

APPENDIX D

TABLE 1 TANQUE VERDE CREEK BANK STABILIZATION PROJECT Excavated and Construction Material	
Total Material to be Escavated(cy)	115,000 (uncompacted soils)
Total Amount of Pozzolon (Stabilizer) (cy)	360
Total Amount of Portland Cement (cy)	3,500

TABLE 2 TANQUE VERDE CREEK BANK STABILIZATION PROJECT Construction Equipment	
Scrappers	3
Bulldozers	2
Compactor	1
Water Truck	1
Bully Dump Truck	4

TABLE 3
TANQUE VERDE CREEK BANK STABILIZATION PROJECT
On & Off-Road Truck Emissions

Project Related Material to be Transported and Number of Truck Trips to be utilized per day

Volume of Material (cy)	4,610	Total # of Trips Required	195
Truck Hauling Capacity (cy)	20		
Truck Weight (lbs)	>6K	# of Trips Required/Day	4.0
# Trucks Used	4	Vehicle Miles Traveled/Day	
Project Time (Months)	3	On Road	80
Project Time (Work Days)	63	Off Road	2
Travel Distance (Miles/Trip)			
On Road (roundtrip)	20		
Off Road (roundtrip)	0.5		
Speed (On Road mph)	55		
Speed (Off Road mph)	35		
Cold Starts	100%		
Hot Starts	0%		

On Road Emission Factors (gram/mile)

Activity	PM-10	CO	ROC	Nox	Sox Not Available	Pb Not Available
Exhaust+Evaporative	0.24	7.15	0.56	5.5	"	"
Tire Wear	0.19				"	"
Cold Start		31.31	2.14	2.02	"	"
Hot Start		3.46	0.56	0.97	"	"
Hot Soak			0.46		"	"
Diurnal			1.96		"	"

On-Road Emission Factors (lb/day)

Activity	PM-10	CO	ROC	Nox	Sox Not Available	Pb Not Available
Travel Emissions	0.076	1.260	0.099	0.969	"	"
Cold Start		0.276	0.019	0.018	"	"
Hot Start		-	-	-	"	"
Hot Soak			0.004		"	"
Diurnal			0.017		"	"
Totals	0.076	1.536	0.139	0.987	"	"

Off Road Emission Factors (gram/mile)

Activity	PM-10	CO	ROC	Nox	Sox Not Available	Pb Not Available
Exhaust+Evaporative	0.24	7.82	0.81	4.21	"	"
Tire Wear	0.19				"	"
Cold Start		31.31	2.14	2.02	"	"
Hot Start		3.46	0.56	0.97	"	"
Hot Soak			0.46		"	"
Diurnal			1.96		"	"

Off-Road Emission Factors (lb/day)

Activity	PM-10	CO	ROC	Nox	Sox Not Available	Pb Not Available
Travel Emissions	0.002	0.034	0.004	0.024	"	"
Cold Start		0.276	0.019	0.018	"	"
Hot Start		-	-	-	"	"
Hot Soak			0.004		"	"
Diurnal			0.017		"	"
Totals	0.002	0.310	0.044	0.042	"	"

FUGITIVE DUST GENERATED BY THE CONSTRUCTION ACTIVITIES.

Extraction-PM10 emissions-26.4 lbs/43,560 cu. ft.

(Soil Excavated cu. ft. x 26.4 lbs)/43,560 cu.ft = lbs/day

Note: 1 cy = 27 cu. ft.

Emission for 115,000 cy of material removed:

$115,000 \times 27 = 3,105,000 \times 26.4/43560 = 1,181.82$ for the project duration (without mitigation or watering)

34% control efficiency used for PM10 mitigation measures - watering project site twice a day (Table A11-9-A, SCAQMD, CEQA Air Quality Handbook, April 1993)

After application of mitigation - (watering the unpaved road = 639.82 lbs for the project duration.

$639.82/180 = 3.5$ lbs per day.

Vehicle miles travel per day (VMT)

Distance traveled by a vehicle x Number of Vehicle = Total VMT per day.

Fugitive dust generated by truck traffic on unpaved road=

$2.1 \times (G/12) \times (H/30) \times \{[(I/3)^{0.7} \times (J/4)^{0.5}]\} \times [(365-K)/365]$ in pounds per miles traveled Where,

G = Surface silt loading in percent (Table A9-9-D-1)

H = Mean vehicle speed in miles per hour (Table A9-9-D-2)

I = Mean vehicle weight in tons (Table A9-9-D-3)

J = Mean Number of wheels on vehicles (Table A9-9-D-3)

K = Mean number of days per year with at least 0.01 inches of precipitation (Table A9-9-D-4)

Fugitive dust generated by truck traffic on unpaved road=

$2.1 \times (G/12) \times (H/30) \times \{[(I/3)^{0.7} \times (J/4)^{0.5}]\} \times [(365-K)/365]$; where G = 28; H = 15 miles/hr; I = 10,000 lbs/2000 = 5 tons; J = 6; K = precipitation condition in days = 34.

$F = 2.1 \times 2.33 \times 0.5 \times 1.43 \times 1.22 \times 0.91 = 3.88$ lbs/miles

Therefore, E = 2 miles/day total traveled distance on unpaved road = $2 \times 3.88 = 7.76$ lbs for trucks traveling on unpaved road.

45% apply water three times daily is used for truck traveled on unpaved road and 40% traffic speed on all unpaved road is 15 mph or less (15 miles of speed is used for calculating fugitive dust emission.)

After application of mitigation of 45% = $7.76 \times 45/100 = 3.49$ lbs per day for trucks traveling on unpaved road.

Fugitive dust generated per day by the project would be = $3.5 + 3.49 = 7.00$ lbs per day.

APPENDIX E: PUBLIC INVOLVEMENT AND PUBLIC REVIEW

PUBLIC MEETING SUMMARIES

Public Meeting Summary

First Public Meeting

Date: May 28, 2002

Location: Dusenberry/River Public Library

Corps and Pima County representatives presented and summarized the project and documents.

The project is authorized under the Flood Control Act of 1938 and WRDA 1996. Bank protection on the Tanque Verde was reevaluated due to flood damage in 1993.

Several participants noted that they had just received notice of the meeting that day, or had not been officially notified of the meeting and heard about it by accident.

Mr. Joseph Cesare, a property owner who owns part of the proposed preserve area requested introduction of attendees. The following attendees introduced themselves:

Lori Woods- RECON

Sherry Ruther - (Arizona) Game and Fish Department

Julia Fonseca- Pima County

Larry Cesare- Property owner.

A few other attendees declined to introduce themselves.

The question was asked, What if property owners don't want to sell?

Pima County FCD & DOT responded that it is their responsibility to obtain the land.

Mr. J. Cesare spoke in favor of a linear park. He would like to see it be included in the plan. He also inquired about revegetating the burned areas. He also asked if the soil cement protection be amended.

The proposed alignment is based on Pima County's post 1993 request.

Sherry Ruther asked if the proposed alignment is "Set in stone?" We are dealing with banks as they currently exist, not reclamation of riparian habitat area. Earlier soil cement caused the stream to migrate to the north.

John Drake (Corps, Project Manager) suggested looking at other types of protection for the riparian preserve such as: Kelner jacks or soil cement with pipes to allow flow to reach mesquite bosque.

Ira Artz (Tetra Tech) said the smooth bank on the south, would reduce erosion on north bank.

Joseph Cesare has been revegetating the burned area.

Ruth Villalobos (Corps, Chief of Planning Division). The Corps did not have authority to look at Habitat Restoration before the mid 1990's. This project has no recreation trails.

Suzanne Shields (Pima County)- We can't have trails on south side by Tucson County Club Estates.

24 June is comment deadline for inclusion in final report. (The deadline was subsequently extended).

Second Public Meeting

Date: July 9, 2002

Location: St. Alban's Episcopal Church

The Corps and Pima County representatives summarized the project.

The Public comment period has been extended to July 31 due to late notification of the availability of the document.

Suzanne Shields, Pima County Deputy Director for Flood Control, discussed some other projects in Pima County, including other natural treatments for riparian areas. She will have field meetings in the fall. The goal is to maximize riparian habitat preservation.

Bobby Ulich spoke in behalf of the Tanuri Ridge Homeowners Association (TRHA). TRHA owns 18 acres of the (proposed) preserve. They are already legally prevented from developing it. Would the land then be available for County to develop recreation?

Ms. Shields Responded that right of way purchase is the County's Responsibility. No recreation features would be there.

Members of the public asked about a walkway along the North Bank (along the preserve).

The county responded that there would be some tie-in with the trail system on Tanque Verde.

Sonja Macys, representing Tucson Audubon Society favors on-site mitigation, but questions the purchase of acreage that is already preserved.

John Drake, Army corps of Engineers replied that are aware of the covenants. We do not have a real estate appraisal yet. We will need to determine how binding the covenants are before determining if purchase or some other means to secure the preserve is appropriate.

Lois and Rick Eisenstein. –(TRHA President) also asked about recreation. Plans show accessibility, and a connected path would increase access. They are also concerned with scour of the riparian area in major floods.

Mike Zeller - Tetra Tech – (worked for Pima County before 1981). Regarding north bank erosion, water would be deflected from the south, which would also reduce reflective meander, but this does not completely prevent erosion.

David Berg brought up the need for access across Tanque Verde Creek for native wildlife including javelina, mountain lion, bobcat, jackrabbits and other species.

Robert Fee – Chief, Tucson County Club Fire Department said that after the 1965 flood there was a lake. Land was offered in exchange for bank protection. South side water mains were damaged. He suggests some area for recreation use, but not clear where.

Barbara Brody, TRHA member also expressed concern about the proposed development on the SE corner of Craycroft Road and River Road. This would be adjacent to the proposed project.

Pima County is reviewing the plan. They will need mitigation. The Flood plain ordinance requires dedication.

Suzanne Shields - Other properties have been acquired by Pima County FCD and management plans developed.

Rick McNeely, TRHA, indicated that some of the Mitigation area does not have riparian vegetation. He does not want a river walk close to the residences. Could property be acquired under eminent domain?

As indicated earlier, the County is responsible for obtaining ownership or rights-of-way.

Some attendees say the (LRR/EA) report is too difficult to understand.

Suzanne Shields will prepare a summary of the Limited Reevaluation Report (LRR).

PUBLIC REVIEW COMMENTS AND RESPONSES

June 6, 2002

Mr. Ed Demesa, Chief, Planning Section A
Plan Formulation Branch
US Corps of Engineers
PO Box 532711
Los Angeles, CA 90053-2325

Dear Mr. Demesa;

Thank you for the announcement of the public meeting here in Tucson, AZ concerning the Tanque Verde Creek, scheduled for May 28, 2002 which I received today by First Class mail. I would also like to point out that our zip code was changed at least four years ago, if not longer.

My wife and I would have liked to attend the meeting since the matter to be reviewed is of interest to us; we live very close to the area in question and the meeting place is walking distance.

I would hope that future notices will be more timely and with more up to date addressing.

Very truly yours,



Donald E. Williams

Cc: Mr Kurt Weinrich, Director
Pima County Dept of Transportation and Flood Control District

Response: We apologize for the late mailing of the notice for the May 28, 2002 public meeting for this project. Due to problems in notifying interested parties for the initial meeting, another meeting was scheduled, with notification reaching the public in a timely manner. We hope you were able to attend and participate in the second public meeting on July 9, 2002 at St Alban's Episcopal Church. Thank you for your updated address information.

To Mr Ed Demesa
Re Tanque Verde Creek bank projects
Public meeting May 25th 2002? But we
got this letter June 7th!

June 8, '02

There is no mention of walking path along
the top of a new embankment but I
assume it is part of the plan so as to
link up with path the west and east of
that segment.

Also - we need a footbridge over
Ventana Wash where it empties into
Tanque Verde Creek. For years the pipe
railings lay on the ground nearby as
though it was planned. The cement
embankments are there. Perhaps a builder
went under & didn't finish.

How can I find out if these
items are included?

Cassandra Von Mayr

Response: See previous response regarding the late notification and the second public meeting. The proposed plan does not include recreational features such as walking paths or trails along the top of the new embankment to connect with other trails to the east and west. Such features would be the responsibility of the County. A footbridge over Ventana Wash is not within the scope of this project. Pima County Department of Parks and Recreation is likely to have additional information regarding the status of the bridge that appears to have been started but never completed.



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT
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Tucson Office, 555 N. Greenwood Rd., Tucson, AZ 85745

June 18, 2002

Ms. Ruth Villalobos
U.S. Army Corps of Engineers
Planning Division
P.O. Box 532711
Los Angeles, California 90053-2325

ATTN: Tanque Verde LIRR

Dear Ms. Villalobos:

At the conclusion of the May 28, 2002, public meeting in Tucson, Arizona, several members of your staff, representatives of the local sponsor (Pima County Flood Control District), and I discussed some of the concerns that the Arizona Game & Fish Department (Department) has with the currently proposed Tanque Verde Bank Stabilization Project Between Craycroft Road and Sabino Springs Road. The Department's primary concerns relate to project design and the appropriateness of the proposed mitigation site.

Briefly, the Department believes that the gap in the alignment of the stabilization on the north bank proposed in order to accommodate preservation of the mesquite community actually compromises the long-term viability of this area via the erosive forces of lateral channel migration. Hard surfacing this exposed bank is also expected to negatively affect this mesquite community by eliminating/significantly reducing overbank storage. There was additional discussion that mitigation, in this case, would be more effective if sites upstream of the proposed project where the riparian community is more in tact were utilized to off-set project-related impacts. (This point has even more merit as recent findings show that Pima County already has measures in place (restrictions on development and easements) that protect a significant portion of the 48-acre proposed mitigation site.)

Subsequent to these discussions, it was mutually agreed to arrange a meeting in the near future to further explore these issues and to modify the proposed project if warranted. I look forward to working with your staff, representatives of the local sponsor, and the U.S. Fish and Wildlife Service in this endeavor. Please contact me at griffither@gf.state.az.us or 520.942.628x5982 ext. 550 to coordinate the Department's participation.

NOV 26 2002
RECEIVED
JUN 26 2002

1. The Department's primary concerns relate to project design and the appropriateness of the proposed mitigation site.

Response: The combined responses to the more specific concerns that follow will address this more general comment.

2. The Department believes the gap in stabilization along the exposed edge of the mesquite community on the north bank compromises the long-term viability of the area due to exposure to erosive forces. Hard surfacing the exposed bank (as proposed in Alternative 4) is also expected to negatively affect the community by eliminating of significantly reducing overbank storage.

Response: Although the "Lateral Migration Analysis" for this project indicates little if any increased erosion of the preserve due to placement of soil cement upstream, downstream, and on the opposite bank, the Corps concurs that significant erosion of the preserve could occur with or without the project. Due to concerns of the Department and several other individuals and groups, the Corps is reevaluating providing bank protection for the preserve. The alternative that provided soil cement bank protection for the preserve (Alternative 4) was, initially, not selected, primarily for the reasons stated in the Department's letter. A soil cement berm has the potential to reduce overbank storage and to prevent overflows from the smaller floods that are most beneficial to the riparian community while allowing the larger, more destructive floods to reach the habitat. In order to protect the preserve from erosion, while maximizing the

Ms. Villalobos
June 18, 2002
2

Sincerely,


Sherry A. Rutter
Habitat Specialist

SAR: sr

cc: Bob Broscheid, Project Evaluation Program Supervisor, Habitat Branch, PHX (ACFD)
Log No. 5-24-02/01)

Bob Lemmon, District Wildlife Manager, Region V
Mike Martinez, USFWS, Az Ecol. Services State Ofc, PHX
Larry Robison, Pima Co. Flood Control District

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hydrologic connection, the Corps proposes to construct a berm to the minimum height that would protect the toe from erosion and to install pipes to conduct water through the soil cement. With these modifications, the Corps believes that the negative effects of the low soil cement berm, such as loss of overbank storage, would be minimized, and the erosion protection benefits would be maximized. The Corps and Pima County will also look in more detail at other options for bank stabilization of the preserve area during the Pre-construction, Engineering, and Design (PED) phase of this project.

3. The Department suggests using riparian habitat upstream of the site as mitigation.

Response: The cost of off-site mitigation would be beyond the budget for this project.

4. Pima County already has measures in place that protect a significant portion of the 48-acre proposed mitigation site.

Response: The Corps concurs that some restrictions and easements exist on portions of the proposed preserve area, but deed restrictions can often be reversed. Real Estate division will determine what needs to be done to secure the land as a permanent preserve. The final action may involve a combination of land acquisition and easements that ensure protection from future development.

5. The Department requests a meeting with the Corps, the local sponsor, and U.S. Fish and Wildlife Service to explore the issues discussed in the letter and at the May 28, 2002 public meeting on this project.

Response: The requested meeting took place on June 20, 2002, at the Pima County offices.



**CITY OF
TUCSON**
DEPARTMENT OF
TRANSPORTATION

June 18, 2002

Mr. Ed Demesa
Study Manager
Plan Formulation Branch
U. S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

**SUBJECT: TANQUE VERDE CREEK BANK STABILIZATION
PROJECT, CRAYCROFT ROAD TO SABINO CANYON
ROAD. LIMITED REEVALUATION REPORT (LRR) AND
DRAFT ENVIRONMENTAL ASSESSMENT (EA).**

Dear Mr. Demesa:

Thank you very much for giving us an opportunity to comment on the subject LRR. We acknowledge the proposed construction limits are all outside the incorporated City of Tucson limits, however, the City has interest in the success of this project because it will result in major benefits to residents living in the area. We trust that the public meeting held on May 28, 2002 at 6:00pm was productive.

We have reviewed the subject report and are pleased to see that the analysis performed to evaluate the need for bank stabilization was addressed in great detail. The proposed design to construct 1550' feet of bank protection (north bank) and 2,830 feet of bank protection (south bank) upstream from the Craycroft Road bridge is needed to protect the bridge and the roadway.

The plan to construct the 4,220 feet of bank protection along the golf course (south bank) will also result in valuable benefits to the area and stop the recurring lateral migration of the south bank during rare flooding events.

We would like to request that preservation of the riparian habitat area along the north bank be studied further. The thalweg of the creek skirts the toe of the north bank along the riparian area and we believe this may have the effect of eroding the north bank during significant flow events. We would suggest that the low flow bank protection be limited to one or two feet, not four feet as studied in the report.

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The project area is outside the Tucson city limits, but the Department of Transportation is interested in the success of the project due to the benefits it would provide in the area. The proposed bank protection would provide valuable benefits on both the north and south banks. The thalweg of the creek skirts the north bank along the riparian area and may cause erosion. The Department favors erosion protection but suggests limiting the height of the soil cement berm to 1 to 2 feet (primarily for esthetic reasons).

Response: The Corps is currently reevaluating protective measures for the riparian habitat preserve. Four feet was considered a maximum height for the berm in Alternative 4. The Corps concurs that if a soil cement berm is constructed to protect the preserve, it should be at the lowest height that would protect the bank from undercutting. A berm 1 to 2 feet in height would cost less than a higher berm and may be superior in terms of biological benefits as well as esthetics.

Mr. Ed Demesa
June 18, 2002
Page 2

Based on the high benefit/cost ratio as evaluated in the recommended plan, as presented in the LRR Report, we are hopeful that the next phase of the project, including design and construction, will be undertaken soon.

Again, thank you for the opportunity to provide comments and we look forward to future involvement in this project.

Sincerely,



James W. Glock, P.E.
Deputy Director of Transportation

DOT No.: 02-109

JWG:YDD:sb

c: Benny Young, Assistant City Manager
Andy Dinauer, Engineering Administrator
Dena Wakefield, Engineering
Larry Robison, P.E.

6/30/02

Mr. Ed Demesa, Chief
Planning Section A
Plan Formulation Branch,
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, CA 90053-2325

Dear Sir:

In response to your notice of a meeting to be held July 9, 2002 and request for views and comments we submit the following statements:

As residents in the Tanuri Ridge Homeowners Association we oppose any plan to use the 48 acres being taken for this flood control project (the draft LRR, the draft EA, and the proposed Recommended Plan including future maintenance) for any other purpose than stabilization of the unprotected banks of Tanque Verde Creek.

Specifically we oppose the development or any recreation uses within the 48 acres which is proposed to be taken. Using any part of that area for walking, cycling etc. would disrupt the tranquility of the area, and the quiet enjoyment of our property would be taken from us.

We use the 48 acres now for bird watching and nature walks. Any development of any sort would devalue the properties of the individual property owners within the Tanuri Ridge Association.

Very Truly Yours

Frank T. Murray
Suzanne M. Murray

cc: Rick Eisenstein, Pres.
Tanuri Ridge Homeowners Assoc.
cc: Melinda Carrell

The Murrays oppose any plan for the 48 acre mesquite bosque) site other than for stabilization of unprotected banks. They specifically oppose development of recreational uses for walking, cycling, etc. that would disrupt the tranquility of the area.

Response: The current plan does not include any recreational uses or development for the 48- acre mitigation site. The Draft EA does refer to possible future passive recreational development by Pima County; however, the County has subsequently indicated that no recreational features will be developed in the preserve. References to potential recreational features in the preserve area have been eliminated in the Final EA. See last paragraph, section 3.3.2 of Final EA.

July 1, 2001

Mr. Ed Domesa, Chief Planning Section A
Plan Formulation Branch
U.S. Army Corps of Engineering
P.O. Box 532711
Los Angeles, California 90053-2325

Re: Tanque Verde LRR and Draft EA

Our home is immediately north of the Tanque Verde Creek so we are pleased to hear of the proposed bank stabilization.

When we built our home in 1986 it was our understanding and that of our Homeowners Association that the land north of Tanque Verde Creek would never be used for commercial or public recreational use. This is desert land consisting of many types of native trees, shrubs and cacti and is a safe habitat for several desert creatures such as coyotes, bobcats, javelina and many bird species including quail, hawks and owls. It is our sincere hope this area can remain pristine and not be opened for public access and/or recreational purposes.

We will be out of state for the July 9th meeting so we are sending this letter to express our thoughts.


Art Nehring


Rose Nehring

The Nehrings favor bank stabilization but oppose public access to and recreational development of the land north of Tanque Verde Creek (the proposed preserve area). Their understanding was that the site would never be used for commercial or public recreational use. The letter lists some of the wildlife species found in the habitat. The Nehrings were unavailable to attend the July 9 public meeting.

Response: The purpose of acquiring the mesquite bosque is to preserve it in an undisturbed condition and to allow natural recovery from previous disturbance. See also the response to the letter from Frank and Suzanne Murray. The Corps also appreciates the information provided pertaining to additional species inhabiting the site. This information has been incorporated into the Final EA, Section 4.5.

July 7, 2002

Mr. Ed Demesa,

We are writing you this letter in regard to the purchase of the mesquite grove in our neighborhood. We live in Tucson, Arizona, along the Rillito River, between Sahino Canyon and Craycroft Roads.

We are OPPOSED to the purchase of the Mesquite Grove, as this is our private neighborhood property. We are not opposed to the soil erosion program, to reinforce the banks of the River, nor the walking path. The path could be constructed in the same manner as on the West Side of Craycroft. It is not necessary to purchase the mesquite grove in addition.

Thank you for your consideration in this manner.

Sincerely,

 Susan Eggen

Mr. and Mrs. Stephen G. Eggen

Mr. And Mrs. Eggen are opposed to the purchase of the mesquite habitat, which is private neighborhood property. They are not opposed to the soil erosion (protection) program or the walking path.

Response: A portion (approximately 18 acres) of the proposed 48-acre mesquite bosque preserve is dedicated open space for the Tenari Ridge residential area. Deed restrictions on development within the mesquite habitat area are in place. Our Real Estate branch will need to carefully review the language of the deed restrictions to determine if existing restrictions are adequate to preserve the area. The Corps and the County will then determine the most appropriate action to assure that the property remains undeveloped.

July 8, 2002

Mr. Ed Demessa, Chief, Planning Section A,
Plan Formulation Branch,
US Army Corps of Engineers,
PO Box 532711, Los Angeles, CA 90053-2325

Dear Mr. Demessa,

Tomorrow evening we are attending courses at work that are required for our jobs. For that reason we are unable to attend the Public Review and Public Meeting concerning stabilizing the unprotected banks of Tanque Verde Creek between Craycroft Road and Sabino Canyon Road.

Thank you for carefully considering all of the impact on the area. We are not as concerned about stabilizing the unprotected banks of the creek as we are about the idea of creating a preserve of 48 acres. Included in that 48 acres is 17 acres of Common area for exclusive use by members of our neighborhood that would be taken away from our neighborhood.

Our family recently moved to E Country Club Vista Drive in August 2001. We moved here because the area is private and safe, while not requiring as long a commute to work as some other areas of Tucson. We consider the washes on each side of our home to be a protection from strangers since our home is out of the way and not easily visible. We abhor the idea that a public park has been considered near our home, since we are at work during the day and our home would be placed at greater risk for burglaries. Currently it is at low risk; no burglaries have occurred in our neighborhood in years.

We appreciate the common area owned by the Tanuri Home Owners Association. It is controlled and carefully landscaped. This helps to maintain the quality of our neighborhood and the property value of our home. More importantly, this area is used by local wildlife, such as mountain lions, bobcats, javelina and coyotes, for travel between the washes.

Thank you for your consideration of our concerns.

Sincerely,
Robert and June Foltz




Robert and June Foltz are concerned about creating the 48-acre preserve, which includes 17 acres of the Tanuri Ridge Home Owners common area. A public park near their home would reduce protection from intrusion by strangers and increase the risk of burglary in their currently safe neighborhood. The common area helps maintain the quality of the neighborhood and property values. More importantly, the area serves as a wildlife corridor. This letter cites mountain lions in addition to other species previously mentioned.

Response: See responses to previous letters from Tanuri Ridge Homeowners Association members. We appreciate the additional information about the mesquite habitat use as a wildlife corridor and especially the reference to its use by mountain lions. Several participants at the July 8, 2002 public meeting also confirmed mountain lion sightings. This information has been incorporated into the Final EA, Section 4.5.

Mr. Ed Demesa
Chief, Planning Section A
Plan Formation Branch
U.S. Army Corps of Engineers
P. O. Box 532711
Los Angeles, CA 90053-2325

Re: Tanque Verde Creek

Dear Mr. Demesa:

We are writing in regards to the proposal by the Army Corps of Engineers and the Pima County Flood Control District to stabilize the unprotected banks of the Tanque Verde Creek between Craycroft Road and Sabino Canyon Road. The Tanuri Ridge Homeowners Association owns approximately 18 acres of property, which is a part of your proposed plan of action. Our home and personal property adjoin this common area.

We appreciate your rescheduling the public meeting and extending the deadline for comment when the original notices were not delivered prior to the original meeting.

We would like to make you aware of two major concerns we have with the plan as proposed. The selected plan provides for stabilizing the south bank of the creek on the south side of the Tanque Verde but does not provide for similar protection on the north bank. During the 1983 flood we stood on our lot and watched the trees on the south bank fall into the river. Subsequent to that flood, the river was stabilized upstream -- west of the Sabino Bridge. Due to that bank stabilization, the course of the river changed drastically and during the 1993 flood a large portion of land on the north bank was lost.

We believe that it is critically important that protection be provided for the north bank of the river. While we understand that the Fish and Wildlife Service is opposed to soil cementing the north bank because of concern for wildlife (which we share), we would like to have spelled out in advance the means by which the Corps intends to protect the north bank.

Our second major concern is the proposal by Pima County to purchase 48 acres on the north bank for the purpose of providing a future pedestrian/bicycle path through it. We are adamantly opposed to any pedestrian or bicycle path on the north side of the river. The approximately 18 acres, which are a part of the Tanuri Ridge Subdivision, are

1. The Tanuri Ridge Homeowners Association owns approximately 18 acres of property within the proposed project area.

Response: Comment noted. Several members of the Homeowners Association have provided this information.

2. They appreciate the rescheduling the public meeting and extending the comment deadline.

Response: Comment noted. The public's views are important to the study process.

3. Due to bank stabilization upstream, west of Sabino Canyon Road, following the 1983 floods, the course of the river changed, and during the 1993 flood, land on the north bank was lost. They believe protection for the north bank of the river is critically important, but share the concern for wildlife with the U.S. Fish and Wildlife Service opposing soil cement on the north bank (along the preserve area). They would like to know in advance the means proposed to protect the north bank.

Response: There has been a general consensus that some type of bank protection is needed for the north bank of the river (mesquite bosque preserve area). Note that all of the action alternatives (1-3) include 1,550 linear feet of bank protection on the north bank immediately upstream of Craycroft Road. Due to considerable public input on this issue, the Corps is reevaluating the need for erosion protection for the proposed preserve area. The current proposal is a modification of Alternative 4. The plan still includes a soil cement toe wall, but the height would be the minimum that would prevent undercutting and low enough to allow overflow from the

already protected as common area. Wildlife such as javalina, bobcats, coyotes, skunks, raccoons and mountain lions live in the riparian area and/or use it as a corridor via the Tanuri Wash to the Tanque Verde Creek. Elf and great horned owls, Harris hawks, hummingbirds, and other birds are found there. Reptiles include a variety of snakes, horned lizards and gila monsters. There are too few riparian areas left in the Tucson area as it is. Purchasing the land for use as a county park/ pedestrian pathway will certainly destroy its value as a wildlife corridor and habitat.

We would appreciate your consideration of these points as you go forward with your planning process.

Thank you.

Sincerely,

William D. Carrell, Jr.



Melinda T. Carrell



Cc: The Honorable Jim Kolbe
The Honorable Ray Carroll
The Honorable Ann Day

smaller, beneficial floods. PVC pipes would be placed through the wall to maintain the hydrologic connection between the creek and the habitat.

4. They oppose the proposal to purchase and provide a future pedestrian/bicycle path through the 48-acre site. The 18 acres in their subdivision are already protected. Wildlife (examples provided) live in and use the area as a corridor. Too few riparian areas remain in the Tucson area. Purchasing the land as a county park/pedestrian pathway will destroy its value as a wildlife corridor and habitat.

Response: The County has no plans to construct recreational trails through the preserve area. The Corps and the County concur that too little riparian habitat remains in the Tucson area. That was the main rationale for the proposal to acquire the 48-acre mesquite bosque site as a preserve to mitigate for impacts of the bank protection project. Any land use of this area that would destroy its value as a wildlife corridor and habitat would be contrary to the purpose of its acquisition. See also responses to earlier letters from other members of the Homeowners Association. We appreciate the additional information regarding wildlife identified on the site. Species not previously noted have been incorporated into the final EA (Section 4.5).

August 3, 2002

Mr. Ed Demesa, Chief, Planning Section A
Plan Formulation Branch
US Corps of Engineers
PO Box 532711
Los Angeles, CA 90053-2325

Dear Mr. Demesa:

Unfortunately, my wife and I were unable to attend the two meetings held in Tucson recently concerning the Tanque Verde Creek and the proposal to stabilize the remaining unprotected banks from erosion.

I am enclosing the write up in the Tucson morning newspaper which may be of interest to you if you haven't already seen it. For us, it provided more details about the erosion plan that we were not aware of. The area between Craycroft Road and Sabino Canyon Road bordering Tanque Verde Creek continues to be blessed with considerable and diverse small animal wildlife. Sometimes we feel we live within a small animal zoo, especially in the Spring.

We agree that erosion needs to be controlled for the protection of property. The provision of the 48 acre preserve is a noteworthy step towards preserving the diverse animal life we enjoy. We would hope that the soil cementing of the river banks can be done with a provision towards the preservation of animal corridors across the river and up and down the embankments. The actual process of cementing the river banks is going to be stressful enough for the animals but hopefully not too disastrous for them.

Very truly yours,



Donald E. Williams

Response:

We appreciate the article from the Arizona Daily Star. It provides a good summary of our second public meeting. The concerns expressed in this letter were shared by several of the participants at the meetings and in some of the other written comments. Preservation of wildlife corridors across the river is a priority, and this will be taken into consideration in the final design of any bank protection for the preserve area. (See Section 8 of the Final EA, Environmental Commitments).

SHPO- 2002 - 1095 / 11164



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P.O. Box 52711
LOS ANGELES, CA 90053-2271
May 21, 2002

REPLY TO
ATTENTION OF

Office of the Chief
Planning Division



TO INTERESTED PARTIES:

Enclosed for your review and comment is a copy of the Draft Limited Reevaluation Report (LRR) and Draft Environmental Assessment (EA) for the Tanque Verde Creek, Pima County, Arizona bank stabilization project between Craycroft Road to Sabino Canyon Road.

The review period for the draft LRR and draft EA is 30 days. Comments on this document received prior to the close of the review period will be incorporated into the Final LRR and EA. Please address written comments to:

U.S. Army Corps of Engineers
Planning Division
P.O. Box 532711
Los Angeles, California 90053-2325
ATTN: Tanque Verde LRR

If you have any questions regarding the draft LRR and draft EA, please contact Mr. Ed Demesa, Chief, Planning Section A at (213) 452-3792 or Ms. Lois Goodman, Environmental Coordinator, Regional Planning Section, at (213) 452-3869.

Sincerely,

Stephen Fin
Ruth Beiza Villalobos
Chief, Planning Division
The information about the undertaking. The draft forward to conducting according to 36 CFR 800.
James H. Haggerty, Director for SHPO, June 26, 2002

Enclosure



Response: This letter acknowledges receipt of the draft EA by the Arizona SHPO. The Corps will complete the consultation requirements according to 36CFR 800 in the next phase of the project as indicated.