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Wildlife Linkages Working Group

Minutes of August 14, 2009, Meeting

Committee Members

Charles Barclay, ADOT DES NRMG, Alt.
Carolyn Campbell, Sonoran Desert
Locana de Soza (for John Windes), AZGFD
Rick Ellis, Pima County, Chair
Janice Przybyl, Sky Island Alliance
Janine Spencer, Town of Marana, Alt.
Phil Trenary, Town of Oro Valley

Staff

Jim DeGrood
Pat Kendall
Steve Matthews
Teresa Ruiz

Public/Agencies

Mitch Anderson, Citizen
John Bacigalupi, CONTECH
Kerry Baldwin, PC Parks & Rec
K.C. Carter, Vice Mayor, Oro Valley
Ron Casper, ADOT-Tucson District
Matt Clark, Defenders of Wildlife
Mike Colbert, Citizen
Bob Cratty, Sun City Vistoso Resident
Diana Durazo, Pima County
Judi Ellwanger, Citizen
Melody Gilkey, CSDP
David Grandmaison, AZGFD
Jan Johnson, CAC
Kathleen Kennedy, CSDP
Pat Kiasman, Oro Valley Resident
Terry Minks, Sun City Vistoso Resident
Siobhan Nordhaugen, ADOT Natural
Resource Mgmt-Enviro Services
Kathleen Pastryk, Oro Valley Resident
Robin Raine, ADOT-Tucson District
Joy Reoner
Sherry Ruther, PC DSD
Laura Sagerman, TEP
Kathie Schroeder, Resident
Geoffrey Soroka, SWCA
Scott Stapp, HDR

1. Call to Order and Introductions

The meeting was called to order by Rick Ellis at 9:03 a.m., and a welcome was issued to Vice Mayor K.C. Carter of the Town of Oro Valley. Introductions were made.

2. Approval of Minutes of July 10, 2009

Motion was made by Ms. Campbell to approve the minutes of the July 10, 2009, meeting, seconded by Mr. Trenary, and unanimously approved.

3. In-Kind Contribution Form

An in-kind form was routed for member participation.

6. Updates and Announcements

Ms. Campbell prefaced the SR77 proposal by reviewing her notes and work over the past 11 years since the Sonoran Desert Conservation Plan's start and indicating the importance of this area between the Tortolita and Catalina Mountains. This has long been known as an animal movement corridor and identified as one of six key wildlife movement areas throughout Pima County in the plan's initial environmental maps. As an environmental representative on the RTA's Citizen Advisory Committee and in her work with the Technical Management Committee (TMC), Ms. Campbell presented this funding category to the RTA and voters. These large key linkage areas between parks were seen as a priority: "proposals for wildlife crossings associated with roadways or highways that divide existing parks or preserves, will be given the highest priority." With the sense there'd be matching funds, a total need of \$9 million was identified for retrofits between the Catalina and Tortolita Mountains, across the Oracle Highway/Canada del Oro Corridor. Today, it's exciting to see this big critical landscape linkage from years ago come before the working group.

5. Proposal Review

Siobhan Nordhaugen, of ADOT's Natural Resources Management Group's Office of Environmental Services, presented an overview of the SR 77 Wildlife Crossing Structures proposal. There is a SR 77 widening project to six lanes from Tangerine Road to the Pinal/Pima County line in the initial project assessment's final phase and the final design will start as soon as that is completed. The proposal's area of concern (MPs 83.7 to 84.8) doesn't contain any structures that can be upgraded for wildlife usage. The area has been identified in the Sonoran Desert Conservation Plan as part of the critical biological corridor linking the Santa Catalina Mountains and the Tortolita Mountains.

The proposal includes three structures: two underpasses and an overpass to be constructed in a three-mile distance (MP 83 to 86). A variety of animals in the area were considered and structures were designed for the largest animals (coyotes, mountain lions and mule deer). Due to cost constraints, ADOT considered prefabricated arched structures which can be constructed quickly and allow easy traffic switchovers.

Structure #2 (MP 83.9) is an underpass similar to #1 (MP 83.7) and is 50 feet across, while #1 is less wide due to surrounding housing development constraints. Structure #3 (MP 84.8) is an overpass for wildlife (190 feet wide with two ramps) landscaped to look like the surrounding area with an inner 25-foot rise and built out to accommodate the future possibility of four lanes on each side. It runs from state land to state land next to the Pima County transfer station. The public/pedestrians would not have access to structure #3, and although pedestrians could walk under structures #1 and #2, measures would be in place to restrict off-road usage.

Although wildlife overpasses haven't been tried in Arizona, they've been successful in Utah. ADOT is currently placing three structures on US 93 solely for big horn sheep usage, and another similar prefab arched structure is in the construction process in northern Nevada.

Ms. Nordhaugen indicated that structures by themselves are not effective to funnel wildlife to them, and cited examples of big structures built on SR 260 where animals prefer to cross at grade. Only one hit resulted in that area after fencing was installed. Fencing is critical in keeping all wildlife off the road and its height is extremely important. Mule deer easily clear right-of-way fencing. The proposal includes eight-foot fencing and escape ramps using existing topography to create slope jumps and structures built to facilitate jump outs. Ungulate proof fencing with its tighter weave, is proposed for small animals, which need fencing to funnel to structures too.

Small animals will use culverts (as evidenced by monitors on SR 90) and usage increases with funnel fencing. The proposal's main theme is to restore the permeability that SR 77 has severed in the past. There is a high degree of data that indicates that habitat loss and fragmentation will lead to extinction. Animals on both sides of SR 77 run the risk of having genetic drift, population decline and possible extinction if the linkage is severed permanently as a result of these structures not being installed at this point.

Another component of this proposal is the monitoring aspect which will be presented at a different timeframe than the construction, which is not scheduled to occur until 2014 due to current budgetary constraints.

The proposal's funding request of \$8,230,600 represents the total cost for installation of all three structures. The monitoring proposal will be separate, and the crossings evaluated to make any needed changes so that they will work as effectively as possible.

Mr. Baldwin of Pima County's Parks & Rec Natural Resources noted Pima County's full support for this important project that will give us a lot of information and help with some significant connectivity issues on a regional and broad perspective.

Ms. Nordhaugen mentioned that the intent of structures #1 and #2 is to link the Santa Catalina Park to Big Wash. Additional consideration of utility relocation due to fiber optics and the overpass ramps being in the power lines has been encumbered.

Mr. Clark, Southwest representative of the Defenders of Wildlife, and a new member of the Arizona Wildlife Linkages Working Group, remarked that he has been involved in the development of the statewide linkages assessment process and workshop on wildlife linkages and mentioned that there has been a broad level of input and stakeholder contribution in a well thought out process using reliable data and scientists' best educated guesses. The project's site selection and structures are very appropriate and will make a difference to wildlife and drivers.

Oro Valley Vice Mayor K.C. Carter mentioned lots of confusion about the project's bridges at a recent ADOT meeting at Catalina School, and upon learning of set aside funds for the bridges, he began writing letters to get the process working. Meeting with the Governor and new State Land Commission, the Town of Oro Valley is pursuing annexation of 6,000 acres and keeping the open space.

Ms. Nordhaugen stated that all three structures are needed. Although one structure may be effective, animals don't cross all in the same place. Based on a road kill study, structure #2's location (MP 83.9) is the second highest road kill crossing, and the other two are also high. This particular constrained configuration is the best way to get animals from the Tortilitas back into Catalina State Park. On SR 260 there is one structure per mile for elk.

In response to a question on no development in the wildlife corridor preserve, Ms. Nordhaugen mentioned that TEP has decided to relocate a planned substation outside the corridor, and that ADOT prefers not to construct a structure that does not link to set aside land. Mr. Ellis indicated that this preservation issue may be raised by other committees and should be emphasized in the proposal along with animal population movements (crossing locations and number), if data are available.

Mr. DeGrood reported that RTA Board members who are aware of this project, have asked where we stand in terms of the overall priorities of the Wildlife Working Group with respect to the regional use of funds since this project is nearly 20 percent of RTA funds in this particular category. Although this may be the best use of these funds, there will be concern raised at the board level on how are we proposing to disburse the funds regionally and whether it's appropriate to focus on a few big projects (such as this one), or a more broad use of funds. There is also concern about the private property to the east of SR 77, whether wildlife easements can be acquired, and whether it will be permeable in the future. Because the mortality rate, according to proposal materials, is highest south of the project near the confluence of the Big Wash and CDO, will another structure be considered there that may be of more value?

Ms. Nordhaugen noted the project's great expenditure of funds, but believes this project has regional benefits.

Ms. Campbell mentioned funding for this RTA category goes beyond any formula or percentage and restated her initial proposal to the RTA Committee.

A letter from Chuck Huckelberry dealing with land on the west side of SR 77 was distributed. The wildlife overpass will land near the Catalina transfer station, and Pima County has committed to restoring and revegetating that land for wildlife movement. In the Arroyo Grande planning process, it's proposed that Pima County will be acquiring open land as an extension of Tortolita Mountain Park.

Ms. Ruther, Environmental Planning Manager for PC Development Services and wildlife biologist, commented that the existing land use situation of long-standing development on the east side of SR 77 is still very permeable. If Pima County acquisition doesn't occur, the existing land use will persist and modifications to intensify the land use would need to be mitigated through very specific measures for future development to retain the amount of permeability we currently have today.

Ms. Nordhaugen noted that the structure #1 is only a mile from the CDO bridge and the proposed 3 miles of fencing (to MP 82), is meant to tie into it for safe crossings, as animals prefer the path of least resistance.

In response to a question on how the ADOT Design Engineers have come into play to insure that these structures can be built and installed, Ms. Nordhaugen indicated that ADOT Tucson District Engineers were amenable to the construction and installation of prefabricated arched structures that can be installed quickly and shift traffic control easily.

Ms. Nordhaugen responded to comments on the narrowness and constraint of the passageway near structures #1 and #2, by saying that #2 is the highest attempted crossing place for mule deer and with the area's feeling of openness and passability, she didn't think this will hinder their movement or appear to be a tunnel situation, but both structures help them and ensure their safe crossing movement. Housing is located atop the drainage. Also, fencing is located around the church which won't deter deer.

Mr. Trenary commented that the Oro Valley Mayor and Council passed a resolution last month to move the proposal forward.

Ms. Nordhaugen mentioned that the width of the overpass (150') is modeled after a similar structure in Banff Canada that has proven to be very effective. With the anticipated increase in traffic as Pima County grows to 1.3 million in 2025, it was felt the width would help offset the distraction of the traffic below. Fencing will be installed on top of the structure so that animals will not be able to fall or leap onto the cars.

When asked if Pima County or the Town of Oro Valley would need to pass an ordinance dealing with trespassing, Mr. DeGrood responded that the ADOT right-of-way has already been acquired.

Ms. Campbell noted that there is no mention of matching funds in the proposal, and wasn't sure what work would be done in house. Ms. Nordhaugen said that certain aspects could be called out, and indicated that the overall SR 77 upgrade is currently estimated at \$33 million. ADOT has modified the percentage of tasks to much less than standard, and these structures are being included in the initial project assessment and are being carried forward to final design. Ms. Campbell suggested that matching fund items be listed and quantified, as in prior proposals, and Mr. Ellis added that the reduction in costs by ADOT (nearly \$3,000,000) is critical to note.

In regard to the project's cost estimate and whether it can be executed for this proposed amount, Mr. DeGrood noted that an Inter-governmental Agreement (IGA) with ADOT has not yet been entered into for construction. If the RTA provides a funding allocation, it is the implementing jurisdiction's responsibility to absorb any overruns should they occur. Ms. Nordhaugen responded that ADOT has agreed on the proposed amount to install the structures, place them into plans and design, and to absorb any amount beyond that.

Any quantified in-kinds funds should be shown in the proposal to give an idea of actual total investment, and Ms. Campbell noted possibly including Pima County's revegetation of the transfer site, any Oro Valley offerings as well as AZGFD's funding of the actual linkage design. Mr. Ellis added that Oro Valley's possible annexation and maintenance in not allowing a big commercial infrastructure and tax base to go, boosts the actual investment quite a bit higher than the proposed amount. Contributions of non-governmental organizations also need to be included.

Mr. Casper, ADOT's Interim Tucson District Engineer, commented that the community has a real opportunity during ADOT's major reconstruction of SR 77 in this area to successfully incorporate this project and ease the impact of its installation and management of traffic to drivers.

Mr. DeGrood added that recommendations need to be tested to determine if we're moving forward with the best possible projects using our limited resources in the best way possible, and is it proportionally correct to what the problem is.

Mr. DeGroot noted that we're about to go to a call for projects for the next 3 years of the Transportation Improvement Program (TIP), and expressed the tight timeframe (TIP meeting 8/18), then the proposal would move forward to the Transportation Planning Committee (9/2), Management Committee (9/9) and the RTA Board for approval (9/24). There may still be a lingering concern of where this project fits over the life of the twenty-year RTA Plan.

When asked how much time was needed, Ms. Raine, ADOT Project Manager, indicated that ADOT plans to advertise for the SR 77 project's design in January 2010, and a commitment would be needed by then.

Mr. Ellis suggested the timeframe be used to address anticipated concerns of the various reviewing committees toward a successful outcome.

In response to a question on how to agendize the proposal but not delay it here, Mr. DeGroot noted that the motion could be crafted to approve the proposal to bring it forward through the TIP Subcommittee as this group directs.

Motion was made by Mr. Ellis to accept the SR 77 Wildlife Crossing Structures proposal with the following additional work needed: 1) revise maps showing land use and open land on the project's east side, 2) clarify structure #2 rendering, 3) list in-kind contributions/supplemental funding sources, and 4) work to develop clear priorities for the use of Wildlife Linkages Funding. The recommendation is to be forwarded to the TIP Subcommittee for consideration in October 2009, at a total cost of \$8,230,600. The motion was seconded by Carolyn Campbell, and unanimously approved.

Mr. Ellis thanked Ms. Nordhaugen for her hard work and the education its brought to the group during this process as attendees applauded. In turn, Ms. Nordhaugen thanked all coalition and other staff, ADOT design team members and many residents for their help over the years in developing the proposal.

HANDOUT: SR 77 Wildlife Crossing Structures Increasing Permeability and Maintaining Connectivity (Tortolita Mountains to the Santa Catalina Mountains) Wildlife Linkages Structure Construction Proposal, pg. 1-22.

Wildlife Mortality and Corridor Use near Highway 77, Oro Valley to Catalina, Pima County, Arizona, Elissa Ostergaard, AGFD (supplement to above proposal), pg. 1-12.

Letter dated May 28, 2009 from Chuck Huckelberry to then ADOT-Tucson District Engineer, Greg Gentsch, in support of the SR 77 proposal.

4. RTA Board Update

Jim DeGroot, Director of Transportation Services, said that the RTA Board met on July 23 and approved 40 bus pull-out projects selected from bus stops with more than one hundred boardings per day. Transit improvements along the Oracle Corridor also will be looked at, with ADOT, due to current deficient bus stops and pedestrian issues.

The RTA Technical Management Committee met on July 29, and made a recommendation on a noise wall policy as a result of an appeal presented to the RTA Board at its June meeting by residents along the La Canada project. The board tabled the item and directed

the TMC to develop an overarching policy on how to approach noise wall requests region-wide. Mr. DeGrood reported that the RTA Board's next meeting is scheduled for Sept. 24. The CART Committee will meet sometime after Labor Day. The TIP Subcommittee will consider the Houghton Road and three Town of Sahuarita proposals at its Aug. 18 meeting.

7. Future Agenda Items

No items were requested.

8. Call to the Audience

No discussion occurred.

9. Adjournment

The meeting was adjourned at 11:04 a.m. by Chair Rick Ellis.