



# BOARD OF SUPERVISORS AGENDA ITEM REPORT

Requested Board Meeting Date: 6/21/2022

\*= Mandatory, information must be provided

Click or tap the boxes to enter text. If not applicable, indicate "N/A".

**\*Title:**

Approval of a Riparian Habitat Mitigation In-Lieu Fee Proposal for a Grading Permit at 4535 North Avra Road, Located within Regulated Riparian Habitat

**\*Introduction/Background:**

Chapter 16.30 of the Pima County Floodplain Management Ordinance No. 2010-FC5 (Ordinance) requires a riparian habitat mitigation plan (RHMP) for mapped riparian habitat disturbances greater than 1/3 acre. The RHMP requires Flood Control District Board of Directors (Board) approval when disturbance of Important Riparian Area exceeds 1/3 of an acre and is more than 5 percent of the habitat on the property. If a project site contains suitable area(s) for riparian restoration, enhancement, or establishment, onsite mitigation occurs in accordance with the adopted Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines. The Ordinance contains a provision for mitigation banking, when on-site mitigation is not feasible. All offsite mitigation proposals require Flood Control District Board of Directors (Board) review and approval.

**\*Discussion:**

The owner Mr. Schaffner has applied for a grading permit on his property located at 4535 North Avra Road. The entire property is mapped within Regulated Riparian Habitat (RRH). Mr. Schaffner hired Greg Shinn with GRS Landscape Architects to prepare a Riparian Habitat Mitigation In-Lieu Fee Proposal and is proposing to contribute a fee of \$2,412.00, based on the a vegetative survey which is allowed under the guidance provided in the Pima County Regulated Riparian Habitat Off-Site Mitigation Guidelines.

**\*Conclusion:**

Acceptance of mitigation banking funds in-lieu of onsite mitigation is allowed under the Ordinance. Contributions to the mitigation bank for disturbance of this habitat will provide funds to be used toward purchase of high value resources or towards restoration of degraded riparian habitat within Pima County.

**\*Recommendation:**

The In-Lieu Fee Proposal conforms to the Ordinance and the Guidelines, and, as such, the District recommends approval.

**\*Fiscal Impact:**

\$2,412.00

**\*Board of Supervisor District:**

☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐ 5 ☐ All

Department: Regional Flood Control District

Telephone: 724-4600

Contact: Patricia Gilbert

Telephone: 724-4606

Department Director Signature: \_\_\_\_\_

Date: 5/24/22

Deputy County Administrator Signature: \_\_\_\_\_

Date: 5/24/2022

County Administrator Signature: \_\_\_\_\_

Date: 5/25/2022

MAY 26 2PM 1152 PC CLK OF BD

(K)

**DATE:** May 23, 2022

**TO:** Flood Control District Board of Directors

**FROM:** Suzanne Shields, P.E.  
Director

**SUBJECT:** Approval of a Riparian Habitat Mitigation In-Lieu Fee Proposal for a Grading Permit at 4535 North Avra Road, Located within Regulated Riparian Habitat (District 3)

### **Background**

Chapter 16.30 of the Pima County Floodplain Management Ordinance No. 2010-FC5 (Ordinance) requires a riparian habitat mitigation plan (RHMP) for mapped riparian habitat disturbances greater than 1/3 acre. The RHMP requires Flood Control District Board of Directors (Board) approval when disturbance of Important Riparian Area exceeds 1/3 of an acre and is more than 5 percent of the habitat on the property. If a project site contains suitable area(s) for riparian restoration, enhancement, or establishment, onsite mitigation occurs in accordance with the adopted *Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines*. The Ordinance contains a provision for mitigation banking, when on-site mitigation is not feasible. All offsite mitigation proposals require Flood Control District Board of Directors (Board) review and approval.

### **Report**

The owner Mr. Schaffner has applied for a grading permit on his property located at 4535 North Avra Road (Exhibit A). The entire property is mapped within Regulated Riparian Habitat (RRH) and there are three classifications of RRH; Important Riparian Area with an Underlying Classification Xeroriparian C and D Habitat and Xeroriparian Class D Habitat (Exhibit B). The disturbance 0.63 acres is over 5% of the RRH on the property. Mr. Schaffner hired Greg Shinn with GRS Landscape Architects to prepare a Riparian Habitat Mitigation In-Lieu Fee Proposal (Exhibit C) and is proposing to contribute a fee of \$2,412.00 in lieu of onsite mitigation, based on the a vegetative survey which is allowed under the guidance provided in the *Pima County Regulated Riparian Habitat Off-Site Mitigation Guidelines*.

### **Recommendation**

Acceptance of mitigation banking funds in-lieu of onsite mitigation is allowed under the Ordinance. Contributions to the mitigation bank for disturbance of this habitat will provide funds to be used toward purchase of high value resources or towards restoration of degraded riparian habitat within Pima County

Attachments: Exhibit A – Project Location  
Exhibit B – Project Site – Riparian Classification Map  
Exhibit C – Mitigation Banking In-lieu Fee Proposal



# Exhibit A

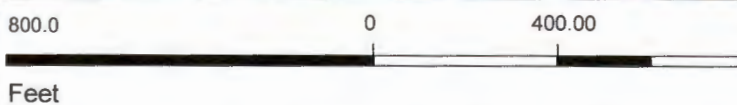


Legend



4535 N Avra Road

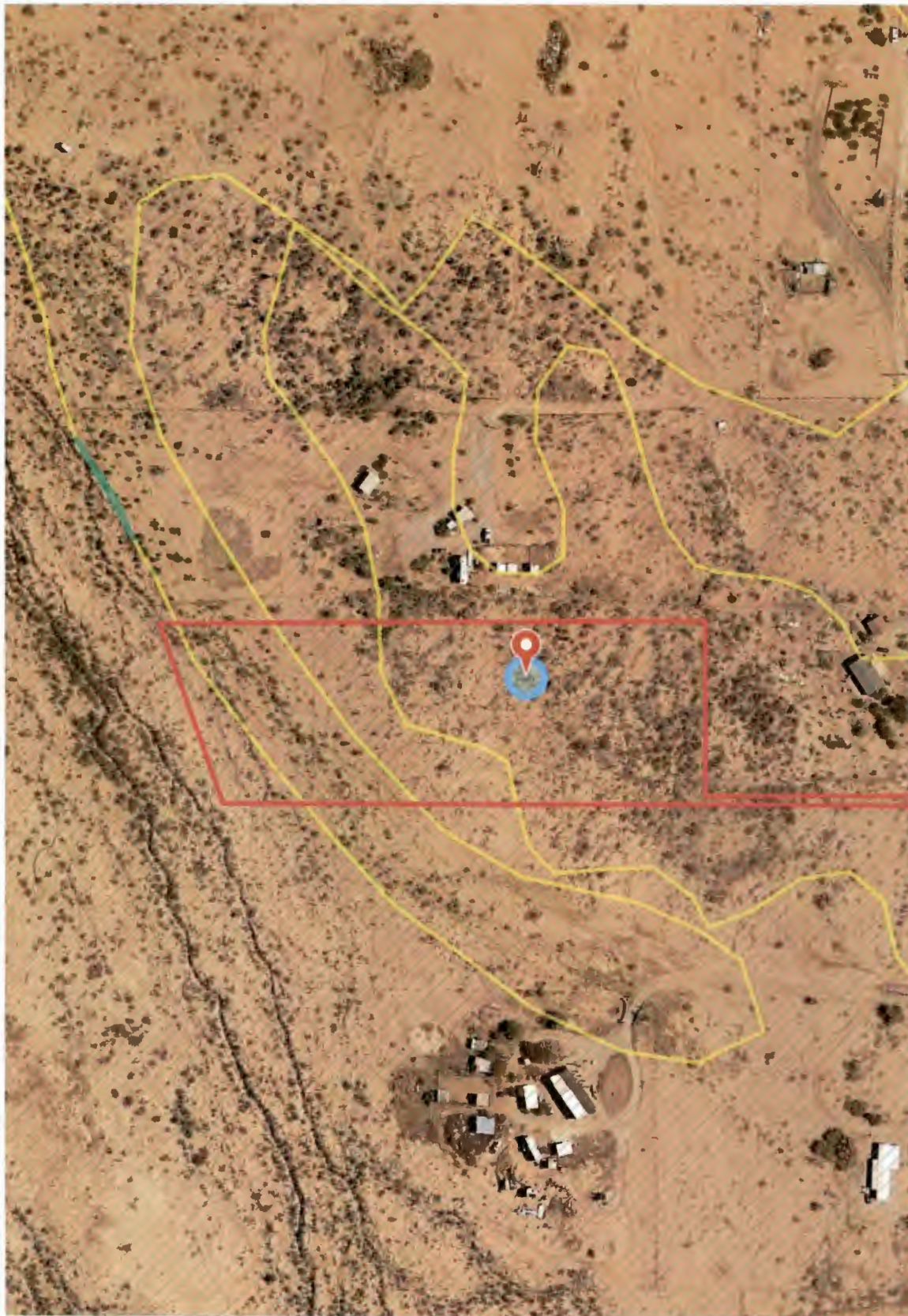
5/20/2022



This map is static output from an internet mapping site and no warranty is expressed or implied as to the accuracy, reliability, currency or completeness of the data, and is for reference only



# Exhibit B



## Legend

Riparian Habitat - Pima  
Effective 10/20/2005

- Xeroriparian A
- Xeroriparian B
- Xeroriparian C
- Xeroriparian D
- Hydromesoriparian or Me
- IRA - Xeroriparian A
- IRA - Xeroriparian B
- IRA - Xeroriparian C
- IRA - Xeroriparian D
- IRA - H
- Important Riparian Areas



4535 N Avra Road

5/20/2022



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Figure A

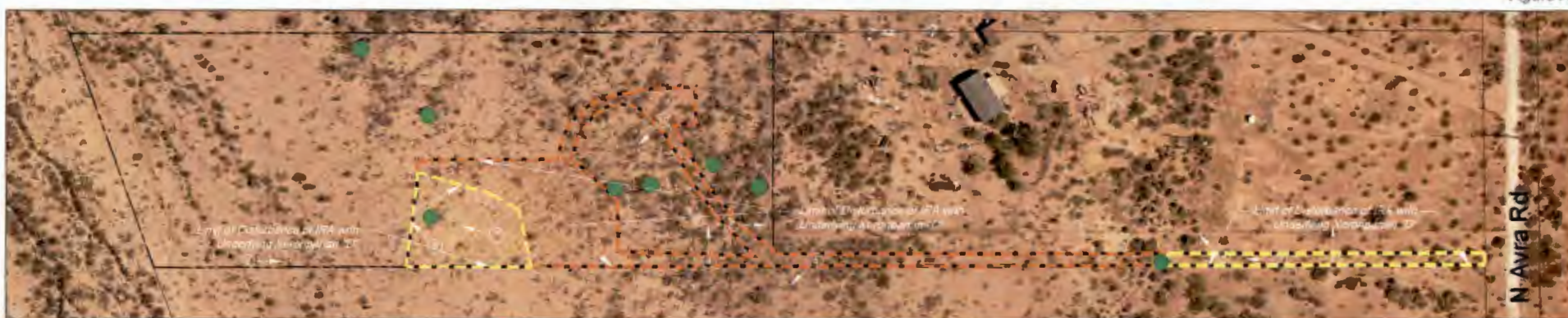
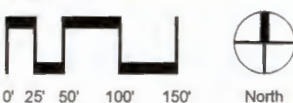


Figure B

Scale: 1" = 50'



#### RIPARIAN NOTES

1. Zoning = R4
2. Gross Site Area = 186,802 SF (4.28 acres)
3. Land Use = Rural Homestead
4. Area Calculations:
  - a. Gross site area = 186,802 SF (4.28 acres)
  - b. Total Regulated Riparian Habitat on Site = 186,802 SF (4.28 acres)
  - c. Total Disturbance on Site = 41,745 SF (0.96 acres)
  - d. Total IRA with Underlying Xeroriparian "C" on Site = 96,671 SF (2.22 acres)
  - e. Disturbance of IRA with Underlying Xeroriparian "C" = 27,356 SF (0.63 acres)
  - f. Total IRA with Underlying Xeroriparian "D" on Site = 51,514 SF (1.18 acres)
  - g. Disturbance of IRA with Underlying Xeroriparian "D" = 14,387 SF (0.33 acres)
  - h. Total Xeroriparian "D" on Site (non-IRA) = 36,417 SF (0.84 acres)
  - i. Disturbance of Xeroriparian "D" (non-IRA) on Site = 0 SF (0.00 acres)

#### RIPARIAN LEGEND

	Total Disturbance on Site	41,745	0.96
	Total IRA with Underlying Xeroriparian "C" on Site	96,671	2.22
	Disturbance of IRA with Underlying Xeroriparian "C"	27,356 SF	(0.63 ac)
	Total IRA with Underlying Xeroriparian "D" on Site	51,514 SF	(1.18 ac)
	Disturbance of IRA with Underlying Xeroriparian "D"	14,387 SF	(0.33 ac)
	Total Xeroriparian "D" on Site (non-IRA)	36,417 SF	(0.84 ac)
	Photo Labels		
	Live Trees on Site		

#### CALCULATIONS

Calculations: IRA with Underlying Xeroriparian "C"			
Total IRA with Underlying Xeroriparian "C" Habitat	96,671 SF	(2.22 acres)	
Total Area of Disturbed Riparian Habitat	27,356 SF	(0.63 ac)	
Min. Mitigation Area Required (No Grasses on Site)	0 SF	(0.00 ac)	
Total # of Trees Required = $1.5 \times 0.63 \times 7 =$	7 Trees		
Total # of Shrubs Required = $1.5 \times 0.63 \times 20 =$	19 Shrubs		
Total Riparian Mitigation Area Required =	28,726 SF	(0.66 ac)	
Total Riparian Mitigation Area Provided on Site =	0 SF	(0.00 ac)	
Total Riparian Mitigation Area Provided by In Situ Fee =	0 SF	(0.00 ac)	
Total # of Trees Provided = $1.5 \times 0.63 \times 7 =$	7 Trees		
Total Trees Provided on Site =	0 Trees		
Total Trees Provided by In Situ Fee =	7 Trees		
Total # of Shrubs Required = $1.5 \times 0.63 \times 20 =$	19 Shrubs		
Total Shrubs Provided on Site =	0 Shrubs		
Total Shrubs Provided by In Situ Fee =	19 Shrubs		
Total Hydrosed Required (No Grasses on Site)	0 SF	(0.00 ac)	
Total Hydrosed Provided on Site =	0 SF	(0.00 ac)	
Total Hydrosed Provided by In Situ Fee =	0 SF	(0.00 ac)	

#### CALCULATIONS

Calculations: IRA with Underlying Xeroriparian "D"			
Total IRA with Underlying Xeroriparian "D" Habitat	51,514 SF	(1.18 acres)	
Total Area of Disturbed Riparian Habitat	14,387 SF	(0.33 ac)	
Min. Mitigation Area Required (No Grasses on Site)	0 SF	(0.00 ac)	
Total # of Trees Required = $1.5 \times 0.33 \times 7 =$	4 Trees		
Total # of Shrubs Required = $1.5 \times 0.33 \times 20 =$	10 Shrubs		
Total Riparian Mitigation Area Required =	0 SF	(0.00 ac)	
Total Riparian Mitigation Area Provided on Site =	0 SF	(0.00 ac)	
Total Riparian Mitigation Area Provided by In Situ Fee =	0 SF	(0.00 ac)	
Total # of Trees Provided = $1.5 \times 0.33 \times 7 =$	4 Trees		
Total Trees Provided on Site =	0 Trees		
Total Trees Provided by In Situ Fee =	4 Trees		
Total # of Shrubs Required = $1.5 \times 0.33 \times 20 =$	10 Shrubs		
Total Shrubs Provided on Site =	0 Shrubs		
Total Shrubs Provided by In Situ Fee =	10 Shrubs		
Total Hydrosed Required (No Grasses on Site)	0 SF	(0.00 ac)	
Total Hydrosed Provided on Site =	0 SF	(0.00 ac)	
Total Hydrosed Provided by In Situ Fee =	0 SF	(0.00 ac)	

#### RIPARIAN MITIGATION NOTES

1. This property is being mitigated using the In Situ Fee (ISF) method.
2. Vegetation on the property is in extremely poor condition, with most of the trees and shrubs being dead. No grasses are found on the property.
3. The property has already been cleared. Plant densities are calculated using adjacent undisturbed areas of similar density, based on aerial photography. Figure B shows location of existing live trees. Live trees were preserved within some of the cleared areas. Trees were calculated at 7 live trees per acre. This number has been used for calculation of the required mitigation.
4. The debris piles which are still on site from the clearing were searched for indications of live vegetation that was removed.
5. Mitigation was calculated separately for IRA with Xeroriparian "C" and IRA with Xeroriparian "D", although the same plant densities were used for both Riparian Types.

#### RIPARIAN METHODOLOGY

This property contains both IRA Riparian "C" and IRA Riparian "D". The property has been cleared as indicated on Figure B. Several trees were preserved within the clearing limits as indicated on Figure B.

The vegetation on the property is in generally poor condition with most of the trees either dead or dying. There are no grasses growing on the property. There are some shrubs on the property that are alive. These conditions are evidenced by the photos provided.

Based on the aerial photo and ground verification with existing vegetation adjacent to the clearing, we have estimated the number of live shrubs and trees within the clearing limits. These estimates have been used to determine the amount of mitigation required.

A calculation of In Situ Fee has been provided.



35974 S. Desert Sun Drive  
Tucson, AZ 85739  
(520) 909-4678  
greg@grslandscapersarchitects.com

Date: 5/17/22  
Drawn by: LMW/KVP  
Checked by: GRS

- ☐ Design Review
- ☐ Construction Documents
- ☐ Agency Submittal
- ☐ Construction Set
- ☐ Not for Construction

4535 N. Avra Rd.  
Tucson, Pima County, AZ

#### RIPARIAN HABITAT MITIGATION PLAN

P\_\_

RHMP-1 1-2





1 →



2 →



3 →



4 →



5 →



6 →



7 →



8 →



9 →



10 →

4535 N. Avra Road

# CALCULATION OF IN-LIEU FEE

## Missing Plant Material

11 - Trees (30% 15 gal. and 30% 5 gal.)  
13 - 5 gal. Shrubs  
14 - 1 gal. Shrubs  
0 - SP Native Seed

## Cost Calculations

6 - 15 gal. Trees - \$ 94.00 <sup>1</sup>	594.00
5 - 5 gal. Trees - \$ 42.00 <sup>2</sup>	210.00
13 - 5 gal. Shrubs - \$ 42.00 <sup>3</sup>	630.00
14 - 1 gal. Shrubs - \$ 12.00 <sup>3</sup>	168.00
0 - SP Native Seed - \$ 0.00 <sup>4</sup>	0.00

Maintenance Cost - \$ 340.00 <sup>2</sup>	340.00
Irrigation Cost - \$ 150.00 <sup>2</sup>	150.00
Water Cost <sup>4</sup>	230.00

<b>TOTAL IN-LIEU FEE</b>	<b>\$ 2412.00</b>
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## Notes

- 1 - These are "wet" costs that include the cost of spaghetti tubing and emitters. These costs have been increased by 20% based on recent inflation.
- 2 - Maintenance costs based on \$ 100.00 per year.
- 3 - Irrigation structure (main, backflow, irrigation controller, mainline, poly line, valve and pressure regulator) are not affected by the addition of this plant material. No mainline extension or additional valves are required to irrigate additional plant material. However the cost of approximately 100' of additional poly line is included. Cost of emitters and "spaghetti" tubing is included in plant costs (see note 1).
- 4 - Based on ADWR plant water demand for very low water use plants times 5 years.



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## RIPARIAN HABITAT MITIGATION PLAN

P \_ \_ \_

RHMP-2 2 of 2