

**CITY OF TUCSON
HABITAT CONSERVATION PLAN
Stakeholder Advisory Committee
September 21, 2005 3:00 – 5:00pm
Arizona Game and Fish Department Meeting Room
555 North Greasewood Road**

MEETING SUMMARY

Attendees: Sherry Barrett, Carolyn Campbell, David Goldstein, Lori Lustig, Dennis Rule, Greg Hess, Cathy Blausch (Arizona Game and Fish Department), Emily Brott, Nancy Peterson (alternate for City of Tucson – Environmental Services), Michael Wyneken (City of Tucson – Planning), Leslie Liberti (SWCA)

1) Update on Recent SAC Meetings/Upcoming Meetings

a. *Scheduled SAC Meetings:*

- **July 27**, 3-5 pm, @ Game and Fish. Tentative Topics: Feasibility of implementation and funding options (follow-up to discussion on July 13); overview of TAC recommendations for Southlands.
- **August 17**, 3-5 pm, @ Game and Fish.
- **August 31**, 3-5 pm, @ Game and Fish.

b. *Scheduled TAC Meetings:*

- **July 26**, 1-4 pm, @ Game and Fish. Tentative Topics: Presentation on state trust land reform initiative; continue development of conservation strategies for Southlands.
- **August 9**, 1-4 pm, @ **Fish and Wildlife**. Tentative Topics: Presentation on Tucson Water 50-year water plan; covered activities and initial conservation measures for Avra Valley.
- **August 23**, 1-4 pm, @ Game and Fish. Tentative Topics: Continue development of conservation strategies for Avra Valley.

Leslie provided an update on upcoming TAC meeting topics. She explained that the Tucson Water presentation had been changed from August 9 to August 23. The TAC will still be considering Southlands conservation strategies on August 9.

2) Old Business

a. *Meeting Minutes – Discussion and Approval of May 4, May 26, and June 22, 2005 Minutes*

Leslie suggested that since most of the SAC members had not had a chance to review the meeting minutes, that approval of all three sets would be held over until the next meeting.

David noted that Trevor's statement about funding for the SDCP on page 11 of the June 22 minutes did not match what he remembered from the County's stakeholder recommendations. Carolyn agreed and said that she would send the City the actual language regarding the cost split between public and private sources. Leslie said that she would add the language into the minutes.

b. Action Items from Previous Meeting

At a previous SAC meeting, members had requested maps and calculation comparing the acreage of habitat predicted in the County habitat models versus the City's revised models. Leslie handed out a sheet that showed, for each proposed HCP target species: the acreage of habitat predicted by the County models across the entire county, the acreage of habitat predicted within the Tucson HCP planning area, the percentage of total habitat for each species that falls within the Tucson HCP planning area, the acreage of habitat predicted within the Tucson HCP planning area based on the City's revised habitat models, and the percent difference in predicted habitat within the Tucson HCP planning area based on the Pima County models versus the City's revised models. For most of the species, the amount of countywide potential habitat that falls within the Tucson HCP planning is between 0.2 and 5 percent. Only for the yellow-billed cuckoo is a larger percentage (13 percent) of the total habitat found within the planning area.

Leslie also handed out maps for each of the species that shows how the two habitat models (County versus City) compare. She explained that the City's burrowing owl model took a more refined look at potential habitat in the Southlands, with only ridges that are not subject to frequent sheet flooding being considered potential habitat. In the Santa Cruz River and Avra Valley planning areas, the models matched up pretty well. Due to the refinement of the habitat model in the Southlands area, the City model predicts 55% less habitat for the burrowing owl than does the County habitat model across the entire Tucson HCP planning area.

The primary difference between the City's and County's yellow-billed cuckoo habitat models were that the City's model showed habitat restricted to the floodway of the Santa Cruz River rather than the broader floodplain. It had been noted that there are many areas within the floodplain that no longer receive flood flows, except in the most extreme flood event, and therefore do not receive sufficient water to support riparian –obligate cottonwood and willow trees that this bird prefers for nesting. Another difference in the models was that the County showed cuckoo habitat along Brawley was and the City's model does not. However, in later discussions, the TAC determined that the Brawley/Altar Wash complex does provide dispersal habitat and the model will need to be expanded to include this area. Currently the City model predicts nearly 82% less habitat within the HCP planning area than does the County model, but this difference will be reduced once habitat along the Brawley Wash is included.

The City used the Tucson shovel-nosed snake habitat model that Phil Rosen developed for the Town of Marana's HCP. Phil felt that this model was equally applicable to the City planning areas as for Marana and the strength of the model is reflected in the fact that it was used in the petition to list this species that was recently filed with the USFWS. Phil's model was based primarily on soil type, which was not used in the County model, and the types of soils included in the model were carefully checked to ensure that they accounted for all of the known records for this species in Pima County. The City model predicts 78% less habitat for the shovel-nosed snake than does the County habitat model across the entire Tucson HCP planning area.

The County and City pygmy-owl habitat models are quite different; however, there were fairly significant problems with the types of habitat included in the County model and as a result it was never used in the development of the Conservation Land System. The City's model was developed through discussions with Arizona Game and Fish

Department and USFWS. Because the model was created by experts drawing lines on a map around areas with potential breeding/overwintering and dispersal habitat, the model does not show potential habitat areas outside of the City planning area because it would have been too time consuming to do so. Instead, Scott Richardson identified critical dispersal corridors and actual dispersal routes that have been taken by owls and these are included in the habitat map to provide a large-scale context. Carolyn asked if the pygmy-owl dispersal corridors could be mapped at the parcel level. Leslie replied that it could be done, but wasn't that the City had the time and resources to do so at this point. The City model predicts about 80% less habitat for the pygmy-owl than does the County habitat model across the entire Tucson HCP planning area.

The City's Pima pineapple cactus (PPC) habitat model was developed based on input from Mima Falk. The main difference between the City and County models is that the City's model excludes riparian areas (using the Harris riparian layer) from potential habitat. The result is that the City model predicts 24% less habitat for the PPC in the Southlands than does the County habitat model.

For the ground snake, the City also used Phil Rosen's habitat model. Like the shovel-nosed snake model, this was based primarily on soils. The City model predicts almost 80% less habitat for the ground snake than does the County habitat model across the entire Tucson HCP planning area.

The pale Townsend's big-eared bat (PTBB) habitat model represents the once case where the City took a broader look at habitat than did the County. The County model was influenced heavily by slope and as a result, only showed small patches of habitat scattered across the Southlands. The City model was based solely on the presence of a suitable vegetation series (paloverde-mixed cacti or grassland) and did not try to account for whether there were actually suitable habitat elements present in these areas. There is no potential breeding habitat within the City, so this model is simply trying to capture potential foraging habitat. The City model predicts 430% more habitat for the PTBB than does the County habitat model; however this is a bit misleading since the City model is so broad that the TAC has chosen to take a more selective approach to considering potential bat habitat that focuses on riparian areas and riparian/upland edges and the creating of foraging and day roost opportunities using landscaping and appropriate bridge design.

c. Topics Held Over from Previous Meeting – Questions from Joint Meeting

There were no questions or comments regarding the joint meeting.

3) New Business

a. Covered Activity Scenarios for Southlands

Michael handed out a sheet of calculations that the Planning Department developed as an initial assessment of how much development would occur in the Southlands during the proposed permit period. The sheet is titled *Southlands Preliminary Population, Density & Buildout Estimates*.

Michael then went through the calculations on the handout and explained the assumptions behind them. The first set of calculations is to determine the approximate

amount of developable land in the planning area. The gross buildable area was determined by taking the total planning area and subtracting existing development, riparian habitat and 100-year floodplains (estimated using the Harris riparian layer), existing road right-of-ways, and additional planned major right-of-ways (from the Southeast Arterial Study). The gross buildable area in the Southlands is approximately 25,000 acres.

Michael then skipped to the bottom of the sheet and explained the projected Southlands development scenarios. Region-wide, an average of about 10,000 residential building permits are issued per year. Around 45% of these residential building permits have been issued for the Greater Southlands area. For the Southlands planning area, the City Planning Department feels that between 30% and 40% of the residential permits issued in the Greater Southlands will go towards development within the City (i.e., the Southlands planning area). This equates to between 1,350 and 1,800 residential permits per year. Accounting for schools, parks, and streets, this number of residential permits will consume between 300 and 400 acres per year, leading to an estimated buildout time of 64 to 85 years. The City Planning Department is projecting that development will begin within the Southlands planning area in 2020. This delayed start to development is a result of the anticipated disposal of state trust land in the HAMP and in Marana. The City is also considering a Section 10 permit length that runs until 2050. Given this estimated start time and projected rates of development, between 9,030 and 12,060 acres of the Southlands (35 to 47%) will be impacted by development during the proposed permit period.

Lori suggested that Michael get in touch with John Strobeck (Bright Futures) to get feedback on the development calculations that the Planning Department development for the Southlands. David noted that he thought the ratio of commercial (30%) to residential development (70%) was too high. Nancy asked what is a more typical ratio. David said that commercial development is typically 10 to 15%. David also thought that the percentage of residential development that would be multi-family (30%) was also too high.

Leslie pointed out that these calculations are a good rough start at assessing the relative amount of impact that will occur in the Southlands during the proposed permit period due to development. She said that the numbers could be refined, but it is the final acreage of anticipated development that really matters. She noted that Tucson Water is also working on water project development scenarios for the Avra Valley properties.

Carolyn asked if there was not any open space included in these calculations. Michael replied that parks (about 3,200 acres) and riparian habitat (about 7,300 acres) were both included.

b. Brainstorming Session

Leslie handed out a packet that: outlined the HCP approval criteria and indicated which elements the SAC is responsible for helping develop; general information on the types of implementation, management and funding mechanisms used in other HCPs; and a brief description of the funding, implementation, and management approaches in 8 specific HCPs pulled from a book of HCP case studies.

Leslie ran through the approval criteria and pointed out that the TAC is responsible for developing conservation strategies that meet the “minimize and mitigate to the maximum extent practicable” criterion and ensuring that the resulting conservation plan does not “appreciably reduce the likelihood of survival and recovery of the species.” On the other hand, the SAC is tasked with developing an implementation plan with “adequate funding” and that can be “properly implemented.”

Leslie explained that most HCPs have focused on on-site and off-site mitigation, accomplished primarily through fee-simple acquisition of properties (off-site) and zoning and use of conservation easements (on-site). Other methods that have been used include transfers of development densities, land trades, and restoration.

Another important component of an HCP is management. Although the TAC will be helping develop the monitoring and adaptive management provisions of the HCP, the SAC should be concerned with who will be responsible for implementing the plan, who will hold any mitigation lands, and how will the lands be managed.

Funding is required for the development of the HCP, the acquisition and preservation of land, and long-term management and restoration of lands. Of these, land acquisition has been the greatest implementation hurdle. Most HCPs have used some sort of mitigation fees, either as one-time assessments or annual fees, or both. Other options include sales taxes, property taxes, and assessment districts. There are a lot of ideas about who should pay these costs, with suggestions including the federal government, the development community, the general public, and user groups (e.g., recreationists). There has also been an interest in getting greater state funding for these plans.

Leslie said that she did not want to spend a lot of time going through the case studies; the SAC can review this information at their leisure and ask questions at later meetings. David asked which case study best fit the City’s situation. Leslie explained that all HCPs are different and none will match that closely, but just based on the information in these 8 case studies, probably the Stephens’ Kangaroo Rat HCP is the most similar.

Leslie explained that the remainder of the meeting was intended to be a brainstorming session for funding and implementation options. She emphasized that although the discussion would be facilitated by herself and Michael, the SAC members have a responsibility to express their thoughts, ideas, and concerns. She said that the SAC should ask questions and request any information that is needed to support the discussion. She pointed out that this is just the first phase of a longer term process. The City needs to have a draft plan by the end of the year to fulfill their grant agreement, but this will be just a preliminary draft. Leslie said that it is more important for the SAC to identify critical data gaps and questions that the City needs to answer prior to finalizing an HCP than it is for the SAC to hammer out all of the details of the plans over the next few months.

Leslie noted that each of the planning areas have their own particular challenges. The Southlands is owned almost entirely by the Arizona State Land Department and any conservation strategies for that area have to take into account the need to work cooperatively with the Department. The Avra Valley planning area is owned entirely by the City, but it will be the location of critical water development projects that have very strict siting and operational requirements. On the other hand, these water projects also offer interesting opportunities for habitat enhancement. The Santa Cruz River planning

area is being considered more from a restoration perspective than as an area with significant infrastructure of development plans; however, the multi-jurisdictional nature of the resource means that coordination with other entities is vital.

Carolyn said that restoration and land acquisition were both options for the City, but the conservation plan could be implemented through acquisition alone. Sherry suggested that restoration could be an important component in the Avra Valley planning area. Dennis agreed and noted that it is Tucson Water's hope that restoration of these plans is a part of the HCP. Carolyn pointed out that restoration would not work as a strategy for conserving the Pima pineapple cactus (PPC).

Emily asked how the City was thinking of addressing PPC. Leslie said that she thought this strategy needed to be developed by working backwards from the available mitigation lands rather than by calculating impact and assigning a mitigation ratio for anticipated habitat loss. Her suggestion is to start with the Pima County Priority Conservation Area (PCA) for this species, overlay land ownership, and determine which lands are available for acquisition and could be configured into an effective PPC reserve. She was concerned that there is not nearly enough available PPC habitat to allow both the County and City to mitigate lost habitat at a 3:1 ratio.

Dennis noted that protecting burrowing owls and the pale Townsend's big-eared bat is not incompatible with development and he wondered if this was being considered in the development of the conservation plan. Leslie said that it was being considered. She explained that subcommittees of species experts were convened at the recommendation of the TAC to identify the stressors and threats that were relevant to each species. The discussion focused on not only those factors that are the primary threats to the species, but specifically identified those factors that are relevant to the City's HCP planning area and those stressors and threats were then used to develop biological goals and objectives for the species. Michael noted that the stressors and threats information and the draft goals and objectives can be found on the City's HCP website.

Carolyn suggested that up-front surveys for the PPC were needed, and not just within the City planning area. Leslie said that Mima was concerned about tying conservation to the location of individual plants, and would rather focus on the protection of suitable habitat, and asked Sherry how these up-front survey could fit in with Mima's approach. Sherry felt that the key to doing up-front surveys was to use them to identify occupied habitat areas that can then be acquired for mitigation.

There followed a general discussion of some funding tools, some of their weakness and strengths, and equity issues. The following list captures the concepts considered during that discussion:

- County Bond money – cannot be used for operations and maintenance (O&M) of land; the City does not have the authority to levy bonds for O&M either.
- Impact fee – cannot be used for O&M; the fee can only be levied against development that has a direct impact on the resources being mitigated; the fee can be used for repayment of up-front land acquisitions
- Community facilities assessment fee
- Mitigation fee
- Building permit fee

- County property tax (not bonded)
- Sales tax – takes a general vote; may not apply to O&M; most of the sales tax revenues go into the general fund
- Real estate transfer fees
- Environmental services/water fee/surcharge
- Tucson Water bonds
- Fee on state land auctions (mitigation fee) – an add on to the auction price; ASLD would have to buy in to this
- Rezoning fee

Other concepts that were explored were:

- The use of transfer of development densities – the problem with this method is that the ASLD does not want development on trust lands to be too dense, so it may have limited utility
- The question was raised as to whether Arizona Game and Fish Department could have a role in development or implementing monitoring and management of acquired lands
- Sherry suggested that it would be useful to look at the incremental value of the HCP in streamlining regulatory compliance for developers (e.g., the cost of a Section 7 consultation, species surveys, etc. that do not have to be done under the HCP)

4) Call to the public

There were no members of the public present.

5) Next steps/Future meetings

The SAC will continue this funding and implementation brainstorming at their next meeting (July 27).