

**HABITAT CONSERVATION PLAN**  
**Joint Technical Advisory Committee and**  
**Stakeholder Advisory Committee Meeting**  
**September 6, 2005, 1:00 – 4:00pm**  
**Arizona Game and Fish Department Conference Room**  
**555 North Greasewood Road**  
**Tucson, Arizona 87545-3612**

**Attendees:** Nancy Peterson, Lynne Birkinbine and Francis La Sala (City of Tucson – Environmental Services), Julia Fonseca (Pima County – Flood Control District), Karen La Martina, Dennis Rule (City of Tucson – Tucson Water), Carolyn Campbell, Sherry Barrett, Cathy Blasch (AGFD), Marit Alanen (USFWS), Nancy Zierenberg, Greg Hess, Linwood Smith, Rich Glinski, Lori Lustig, Guy McPherson, Brooks Keenan (City of Tucson – Transportation), Dennis Abbate, Ann Phillips, Trevor Hare, Tina Lee (City Council Ward 2), Catherine Balzano (Arizona State Lands Department), Chris Avery (City of Tucson – Attorney’s Office), Michael Wyneken (City of Tucson – Planning), Tom Furgason (SWCA), Jessica Lee (SWCA), Leslie Liberti (City of Tucson – City Manager’s Office)

**MEETING SUMMARY**

**1) Update on Recent TAC and SAC Meetings/Upcoming Meetings**

a. *Scheduled SAC Meetings:*

- **September 21**, 3-5 pm, @ AGFD. Tentative Topics: Southlands conservation strategies and implementation/funding options.
- **October 5**, 3-5 pm, @ AGFD. Tentative Topics: Avra Valley conservation strategies and implementation/funding options.
- **October 19**, 3-5 pm, @ AGFD. Tentative Topics: Recommendations for Santa Cruz River.
- **November 2**, 3-5 pm, @ AGFD. Tentative Topics: Monitoring and Adaptive Management Program and implantation/funding options.
- **November 16**, 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:*

- **September 28**, 1-4 pm, @ AGFD. Tentative Topics: Fishing discussion of Southlands conservation strategies.
- **October 11**, 1-4 pm, @ AGFD. Tentative Topics: Begin discussion of Avra Valley planning area.
- **October 25**, 1-4 pm, @ AGFD. Tentative Topics: Continue discussion of Avra Valley conservation strategies. Begin discussion of Santa Cruz River planning area.
- **November 15**, 1-4 pm, @ AGFD. Tentative Topics: Continue discussion of Santa Cruz River planning area; begin discussion of Monitoring and Adaptive Management Program; feedback from SAC on conservation program, especially funding and implementation issues.
- **November 29**, 1-4 pm, @ AGFD. Tentative Topics: Monitoring and Adaptive Management Program; feedback from SAC on conservation program, especially

funding and implementation issues; Next steps – beginning Phase 2 of the HCP process.

## 2) Old Business

Old business from both the last SAC and TAC meetings will be held over until their next regular meetings.

## 3) New Business

### a. *City of Tucson Habitat Conservation Plan: Process Summary and Update*

Michael gave an introduction about why the joint SAC and TAC meeting was organized. He said it was a good time for the two groups to come together and ask each other questions and get caught up on the progress of the committees.

Leslie said the original idea for her presentation came from some members who were new to the HCP process and had general questions and wanted to know the City's progress. She thought it would be good for both committees to see each other's accomplishments and see where the committees have come and where they are going. She said that her presentation is formatted to guide discussion. She said some information would be basic information and repeated information for some people, but it would give a good overview of the HCP process, how far the City HCP has come, and what outstanding issues and questions are left to solve.

Leslie began the PowerPoint presentation by addressing why we are all here and what is the purpose of a habitat conservation plan. She said an overall purpose of an HCP is to allow for incidental take of endangered species.

Leslie continued by reviewing a clip from the City of Tucson HCP Charter. She said that the take involved would be urban development and capital improvement projects for the City. Trevor said that the language in the TAC HCP Charter doesn't say anything about habitat conservation. She said that the TAC will make recommendations to the SAC, and that the goals and objects of the SAC charter spell out the focus of balancing the City's proposed activities with conservation of habitat and coordinated regional planning.

Leslie continued to the next slide detailing the general guidelines for what is involved in an HCP. She said there are three general parts, including the process, the plan, and the permit. She said that said the process is initiated by a need for planning, which usually stems around a conflict between listed species and economic development. She said that HCPs are used to find a way to reconcile this conflict. She said that individual developers and municipalities in the area have been dealing with the two listed species, cactus ferruginous pygmy owl and Pima pineapple cactus for a while now. This involved each developer individually going through the ESA Section 7 consultations with USFWS. Rather, she said that HCPs allow for coordinated planning for dealing with endangered species. Leslie pointed out that a recent court decision regarding the Clean Water Act (CWA) 402 Permitting might have an affect on municipalities and developers. She said that a few years ago the CWA 402 permits went from being given out by the Environmental Protection Agency (EPA) to the State under the Arizona Department of

Environmental Quality (ADEQ). Due to the court case, it is likely to go back to the federal government. She said that due to the federal nexus, it would require Section 7 consultation for any proposed development one acre or larger in size. She said that this court case heightens the need and benefit from coordinated planning for potential incidental take of an endangered species. She said that secondly, HCP planning would produce a planning document that will detail the specific commitment from the City to USFWS on how conservation and growth will be balanced. She said upon approval of the plan, the third component is the permit that specifies allowable take and impact to endangered species if the plan is followed.

Leslie continued by describing the HCP approval criteria that guide the HCP planning process. Leslie said that there are six general criteria. The first is that the taking of the endangered or threatened species will be incidental and it is the responsibility of the applicant to not do an activity with the intent to harm or kill a listed species. She said that the next two criteria are biological in nature and require the applicant minimize and mitigate the impacts of the incidental taking to the maximum extent possible, and that the incidental taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. She said these are what the TAC has been focusing on. The next two criteria are logistical in nature including: adequate funding for the plan and assurances that the HCP will be properly implemented. These are the components that the SAC will address. She said the final criteria involves USFWS, and that other such measures can be required by the Secretary of the Interior as being necessary or appropriate for purposes of the plan.

Leslie continued by listing the general elements of an HCP including the applicant, biological requirements and logistic elements. The applicant will be the HCP permit holder and defines the duration over which covered activities are implemented and the area over which there is a potential for take. She said it wouldn't make sense for the City to include areas currently within the city in the HCP because the probability for take in those areas is very low. The permit holder also identifies the proposed covered activities. She said that the biological elements consist of describing covered (target) species; the expected impact to them; avoidance, minimization and mitigation strategies; and monitoring and adaptive management. The conservation targets are chosen based on whether they are USFWS listed or could become listed during the permit period, and the impacts are calculated by evaluating the occurrence, habitat, and possible threats and stressors to those species. She said there needs to be at least one endangered listed animal (not plant) for a HCP. Criteria for avoidance, minimization and mitigation strategies in an HCP revolve around minimizing impact and not jeopardizing a listed species. She said that monitoring and adaptive management include compliance and effectiveness monitoring, and detailing a mechanism for responding to anticipated changes such as changed and unforeseen circumstances. In order to accomplish these requirements, Leslie pointed out that the TAC is responsible for identifying the target species (which is completed), providing guidance on occurrence and habitat, threats and impacts, and developing specific conservation strategies involving reserve alternatives, adaptive management guidelines, and recommendations to assist SAC in considering implementation options.

Leslie continued by talking about the logistic elements of an HCP including implementation and funding. She said that implementation involves providing a

mechanism for imposing HCP elements on affected lands by reconciling with existing authorities. It also involves the responsibility for management and monitoring, a framework that details who will do the work and how it will be funded. She said that the criterion for funding involves finding adequate funding sources/tools that allow for management in perpetuity. She said that according to the SAC Charter, the goal of the SAC is “the long-term protection of target species, provide for regional economic objectives, contribute to regional conservation planning efforts.” The committee’s duties include making recommendations regarding: a preferred reserve design, appropriate implementation mechanisms, a framework for management in perpetuity, and opportunities for regional coordination. She said that implementation mechanisms include changes in City ordinances, plans and polices, and funding for habitat acquisition, management and monitoring.

Trevor said that the City of Tucson HCP charter should be worded more similarly to the SAC charter. Leslie said that the TAC charter was never revised, unlike the SAC’s charter, which was revised. She said SAC’s responsibilities include choosing a preferred reserve design if the TAC presents a set of reserve alternatives, selecting appropriate implementation mechanisms, finding funding options for habitat acquisition and management and monitoring of those lands, and finally there needs to be a framework for management of those lands in perpetuity.

Leslie said that both charters have a similar opening statement, but that the responsibilities, goals and objectives are different for both groups. Trevor said that the TAC charter seems fine, but the SAC group can make more decisions so he supports SAC to look into changing the charter. He said that if this is the overall guiding principal for City, he understands it is important to note that capital improvements and urban development are covered. But, he said that the overarching goal is habitat conservation. Rich said that TAC has enough to focus on without rehashing the charter. Leslie said that “best available science” has been a good goal and objective for the TAC. Trevor said he would like to see Mayor and Council approve a charter that supports habitat conservation, as well as capital improvements and urban development. Ann said that she thinks someone reading the two different committee charters are going to get a very different vision of what the City’s goals are. Ann said that incorporating a more global vision into the City charter would be a better way to provide an ecosystem, holistic statement. Chris said that the problem is that the HCP process is not about doing good things for the environment, but rather to create a plan to mitigate for take of endangered species. He said the goal of an HCP is to get an incidental take permit. He said that the broader you make the language in the charter, the further away you get from the original goal of the HCP. Chris said the only reason a government agency or municipality would go through this extended process is to get an incidental take permit. Sherry said she doesn’t necessarily agree with Chris. She said yes, an HCP is the functional way an entity gets an incidental take permit for a listed species. But, she said that most communities see the HCPs as a good tool to bring conservation into the overall planning process, which incorporates quality of life, open space, ability to have recreation, etc. to bring these into the planning process early before development occurs. Chris said that this could be done other ways, such as city planning, statewide planning, development of land bank, and/or other zoning processes. Sherry said yes, but most communities don’t use those mechanisms for conservation planning. She said that HCPs bring people to the table and forces them to talk. Chris said that the further HCP charters get broad,

the further you get from the USFWS Section 10 planning process definition. He said that for every HCP effort that gets launched, there has to be a decision of where to plan to draw the line. He said that the reason we are here talking about an HCP is being of the CFPO, but there is some point the group has to decide where to draw the line and see what a HCP encompasses. Rich said that it also incorporates risk avoidance. Leslie said that she would make an agenda item at the next SAC meeting to discuss the concerns with the charter. Carolyn asked if she could provide some draft language for charter revisions. Leslie said that would be helpful. Sherry reminded the group that USFWS is not an official member of either committee and that they don't care what the charters say, but she wanted to clarify the philosophy of the HCP. Ann said that this could be seen as a win-win because an ecosystem approach is best for the listed species. Ann said if the City addresses the entire breadth of habitat variability (uplands, riparian, etc.), like you will be addressing any issue that will have come up in the future. She said that it might be a win-win approach, from the viewpoint of the City. Chris said the more expansive we draw out language in charter, the further get away from USFWS HCP planning process language. Carolyn said we need to draw the line. Lori agrees with Chris, saying that the City's charter is largely looking at Southlands, which is called "future city," and has intention to build out, taking into account we are being sensitive to species and the environment. She said that we are looking for a balance. Lori said that she doesn't necessarily agree that the larger mission isn't good, but that the City has said they are building out and want to do it in best, most sensible way. Sherry said she agrees, she said there are far more flexibility in the Southlands if look at regional context. Leslie said we have to keep in mind this is from the City's point of view, but have also talked how the HCP fills through into the other connections. Carolyn asked if Leslie could send out the final version of charter. Trevor asked if SAC was informed about the YBC on the Simpson Farm site, and Leslie said they were.

She said that while the TAC's efforts are more recognizable because the biological elements in the HCP process come first, the SAC has been working hard as well and has spent several months discussing funding options while they wait for the TAC's conservation recommendations. The SAC has been working on devising a diverse funding toolbox that will raise sufficient money, provide assurances to USFWS, equitably spread costs to those who benefit from the HCP, and to protect the HCP funding from fluctuations in the state of the economy.

Leslie continued by explaining that this process is more than just an HCP, that there are further NEPA requirements including an Environmental Impact Statement (EIS) and Section 7 consultation. In an EIS, broader considerations such as soil, water, vegetation, wildlife, aesthetics, environmental justice, public health and safety, and transportation, must be evaluated. For the Section 7 consultation, the HCP cannot cause adverse modification of critical habitat, or put listed species in jeopardy. She said that direct, indirect and cumulative impacts to listed species must be evaluated. In order to evaluate this, for example, the actions of Pima County and Sahuarita must be taken into consideration. Also, she said that impacts to listed plants must be considered. She said that this requires that Pima pineapple cactus (PPC) be dealt with in the Southlands.

After dealing with the basic components of an HCP, Leslie continued the presentation detailing the accomplishments made in the City HCP process and discussed outstanding questions and issues that are left to be resolved. She said that the two committees have

been looking at the three planning areas (Southlands, City-owned lands in Avra Valley, Santa Cruz River within the City limits) discretely because they are geographically separated, and have their own species, habitat and development issues. She said that the City of Tucson is the permit holder and is seeking a permit ranging from 20-50 years in length. She said that the City doesn't yet know the timeline of development, thus hasn't decided on a precise length for the permit.

Leslie continued with the next slides that described the planning boundary. She reiterated that the Southlands considered being the Future City. She said since the last joint meeting, hydrology has come up as an issue in the Southlands that will be difficult to address while attempting to provide the best opportunities for urban development and conservation. She said that the Avra Valley planning area is the land that was purchased by the City for its water rights, but now is being held for City water projects. She said that about 80 percent is former farmland, and it is not clear what the extent of the degradation is or what is the level of recovery in the area towards its natural state. She said that with the Santa Cruz River planning area, there are three U.S. Army Corps of Engineers restoration projects, two HCPs (City and County), and one adjacent HCP (Marana). She said that coordination is key to this area. She said that the current outstanding issues/questions include what is the exact duration of the permit and what are the proposed covered activities. The other question involved the issue of how future annexations will be handled.

Leslie said that annexations would involve coordination with other jurisdictions. She said that coordination with Pima County would be required in order to define urban versus rural areas, consider different municipal goals and refined/new information, and create standards for both proposed urban and rural density areas. She said that the City is going to have intense urban development in much of the Southlands, but there are might other areas that are more appropriate for low density/rural areas. She said this process would need to consider that the coordination between two jurisdictions would have to be sensitive to the fact that both the City and the County have their own goals/needs. She said that standards could be created for both types of areas for urban and low density. She said that annexation would also involve coordination with State and Federal agencies such as Arizona State Lands Department (ASLD), Saguaro National Park, and Coronado National Forest. She said that ASLD owns most of the Southlands and the department doesn't automatically want their lands annexed. Leslie said that the City's long-range plan only goes to the City's corporate boundaries. Michael agreed, noted that the General Plan is more like a policy document rather than a land use plan. Leslie said that annexation not only brings in new lands, but also new species. She said the potential annexation areas surround Cienega Creek, where there are Gila chub and desert box turtle. Trevor added that two sensitive frogs and one fish are also present in Cienega Creek. Leslie said that one way to approach annexation issues could be to through the Greater Southlands planning effort.

Leslie paused the presentation and opened up a discussion about annexation and the possibility of a Greater Southlands planning effort. Trevor asked if there have been meetings between the City and Sahuarita. Michael said there have been meetings about having joint planning, but he doesn't think they have focused on annexation or conservation issues yet. He said, that so far, the meetings haven't gotten further than just getting stakeholders to the table. Trevor said that TAC has talked about the

importance of those lands (Santa Rita Experimental Range, Corona de Tucson, Coronado National Forest, and areas southeast of the Southlands) for connectivity. He said that getting joint coordination in that area is important to preserve those important riparian corridors. Trevor said he supports a coordinated effort. Leslie asked the committees if the Greater Southlands planning effort the best way to go about it. She said on the positive side, everyone is going to be at the table anyway on larger land planning issues, thus it puts conservation in the context of other land planning issues. Leslie asked what are the key issues that might not get addressed or not get sufficient attention in the coordination conversations. Sherry asked if a greater Southlands planning area has been officially defined. Michael said it has been based on the Southeast Area Arterial Study and Pima County's Lee Moore Basin Watershed Management Study and is basically from I-10 to the Santa Rita Experimental Range and from I-19 to Highway 83. Michael said the transportation and drainage management plan are the skeletal elements for future planning. Trevor said he supports a regional look because there are important biological connections in area. Trevor said that the Corona de Tucson development could ruin our planning/coordination efforts. Ann said that, in the TAC, they have talked about the stages of planning, and that if conservation is not an initial step then someone might draw a freeway through the area. She said that regional conservation makes sense. She said if we don't get in and give an opinion now, it might be too late. Ann asked Michael how the conservationists get to the negotiating table and what role has they could be given. Michael said the conservations haven't gotten that far. He said that a scope will be developed soon for the planning effort and that is where conservation topics could come into it.

Ann asked Julia about the drainage management plan. Julia said the plan could have implications for future infrastructure. She said there are no CIP projects that are included in the HCP area currently, but that they could be anticipated in the future. She said the County has the Conservation Land System (CLS), which provides the guiding idea for how area should be developed. Julia said it is timely to have these conversations. She noted that the County plan does not cover any of the State Trust lands. Leslie said there are a number of coordination issues. For instance, how does ASLD fit into this picture when the City included State Trust lands in their HCP planning area while Pima County did not. She said a second issue is the differences in habitat models used in the County and City HCPs. She said that the City started with the County models, but now has taken a refined look at potential habitat within the planning area.

Sherry suggested the biological experts from both HCP models get together and talk if there isn't any way to come up with a single model. She said if there is more refined information, some parts of the County models might not make sense now. She said she could go back and talk with the County to see if the experts could agree to a common approach. Julia said that the models, especially in the areas slated by Pima County for development, needs to be reviewed. She said that Pima County labeled the Southlands as an area for development, but there is considerable PPC habitat there. Trevor said the PPC need to be re-evaluated, because it wasn't addressed separately from high diversity areas by Pima County in developing the CLS. He said that the area that includes the Southlands has been set aside for development, but the technical experts do not think it should be fully developed. Sherry said that this might result in refining the CLS. Julia said it makes sense for the City to keep the lead for approaching ASLD. Sherry asked Julia if she anticipates that when ASLD disposes of land they are more

likely to dispose if it is within a municipality. Trevor said that if ASLD disposes of land that isn't annexed, those parcels immediately become under the requirements of the CLS with Pima County permit. Julia said the attractiveness of a HCP is that it will guide urban infrastructure where it makes sense and do it in a timely fashion.

Brooks asked what Sahuarita's current thinking. Leslie said that she doesn't think it has been something that has been sufficiently addressed to date. She said that the Greater Southlands planning effort provides a context to initiate this discussion. She said that an HCP has been on Sahuarita's radar screen from time to time. Ann said she knows they are working on a regional trail system. She said Sahuarita currently has a lot on their plate, and if there is a process they can piggyback on, she thinks there might be the potential to influence them.

Ann asked if ASLD would be at the table in the Greater Southlands planning conversation. Catherine said yes, because they are the landowners and that that the Greater Southlands regional planning effort was ASLD's idea. She asked if future annexation would expand the conservation efforts into a larger regional context.

Leslie said that the annexation issue is that if the City annexes land that is not currently addressed in the HCP planning areas, that land would not be covered by the City HCP or the County HCP. Because of this gap, Leslie said that the Greater Southlands planning effort is a way to identify the best transition from unincorporated County into the Future City. Catherine said it is going to be a long time before more ASLD land is annexed into the City of Tucson with there being more than 50,000 acres of non-developed State Trust land within the City limits currently. Trevor asked if it has more to do with the ASLD disposition process. Catherine said she does not see large amounts of dispositions in the Southlands soon. Trevor asked if infrastructure comes in after the land is sold as long as there is a conceptual land use plan. Catherine said that sometimes the infrastructure crosses State Trust land to feed small private lands. Ann said that this type of development leads to the growth of small, wildcat communities. Catherine said that ASLD has talked about the Sahuarita corridor for 20 years. Ann asked about the criteria ASLD uses when planning land disposals because anything could happen in the next 20 or 50 years. Ann said that it is wise to consider at larger planning area over time because maybe the decision to annex State Trust land into the City depends on where the transportation corridor in that area ends up. Ann said that conservation decisions should come first before any planning efforts. Catherine said the whole regional road network looked at by PAG, land use or infrastructure really only has a small number of north-south roads, while Sahuarita Road is the only east-west road. She said that PAG was looking at a 50-year horizon in the Southeast Area Arterial Transportation Plan. Ann said that the crossing of two of those major roads is planned right on top of some of the best conservation area in the Southlands. Michael said that some portions of the roads are shown with dashed lines to indicate they are not permanently placed; knowing that a lot more studies would have to be done to decide exactly where to locate them. Catherine said she told PAG that all roads should be dotted because there needs to be more information, and said that ASLD did not endorse any of the alignments. Ann said that it makes more sense to start with conservation planning.

Sherry said that, as we work through this conversation, it is important to keep in mind that the HCP permit can be written in chunks/phases, which she said might work better for ASLD. Chris asked Sherry if there are a lot of HCPs in the state, and if any of them have been successful in getting ASLD to actively participate. Sherry said USFWS is involved in the HCP planning in Pima County and the City, and Verde Valley is just starting an HCP. Carolyn wanted to know if more of the Agua Caliente and Tanque Verde areas would be annexed. Leslie said there are only a few parcels up there that are not developed, and the potential for take of an endangered species is much less. Trevor said that the Rincon Valley and Cienega Creek areas are of concern to him because they have lots of potential for vulnerable species.

Rich said that there are still a lot of outstanding issues, such as DNA evaluation for PPC populations, more study of both CFPO dispersal areas, and the importance of BUOW habitat in the Southlands. Rich said that he liked how Tucson Water has a dynamic planning process, and suggested that perhaps the Tucson HCP committees could work in that way. He said that the TAC has been dealing with many unknowns. Trevor noted that a HCP permit may need more assurances than a dynamic plan could provide. Rich agreed, but asked how we could plan for development when we need all the land for conservation; we need the uplands for PPC, in between the uplands and riparian areas for BUOW, and the riparian for CFPO. He said there are many uncertainties. Trevor agreed, saying that perhaps something is going to lose in the Southlands. Leslie also agreed, but noted that this is why the TAC put together biological goals and objectives for the eight species to give the committee guidance in making these trade-offs. Dennis asked about the impacts Sahuarita might have on both the City and County HCP, and asked how much of Sahuarita's planning areas are owned by ASLD. Leslie said that there is a lot of undeveloped private land in Sahuarita and it will likely be developed quickly. Dennis asked if those lands would be subject to Section 7 consultation. Sherry said yes if there is a federal nexus, especially if the CWA permit authority change occurs. Sherry said USFWS has not been in a discussion with Sahuarita in approximately five years, but said that USFWS is willing to talk to Sahuarita.

Ann wanted to follow up on ASLD involvement. Catherine said she is learning about the HCP process, and from her personal educational science training, that it is almost better to erase jurisdictional boundaries to find out what is, biologically, the best thing to do, then put the jurisdictional boundaries back and try to figure out how to do it. She knows that the focus in the Southlands has been within the City limits; she said that it seems to make more sense to go outside of City limits and see what areas are most sensitive and make those trade-offs. She said that in years down the road, you work with the developers to achieve those biological goals. She said that ASLD has the potential to work with the developers so that certain lands do not get touched. She said that it could be done with good planning. She said that the City does not need public monies to acquire land, and this type of development supports the type of community people move to Tucson to live in. She said people enjoy having the natural environment here, which it is not like living in central Phoenix. Ann said that the County process has identified conservation lands, but that the County HCP does not apply to ASLD lands. Catherine said that, as the land is developed, when rezoning happens the County requirements have to be dealt with. She said that it was ASLD's intent to work with County to find areas that are less sensitive. Greg asked if it is really true that it might not be 50 years before ASLD disposes land in the Southlands. Catherine said yes, and part of the

reason is that there is currently 50,000 acres of State Trust land within the City. She said that their efforts are also focused on working with the City on the Houghton Area Management Plan (HAMP), as well as looking at infill property in Sahuarita and Marana. Michael thinks the HAMP will be built out in approximately 30 years. Greg asked whether this is a why it is important to prioritize which HCP planning area we work on first. Catherine said that, in terms of planning the future road corridors, is important to talk about the Southlands now. She said that if there really is a planned road intersection over an important conservation area, she suggested that fact get brought up soon. Michael said that there is a lot more that needs to be learned, but the road planners wanted to roughly show the connectivity of roads, while also providing the flexibility to shift them around some. Greg said that PAG would welcome this data. Leslie said part of the HCP process is to be able to provide input into other planning processes. Greg asked if we would want the City HCP approved before the other planning process starts. Leslie said, not entirely, because we do not need a formal HCP to give the committees credibility to comment.

Sherry agreed with Catherine that USFWS would also like to see an effort made to consider a regional planning effort. She said that this would give certainty for where infrastructure, development, and conservation will go. Leslie asked Sherry about the timelines of the City and County HCPs, and wonders if Pima County can go ahead and get their permit and still be able to have coordination afterwards. Sherry said that if the coordination would require the habitat models to be refined, then the models would need to be addressed first. She said she would like to see the blueprint done first. Carolyn added, that even if the County HCP permit were submitted this fall, the NEPA process would take at least a year. She said that this way there could be public comment. Sherry said that County is already looking at the global picture. Nancy asked if perhaps Sherry could help coordinate a meeting and set up a time frame for this coordination. Sherry said that this is already being planned.

Trevor asked Catherine if ASLD has to do Section 7 consultations when they dispose of lands. Catherine and Sherry both said no. Sherry said it is a question of take. Greg said that it seems that if the City were to go through the HCP process, that ASLD would benefit from this because ultimately they would get a better price for land. Catherine said she couldn't comment, and that she does not know if anyone in ASLD has look into this. Trevor said that it would, because this avoids the time developers would have to go through the Section 7 consultation process. Greg said this would make the land appeal more to developers. Sherry said that some HCP case studies in California have shown that developers advertise that the lands are previously permitted and in compliance with the ESA. Catherine said this has not yet happened in Arizona.

Leslie continued the presentation and discussed the covered species proposed for the HCP. The proposed species were identified based on several criteria including consideration of all species with Federal, State, and local status; whether species are likely to be listed in the future; and whether species have the potential for recolonization after the river restoration projects are completed. She said that the TAC and outside experts derived habitat models for all the HCP targets. She said that new information was gathered from two cacti surveys in the Southlands, and will be obtained from future snake and burrowing owl surveys in Avra Valley.

Leslie said that although the TAC has been talking about species equally, they actually have different USFWS statuses: CFPO and PPC are federally listed as “endangered”; pale Townsend’s big-eared bat (PTBB) and needle-spined pineapple cactus (NSPC) are considered “species of concern”; the ground snake has no State or Federal status; BUOW is protected under the Migratory Bird Act; the Tucson shovel-nosed snake (TSS) has no State or Federal status but has been petitioned for listing; and the western yellow-billed cuckoo (YBC) is a federal “candidate species.” Nancy asked what happens to the HCP if the CFPO gets de-listed. Leslie said a HCP needs to have at least one federally endangered animal in the planning area. So if the CFPO is de-listed, the City could incorporate other endangered species into the process by expanding the planning area. She said that expanding the planning to the east would likely bring the lesser long-nosed bat, and other fish and herps in the Cienega Creek area into the HCP planning discussion.

Leslie went over the three planning areas and summarized the occurrence and amount of potential habitat. Cathy said that a couple weeks ago she and another AGFD person went out to survey for YBC at the Simpson Farm site, but they didn’t hear anything. Leslie said Phil Rosen (Univ. of Arizona researcher) is currently working on a snake survey in Avra Valley, and he believes that prey availability and soil type are the most important characteristics for TSS habitat. Leslie said the major difference between the two snakes is that the GS could live in developed areas, but not the TSS.

Leslie continued by addressing the outstanding issues/questions for the covered species in the HCP. One issue is the many scientific unknowns with PPC, including occurrence, minimum patch size for individuals and populations, the genetics of the three “sup-populations”, pollinator dynamics, and dispersal mechanisms. She said that the PPC experts have good idea for where the general PPC populations occur, but do not know where all the specific individuals are located. Linwood pointed out that there are also some areas in the Southlands that appear to be good PPC habitat, but are unoccupied. Leslie said a second issue is the possible ramifications of the potential CFPO de-listing and whether the City would have to find another listed animal. Trevor said that if the CFPO were de-listed it would be immediately petitioned to be re-listed. Leslie asked Sherry if a HCP permit holder would lose their permit if the species were de-listed. Sherry said yes, that there are a few examples of this happening. Trevor asked if the species were re-listed, would they have to redo their HCP. Sherry said this situation has never happened, and she doesn’t know. Leslie said another issue is whether YBC are potentially nesting at the Simpson Farm Site and what the nesting requirements are. She said this might change the way we think about YBC breeding habitat because at this point we have considered the Santa Cruz River as only dispersal habitat. Leslie said that for many of the species, the breeding/dispersal models were mapped very conservatively. For example, in the Southlands most of the land is really dispersal habitat for BUOW, but it was mapped as breeding habitat. She said the same conservative approach was taken by labeling some of the CFPO habitat as breeding habitat, even though Scott Richardson (USFWS) and Dennis Abbate (AGFD) would say it is likely just dispersal/wintering habitat.

Leslie continued with the presentation to talk about covered activities. She said that for the HCP, the City must include a description of all actions within the planning area that (1) are likely to result in incidental take; (2) are reasonably certain to occur over the life

of the permit, and (3) for which the applicant or landowner has some form of control. She said that in the Southlands, there is an estimated 9,000 to 12,000 acres of development, which will likely start around 2020. She said that there are also City transportation and other ongoing infrastructure planning projects, including the SE Arterial Study and the Lee Moore Basin Watershed Management Study, that need to be addressed. The City plans to rezone the Southlands as under “master planned community (MPC)” zoning. This would allow for large-scale planning, especially useful for accommodating open space, washes and trails, while giving the developer the flexibility of having mixed uses and varying densities. She said that the MPC will have baseline standards that developers would have to comply with, and that the TAC could make recommendations for this guidance manual. She said that there are two main outstanding issues/questions regarding covered activities in the Southlands. The first is what is the exact acreages and timeline of proposed development. The second issue is whether there is room in the SE Arterial Study Plan for the TAC to provide general guidelines to reduce potential environmental impacts of future roads.

Trevor said that the American Association of State Highway and Transportation Officials (AASHTO) has designed standards, but the idea of how to build roads is changing. He said for instance, they are slowing down the speed limit, minimizing impacts to natural topography, and crossing riparian areas at right angles. He noted that TAC’s recommendation would be valuable. Brooks said the City Transportation Department needs information from the TAC about priority conservation areas. Michael said it is important to note that the SE Arterial Study is a planning document and that the City has adopted a policy for alignment studies. He said that, presumably for areas within the City, those policies would come into play. Brooks said he doesn’t think it is too late to comment.

Leslie said that the Avra Valley planning area covers approximately 24,000 acres of City-owned land, which are mostly acquired in the last 20-30 years to obtain water rights and is primarily former agricultural land. This land is to be used for future Tucson Water projects including recharge basins, infrastructure, and brine evaporation ponds. She said that Tucson Water’s draft “Water Plan: 2000-2050” is currently out for public review currently. There are three outstanding issues/questions in Avra Valley. The first is that the development plans for Avra Valley depends upon voters’ decisions regarding water quality and use of effluent. She suggested that the TAC could make recommendations to Tucson Water, Mayor and Council, and perhaps to the voters to help the public understand the environmental consequences of various decisions. Secondly, changes in technology will make a significant difference in the ultimate development footprint. The third issue is to what extent will regulatory project design constraints allow for combined water development/habitat features. She said these projects, while potentially impacting species, could also become an asset that provides an enhancement to habitat. She said that there might be flexibility to bridge the gap between regulation and engineering project design constraints and habitat enhancement.

Leslie continued with the covered activities in the Santa Cruz River planning area, which includes the three restoration projects led by the U.S. Army Corp of Engineers. She said that all three plans are at different stages of development, have different local sponsors, are considered separate projects, and have three separate project managers. She said that there are three main outstanding issues/questions. The first is whether the proposed

restoration could be compatible with preservation of BUOW habitat. Secondly, how can the City anticipate the potential need for SHA/CCAA without knowing what the final restoration plans would look like. The third deals with the fact that the Army Corps process, timeline, goals, and approach are not necessarily compatible with the City HCP process, goals, and timeline. Leslie said that the HCP and Army Corp project might have different environmental goals. She said that coordination is very important and asked for suggestions about how to get there. Dennis said we have already seen an impact on the Army Corps due to the war on Iraq, and predicted that Hurricane Katrina may completely change the Corps' focus for the next 10-20 years. He said that the City will need to be aware of the political responsibilities of the Army Corps. Trevor mentioned that the amount of federal funding for the three projects, which is in the tens of millions of dollars, is much more than the community could raise alone. Ann said that this also assumes the City will want to do what the Army Corps has in mind.

Leslie moved on to discussing the impacts section of the HCP. She said that four tasks must be completed to determine the likely effects of a project or activity on federally listed or candidate species, including: (1) delineation of the HCP boundaries or planning area; (2) collection and synthesis of biological data for species to be covered by the HCP; (3) identifying activities proposed in the planning areas that are likely to result in incidental take; and (4) quantifying anticipated take levels. She said that there are two general outstanding issues/questions involving impacts. The first is how the TAC will quantify the anticipated take levels. She said the primary approach is to measure impact as lost habitat, but asked whether habitat loss is an adequate measure for all species, and to what extent is the quality of potential habitat differentiated in the impact assessment. The second question involves the calculation of cumulative impacts, which would address the impacts of development within Pima County and Sahuarita. Trevor said that avoidance is sometimes the easiest and cheapest. He said that City predicts developing one-third of the Southlands area; it should be easy to avoid sensitive areas.

Leslie continued with a discussion of avoidance, minimization, and mitigation strategies in an HCP. She said that mitigation programs under HCPs and Section 10 permits are varied, but should be based on sound biological rationale, be practicable, and commensurate with the impacts they address. She said typical forms include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for the impact.

She talked about the conservation program in an HCP. She said that there are three main components including stressors and threats, biological goals and objects, and specific measures that detail the conservation program and implementable actions. For example, stressors and threats include habitat loss (breeding, dispersal, foraging, wintering, diurnal preferences, plant locations), habitat alteration, species characteristics, interspecific factors, anthropogenic factors, and connectivity. She reviewed how the stressors and threats for PTBB translated into biological goals and objectives for the conservation program. Rich said that all of these are based on best available science, and that there are many unknowns. Leslie said that there needs to be an identification of critical questions that could be addressed in the future, either through additional data collection or coordination in other planning processes. She posed the question of how will TAC make tradeoffs. She said that, if the City conserved the best habitat for all species, there would be little room for development. She briefly provided an update on

the TAC's mitigation approaches. She said that the TAC is now working on refining conservation strategies for the Southlands, identifying critical questions and areas for future research, identifying preliminary habitat protection reserve configurations, and other elements such as landscaping, education, and road configuration recommendations. She quickly went over the TAC's road guidelines such as to avoid crossing washes wherever it is possible; to span all crossed washes, to cross all washes at right angles, and to cross riparian areas where width of habitat is narrowest. She briefly listed the TAC's draft conservation principles, which include several points within the general categories of habitat protection, preservation of critical habitat elements, connectivity, working within the urban environment, and implementation. She said that working within the urban environment is not only a constraint, but also an opportunity to balance development with conservation. Carolyn asked if Tucson is building a new airport. Leslie said no, but flight zones could affect development and conservation patterns.

Leslie continued with the TAC's two proposed reserve strategies for the Southlands. She said that PPC could not be fully mitigated on-site with the level of development that the City is expecting. She said that off-site mitigation options would be addressed through discussions with cactus experts in Pima County. The first reserve design would be based on the Harris riparian areas. She said the advantages with this approach include the protection of all riparian habitats; open space is spread throughout the planning area, and fairly straightforward implementation. She said the disadvantages include no explicit protection of upland habitat, an increased edge effect, and the concern that the washes do not provide adequate corridor widths, and that the hydrologic function of the area is not preserved. The second reserve approach would be to protect the Fagan and Petty Ranch watersheds in the southern portion of the Southlands. She said that the advantages of this reserve include that it captures some of the upland habitat, open space is concentrated on the southern edge of the Southlands, and it would decrease the edge effect in the reserve. She said that the disadvantages include that it would not protect all riparian habitat, that implementation may be challenging, the open space would be farther from residents, but may provide more opportunity for multi-use. Leslie said that ERZ wash protections would still apply throughout the Southlands. Trevor said that this approach would only be effective if Sahuarita and Corona de Tucson are not developing on southern edge of this boundary.

Leslie went through initial thoughts on a Avra Valley reserve strategy, in which potential recommendations could include: (1) preservation of "priority" areas that provide habitat and essential connectivity; and (2) potential habitat enhancement features that are part of the proposed projects, such as mesquite along recharge basins for CFPO and YBC, artificial burrows for BUOW, and development that is compatible with GS.

Leslie also covered the outstanding issues/questions regarding avoidance, minimization, and mitigation strategies. The first issue is how hydrology will affect urban development, whether there be a need for hydrologic modification, and what are the constraints/opportunities for conservation in this context. She said that much more will be learned from the Lee Moore Basin Watershed Management Study. The second issue was how much on-site conservation can be accomplished given the ownership of much of the land. The third issue is that establishing a plan for PPC mitigation, which is

essential for the City's HCP, will likely require coordination with Pima County and Sahuarita.

The last slide Leslie showed was a map of Pima County's new priority conservation area (PCA) for PPC. Leslie said Sherry organized a multi-jurisdictional meeting for PPC a couple weeks ago. Leslie says that approximately 75 percent of the PCA is State Trust land. She said that, in terms of near-term conservation/mitigation options, the jurisdictions are very limited in terms of a mitigation banks or ways of protecting habitat that satisfies USFWS's assurances requirements. Sherry said that she doesn't expect all this land to be conserved, but that there are areas that are important to the conservation of PPC. She said that some development in this area would have to be mitigated off-site. Leslie said there is discussion about having two mitigation banks with land in between to provide connectivity. Greg asked what biological characteristics were used to create the PCA. Sherry said that it included soil type, vegetation type, topography, and known populations. Rich asked about ASLD's potential liability for impacts to CFPO critical habitat under their grazing permits. Catherine said she doesn't know. Sherry said that whether the Bureau of Land Management (BLM) and the U.S. Forest Service have to evaluate their actions have an effect. Catherine asked if PPC transplant well. Sherry said no, that the success is low because they have a fragile root system. Sherry said that it is also difficult to find large swaths of open and adequate habitat for PPC.

There was not time to go through the entire presentation. The discussion never got to the implementation and funding topics that the SAC has been tackling. Ann suggested Leslie could finish the SAC material at the next TAC meeting. Leslie said she would send out the past few SAC meeting minutes and handouts so the TAC could look over them. She said the SAC would be looking at the TAC's conservation recommendations by October. She said that the groups are still on track to have a preliminary draft HCP done by the end of the year so it can be presented to Mayor and Council.

#### **4) Call to the public**

Sherry announced that USFWS has scheduled a public hearing about CFPO de-listing September 20, 2005 from 6:30-9:00pm. It will be held at the Tucson Convention Center, Apache-Greenlee meeting rooms, 260 South Church Avenue, Tucson, AZ 85710.

Leslie introduced Tom Furgason (SWCA) to the group. He is the new SWCA HCP project manager.

#### **5) Next steps/future meetings**

The TAC will conclude discussion of Southlands at the September 28 meeting and prepare recommendations. The SAC will prioritize funding options.