes were sent out previously, and that the minutes from April 18 required revisions and so an updated version had also been sent to the TAC members. The TAC approved the four sets of meeting minutes.

3) Expanded HCP Planning Area Conservation Targets

Leslie passed out three documents containing initial recommendations for new target species within the Expanded Planning Area for the City HCP, and a fourth document that explained the criteria used by Geoff Soroka (SWCA Biologist) in creating the two new lists of species that were not included in the Segment I master list of conservation targets. She noted that the first table was created by taking into consideration the final species list developed in Segment I of the HCP, and those species that were considered absent in the original planning area, but that have habitat within the expanded planning area, were reclassified as “present or potential to occur”. Species for which listing status had not been considered in Segment I were reclassified as having “uncertain status”. She noted that the species in boldface are the species that might now be considered as part of the HCP planning process. She said that the expanded planning area would likely include lesser long-nosed bat habitat. She pointed out that there are four species associated with Cienega Creek that contain habitat within the expanded planning area. There are six more species on the list that are labeled as “listed or likely to be listed,” and four species labeled as having “uncertain listing status”. She explained that, in order

to shorten the species list, she removed species that are only included as having “potential for restoration”.

The other two handouts were prepared by SWCA, Inc. and identified species that had not been considered in Segment I since they do not have any federal status. These species are considered by Saguaro National Park and Coronado National Forest to be sensitive, and should be considered for the HCP since the expanded planning area now abuts these federal lands. Leslie noted that Geoff created these lists after coordinating with biologists from Coronado NF and Saguaro NP. She said that the TAC should prepare to discuss all of these lists in more detail at the next meeting.

4) Environmental Resource Report (ERR) Recommendations

Leslie explained that the ERR is a document that the City requires developers to complete for any rezonings on lands that contain significant biological resources, providing a resource for City staff to obtain information on the site upfront, in order to determine if the rezoning is appropriate. The ERR also provides a mechanism for the City to work with the applicant from the beginning in order to integrate environmental sensitivity into the project site design. She reminded the TAC that she provided a spreadsheet at the May 2 meeting that detailed the similarities and differences between the ERR and Pima County's equivalent report, the Biological Inventory Report (BIR). She said that as the City revises the ERR, any TAC comments or recommendations would be appreciated.

Trevor said that overall, he thinks the current ERR is substantial. He noted that the ERR captures a lot of the information that Pima County asks for in terms of the Sonoran Desert Conservation Plan (SDCP), including important riparian areas, special elements, and sensitive species. Dennis asked if there was a size specification for the ERR. Leslie said that the applicant has to do an ERR, as recommended by City staff, regardless of the size of the parcel. She then noted two examples of rezonings that do not require an ERR; infill projects located within the City core that have been previously graded and contain no washes, and any projects that are going to reuse an existing building. Ralph asked if the composite map requires just a map of the parcel itself, or if it also needs to include the surrounding area. Leslie said that the map just has to detail the parcel itself, but that the ERR could be amended in order to require including more of the adjacent lands.

Linwood asked Leslie why the City is revising the ERR. Leslie explained that the City is in the process of revising the land use code to create a new zoning category called “planned community zone” for large developments totaling more than 500 acres in size. The City does not feel that the ERR, as written, is appropriate for dealing with these large-scale developments, especially since the ERR does not require developers to look offsite and consider impacts on a larger scale. Also, there are many new resources available for developers to reference when considering impacts from their project that were not available when the ERR was first drafted. She explained that the current ERR was developed by Development Services and Planning, and was written from a technical perspective rather than biological.

Trevor suggested that, in the vegetation section, it would be important to include a discussion about invasive species issues in the area (especially within washes and in

Avra Valley). He would also like to see more detail about the vegetation, including critical landscape linkages and special elements. Leslie explained that more detail about vegetation is reported to the City through the completion of the Native Plant Preservation Ordinance (NPPO) permit. However, she said that Pima County encourages the applicant to begin the NPPO permit process earlier in the BIR process. Leslie noted that she does not want the City to be limited to just the information that is reported through the BIR, with the recognition that she also wants to make the report as easy for the applicant as possible.

Leslie asked the TAC what distance outside of the parcel the applicant should be required to consider. Trevor suggested evaluating land within 0.5-1 kilometers outside the parcel boundary to get a good idea of the larger landscape functions or where the local habitat islands are. Leslie noted that some of these features to evaluate are not available in synthesized resources, such as wildlife corridors. She said that Pima County's critical linkages provides some information, but that the resource was developed on such a large scale that it does not provide enough information on a smaller scale. Rich noted that wash systems usually successfully demonstrate vegetation linkages and wildlife corridors. He suggested that the City require developers to have an approved jurisdictional water delineation (JWD), which would not only require developers to map the washes on the parcel, but would also require developers to look at adjacent properties up and downstream. The JWDs also require mitigation plans to be developed. He noted that developers are looking at many of these issues very early on to evaluate liability and risk concerns. Leslie agreed that some developers do, but that many ERR applicants do not look ahead. She noted that one role of the ERR process is to inform the applicants about the various steps that they need to take, including the pursuit of a Clean Water Act 404 permit. She noted that City staff is not in a position to require an applicant to do a JWD before the rezoning hearing, because there is no guarantee that the rezoning would be granted. Trevor noted that for most parcels, the aerial photographs should be enough to clearly show all wash systems, thus potential jurisdictional waters could be clearly envisioned. Leslie noted that the City Stormwater Division is almost done mapping riparian habitat for the City and future annexation areas and that the map combines Pima County's important riparian areas, Harris riparian data, Shaw's WHIP maps, and the Tucson stormwater management study maps. She said that eventually, the City will be ground-truthing these models and that ultimately, this new map created by the Stormwater Division would be the basis for the new wash ordinance.

Ann asked Leslie if the City could use the ERR checklist to educate developers and to promote environmental considerations, such as the presence of native and non-native plants and the buffering of washes. Leslie responded that the ERR can indeed be used as a tool to educate both City staff and the applicant, while also outlining the City's expectations for the parcel from the beginning of the rezoning process. Leslie noted that other land use manuals could be integrated into the ERR, such as the Water Harvesting Manual and the future wildlife-friendly road crossing manual. Ann suggested that the ERR could be written to pose questions such as, "How would this plan be in compliance with the water harvesting manual?" Ann contributed additional suggestions to the composite map, including the renumbering of the priorities in a manner that places drainage ways/riparian areas as most important (number one), while gateways and scenic trails would be of secondary importance (number two or lower). For the vegetation and wildlife maps, she suggested including a description of the evidence of

wildlife use (prints, nests, scat, feathers, etc.). Leslie suggested that it would be helpful to include in the ERR a list of things to look for when walking through the parcel.

Rich noted that the ERR would not necessarily force the landowner to get more intimate with the land because they would likely hire an environmental consultant to complete the report. Ann agreed, but added that regardless of who writes the report, it still builds a body of knowledge. She also suggested mapping features of the parcel onto the aerial photograph, including site photographs. Rich noted that after mapping all of the information required within the ERR, it would contain almost as much information as that covered within a JWD report. Linwood noted that from his experience gained in writing ERRs, the end of the report usually includes a photo gallery, including UTMs and the direction of photographs taken. Ann noted that there should be a section in the ERR that stresses the importance of evaluating the parcel for the presence of invasive species. Jessica noted that SWCA usually looks for invasive species on the ADOT Arizona Natural Resources Noxious Weed list. Trevor said that he would like to see critical and sensitive biological communities (CSBC) on the map. He volunteered to talk to Bill Shaw about this map to see how he feels about it now, 10 years later.

Leslie said that she would check with Frank Sousa (City of Tucson) on the status of the riparian envelopes. Trevor said that he would like Frank to discuss his rationales when creating wash buffers, and that he hopes that biological considerations are incorporated into his envelopes. Leslie explained that the City decided not to map buffers on the first GIS layer, only riparian areas would be mapped there. She noted that the plan is to first identify the areas that would be considered “no disturbance” areas, and then secondly, to identify areas where some types of intrusions might be appropriate (trails, natural stormwater features, etc). She said that the first revision to the wash ordinance would be sent out to the TAC. Trevor said that he would like other features to be considered, such as vegetation structure for wildlife (overstory, midstory, and understory). Linwood added that photographs in the ERR would help City staff to understand the landscape, more so than with just text descriptions. Ralph asked why radon gas maps are included in the ERR. Rich said that it is likely because that information is required in a Phase I Environmental Site Assessment (ESA).

Leslie noted again that the “planned community zone” is for large developments and that one goal of the rezoning permit should be to initiate a process in which developers will need to start looking at sustainability design components early on in the planning process. Ann added that biological impacts should be emphasized on the composite map. Trevor added that he would like to see geological features such as rock outcrops and HDZ slope ordinance portrayed on these maps. Leslie asked for any additional thoughts to be sent by email.

Leslie announced that a non-profit group, SustainLane, ranked Tucson 20th out of 50 cities based on a sustainability index. She explained the criteria, and noted that Tucson did not fare well in the sprawl index and the number of people who take alternative transportation.

5) **Report from the El Rio Medio Subcommittee**

Ann noted the individuals who attended the El Rio Medio subcommittee meeting earlier that morning, including Trevor, Ralph, Linwood, Michael, Mark Briggs (consulting

ecologist), Kendall Kroesen (Tucson Audubon Society), Lori, Peg Weber (City of Tucson Parks and Recreation Department), Dianna Hadley (neighborhood activist), and Jessica. She said that the group decided to conduct a fieldtrip along the Santa Cruz River between Congress Street and Prince Road by golf carts along the pedestrian trail. The goal of the fieldtrip is to start specifying locations for restoration to be included in the locally preferred alternative to be sent to the U.S. Army Corps of Engineers. She passed out a vegetation species matrix, developed by Tucson Audubon Society, which could be included in the plans. She said that the group decided to create a list of restoration items that should be done no matter which alternative is picked, the three alternatives being: no irrigation, reclamation irrigation, and an incorporated recharge plan. Ralph noted that the plan could include a blend of these three options. Leslie asked Ann if she thought these recommendations could be translated into HCP recommendations for the Santa Cruz River planning sub-area. Ann said yes, because the likelihood that USACE would be awarded federal money for this project is low, thus it would be necessary to achieve the restoration goals through other planning efforts. For example, once the critical vegetation patch size is developed and the plant list specific to water availability is specified, then the project could be taken up by a neighborhood group, or worked into a development plan. She said that the restoration guidelines would provide a model that civil engineers, architects, and developers could use to guide their projects. She stressed four important points regarding the restoration recommendations: (1) the use of native vegetation and the exclusion of invasive species; (2) adding structural components such as rock piles, etc.; (3) incorporating the Stormwater Harvesting Manual; and (4) species-specific recommendations (burrowing owl, toads, bats, etc.). She noted that, however, the manual was developed for urban landscape, so passive water harvesting techniques, such as earth shaping, would need to be specified in greater detail. The TAC discussed vegetation patch sizes, including species-specific scientific literature and water availability. Ann mentioned that at the meeting, Mark Briggs stressed that even small patches of vegetation are valuable to the community. Ralph noted that there are substantial pollution concerns between 22nd and Congress Street, so excessive irrigation should be avoided in this area, but there are opportunities in this stretch of the Santa Cruz River in terms of concentrating rainwater. Ann noted that the set of principles developed for El Rio Medio could be applied to other sections of the river as well. Trevor suggested that the patches of Chilean mesquite along the river could be left in a more natural state, if the City and County stopped trimming them back, creating a more useful environment for the natural integrity of that stretch of the river.

Trevor noted that any ground disturbances could impact toads. Leslie noted that Arizona Game and Fish Department (AGFD) staff could help try to remove the toads before land impacts were made. Trevor agreed, but brought up that the timing could be difficult because removing toads can only be done during summer rains. He said that AGFD has done research on bridge design and bat populations. Ann noted that ingress/egress access to the river would also need to be addressed with respect to wildlife movement. Trevor suggested using a regional Tucson map to help envision wildlife corridors, and then to figure out how to help integrate them into river crossings. Dennis noted that AGFD has been conducting mountain lion studies by following two lions wearing satellite collars. Leslie asked the TAC for opinions regarding the best way to start identifying wildlife corridors, because current information is either on too large of a scale, or is just species-specific. How can we pull this information together to start understanding small-scale wildlife corridors, so we can enhance them with restoration? Trevor said that wildlife corridors are mainly dependent on vegetation and open space. He added that hopefully this would become clearer during the fieldtrip on Friday.

Dennis stressed that the TAC should consider the dangers of creating a situation where wildlife is attracted into an area that puts them at further risk, especially in terms of road crossings and disease. The TAC discussed the potential of golf courses as wildlife habitat and corridors. Leslie said that, in the near future, the City is planning to work with Pima County to develop a green infrastructure plan, and is excited about reframing the green space issue. She noted that, typically, natural areas, parks, and stormwater basins have been separated from each other without linkages. She said that these features would be mapped, in order to plan linkages, and to also create policies to preserve green infrastructure. Cathy reminded the TAC that wildlife pose liabilities that should be kept in mind. Leslie noted that the City's goals are not to encourage mountain lions to come into the urban area. Rich agreed, but stressed that predators follow prey, and that cannot always be managed. He suggested reading the book, "Beasts in the Garden," by David Baron. Trevor also suggested reading Dr. Michael Rosenzweig's work on reconciliation ecology. Cathy reminded the TAC that public education is important in restoration work.

6) Update on Buffelgrass

Ann reminded the TAC that the buffelgrass management and monitoring plan has yet to be finalized. She noted that at the last discussion, the TAC wanted to see all the possible research surveys at once so that they could decide how to spend the grant money. She said that Mima Falk (USFWS) has had a difficult time connecting with Todd Esque (USGS) on developing a seed trapping strategy. She said that Mima has been working with Marc Baker (consulting ecologist) on developing a survey strategy for Pima pineapple, needle-spine pineapple, and other cacti in the expanded Southlands planning sub-area. Travis Bean (University of Arizona Desert Lab) has prepared the seed bank and cost estimate. Mark Briggs prepared a draft vegetation quality and monitoring plan. Cathy said that AGFD could not conduct research under the Segment 2 grant because money spent by AGFD would have to be detailed upfront with the grant application. Thus, AGFD would need to know soon if the TAC would want to do the burrowing owl tissue sampling next year with the Segment 3 grant. She said that Mark Ingraldi (AGFD) is finishing up the current burrowing owl survey in Avra Valley. Ann asked if burrowing owl locations are known from the portion of Avra Valley where the land would be sprayed with herbicide. Leslie said yes, that AGFD knows the location of the burrows and the number of birds. She said that these areas are going to be hand sprayed or mowed. Ann asked Leslie if there could be time at the next TAC meeting to finalize these plans. Leslie said yes. She also noted that for future surveys and research studies, the City would have to announce one large request for proposals (RFPs), so applicants could apply. She noted that the TAC could sit in on the selection process, which would happen sometime before October.

Linwood asked about the results of the Merriam mouse study. Jessica said that she would check with Dr. Ken Kingsley and report back at the next TAC meeting.

6) Call to the Public

No members of the public were present.

7) **Next Steps/ Future Meetings**

The TAC decided to cancel the July 4 meeting, and to make up the two hours lost by this decision, one hour would be added to each of the scheduled meetings on June 20 and July 18. Thus, the TAC would meet from 9am to noon on those two days, instead of from 9am to 11am as previously scheduled. Leslie said that the next meeting would switch to discussions regarding the expanded HCP planning area. Leslie also said that she would send out the link for the City Stormwater Harvesting Manual.