

APPENDIX A

MITIGATION OPTION MATRIX AND REVIEW PROCESS SUMMARY

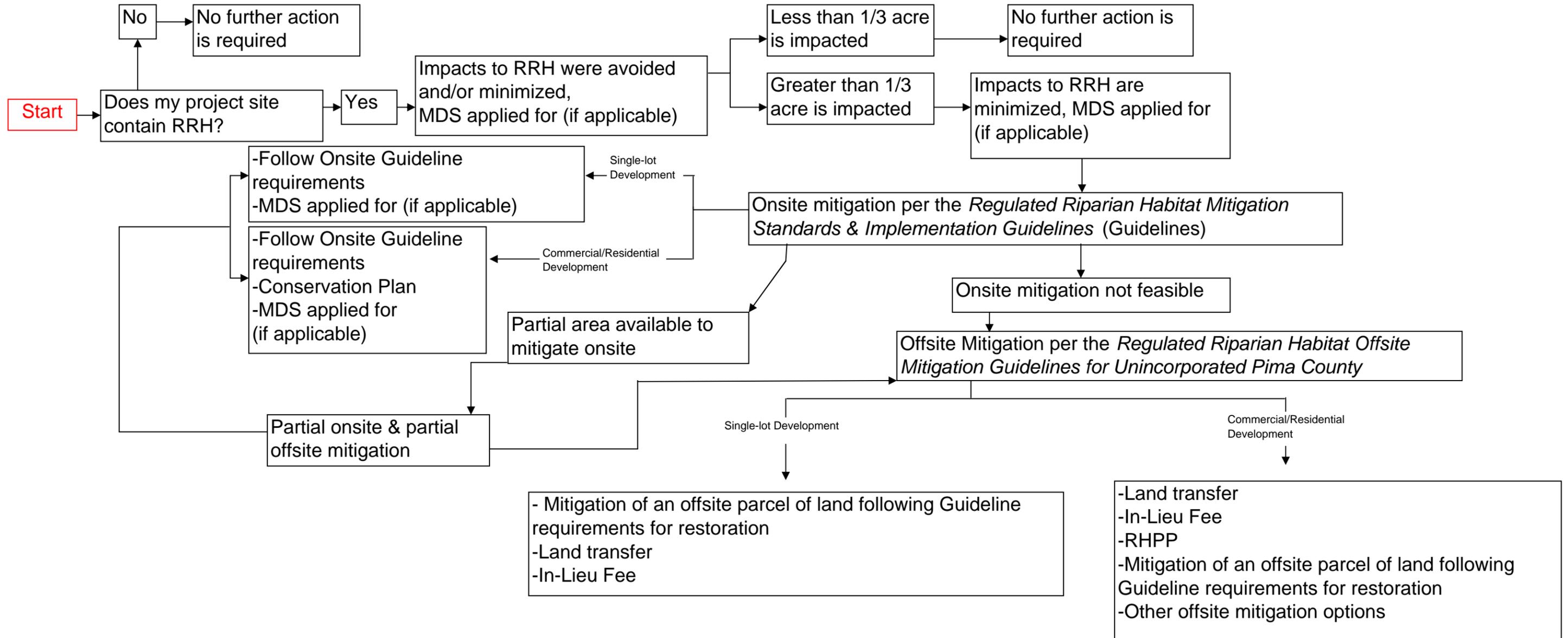
Mitigation Options Available for Disturbance of Regulated Riparian Habitat (RRH)

Mitigation Options	Single-lot Development		Commercial/Residential Development		Comments
	Onsite*	Offsite**	Onsite*	Offsite**	
Onsite mitigation	X		X		Enhancing or restoring onsite riparian habitat function by replanting with native vegetation
Partial onsite mitigation/partial offsite mitigation (see offsite mitigation options)	X	X	X	X	Allows more flexibility when riparian function can't be replaced entirely on the project site/subject parcel. See the "offsite" column to determine which offsite mitigation options would apply
Offsite mitigation		X		X	Includes mitigation at an "offsite" location for single lot development, or all the offsite mitigation options noted in the "offsite" column for commercial/residential development
Conservation Plan			X		Flexible tool to preserve the project site's (onsite) natural resources. Allows for alternative onsite mitigation measures such as: - stewardship to remove system stressors, such as invasive species - preserve unique ecosystem features - preservation of unmapped areas to provide buffer for high value riparian habitat - preservation of unmapped riparian habitat
In-lieu Fee		X		X	Monetary contribution used to preserve, protect, or restore habitat
Riparian Habitat Preservation Plan (RHPP)				X	Flexible tool offering opportunity to preserve offsite natural resources; offsite version of the "Conservation Plan", sharing many elements
Restoration of an offsite mitigation parcel		X		X	Enhancing or restoring riparian habitat function by replanting with native vegetation on a offsite parcel in accordance with onsite mitigation guideline requirements.
Land transfer		X		X	Additional tool for protecting riparian habitat function. Land containing riparian habitat is acquired and conveyed to the District in exchange for impacts to regulated riparian habitat.
Other offsite mitigation options				X	Additional options allowing for the preservation of riparian function through: - purchase of water rights - other options?

**"Onsite" = mitigation occurring within the project boundaries and/or subject parcel
 ***"Offsite" = mitigation occurring outside the project boundaries and/or subject parcel



Regulated Riparian Habitat (RRH) Mitigation Options



MDS = Modified Development Standards per Zoning Code requirements
 RHPP = Riparian Habitat Preservation Plan
 RRH = Regulated Riparian Habitat



Primer for Property Owners – Navigating Chapter 16.30 Regulatory Requirements

Overview

Permitting Process:

- Step 1 – Site Planning
- Step 2 – Avoid and/or minimize impacts to RRH
- Step 3 – Calculate amount of RRH disturbed
- Step 4 – Apply for a Floodplain Use Permit
- Step 5 – Select mitigation option (onsite mitigation, combination onsite and offsite mitigation, or offsite mitigation)
- Step 6 – Pima County Board of Supervisors (Board) review and approval, if required
- Step 7 – Sign special covenant
- Step 8 – In-Lieu Fee (ILF) or Land Transfer
- Step 9 – Issuance of Floodplain Use Permit

Post-permitting obligations:

Onsite mitigation

- Step 1 – Install mitigation area.
- Step 2 – Maintain and monitor mitigation area for a period of five years
- Step 3 – Mitigation area achieves 80% success criteria

Offsite Mitigation

- Option 1: Pay In-Lieu Fee (ILF) Prior to Slab (P2S) or Prior to Electrical (P2E) inspection
- Option 2: Onsite mitigation on an offsite parcel of land
 - Step 1 – Install mitigation area on an offsite parcel of land
 - Step 2 – Maintain and monitor mitigation area for a period of five years
 - Step 3 – Mitigation area achieves 80% success criteria

Q: I own property within unincorporated Pima County and would like to obtain a permit for development (building permit, grading permit, etc.). My property contains mapped regulated riparian habitat (RRH). What steps do I take to comply with Chapter 16.30 of the Floodplain Management Ordinance (Ordinance)?

Permitting Process

Step 1: Site Planning. Gather initial information about the property. Begin by inventorying site constraints including but not limited to the location of:

- Washes (Title 16)
- Floodplains (Title 16)
- RRH (Title 16)
- steep slopes (Title 18)
- Property boundary setback requirements (Title 18)
- Rock outcroppings (Title 18)
- Other site constraints

Determine how each site constraint will impact development of the property by visiting Pima County Development Services Department to address site constraints regulated under Title 18 and Pima County Regional Flood Control District (District) to address site constraints regulated under Title 16. Once information is gathered, prepare a site plan (site plan requirements can be viewed at: <http://rfcd.pima.gov/fpm/permits/>). Show location of washes, steep slopes, RRH, etc. on the site plan. Locate development within the least hazardous area of the property.

If the property owner disagrees with the location of RRH shown on the 2005 Riparian Classification Maps, they have the option to verify the location of RRH in the field. Requirements for field verification can be found in the Onsite Guidelines, Appendix F and G.

Step 2: Avoid and/or minimize impacts to RRH. Once development has been located in the least hazardous area of the property, avoid and/or minimize impacts to RRH, as feasible. This can be achieved in a number of ways, including but not limited to structure orientation, reducing setback requirements by obtaining a Modified Development Standard as outlined in Chapter 18.07, or other avoidance measures as outlined in Technical Policy 024, *Avoiding Riparian Habitat – Requirement*.

Step 3: Calculate amount of RRH disturbance. Follow Technical Procedure 107, *Calculating Riparian Habitat Disturbance*. If disturbance is less than 1/3 acre, RRH requirements have been met, no further action is required. Verify with Floodplain Management that compliance with floodplain and erosion hazard setback requirements has been met. Disturbance of less than 1/3 acre will be tracked and cumulatively applied toward future disturbance of RRH. If greater than 1/3 acre disturbance occurs, proceed to step no. 4

Step 4: Apply for a Floodplain Use Permit (FPUP). If an FPUP application has not already been submitted, submit an application at the District's customer service counter, located at 97 E. Congress Street, 3rd floor.

Step 5: Select Mitigation Option.

Onsite mitigation. Onsite mitigation may occur within previously disturbed areas or areas that will be temporarily disturbed through construction. Proposed onsite mitigation areas will be reviewed for sustainability and ability to support native riparian vegetation at a density and vegetation volume similar to the disturbed habitat. Mitigated area shall replicate pre-disturbance riparian habitat within a period of five years. Riparian Habitat Mitigation Plan (RHMP) requirements for onsite mitigation can be found in the following sections of the Onsite Guidelines:

- Section 2,
- Appendix A, and
- Appendix B

Combination onsite and offsite mitigation. When the project site does not contain sufficient area to implement mitigation entirely onsite, a partial onsite and partial offsite mitigation proposal is allowed. Onsite mitigation will follow requirements outlined in the Onsite Guidelines, as noted above. Offsite mitigation will follow requirements outlined in the *Regulated Riparian Habitat Offsite Mitigation Guidelines for Unincorporated Pima County (Offsite Guidelines)*. The property owner shall choose which offsite mitigation option is appropriate for the project.

Options include:

- In-Lieu Fee (Section 2)
- Onsite mitigation on an offsite parcel of land (Section 4.1)
- Land Transfer (Section 4.2)

Offsite mitigation. When the property owner can show that onsite mitigation is not possible, offsite mitigation is allowed. Offsite mitigation will follow requirements outlined in the *Regulated Riparian Habitat Offsite Mitigation Guidelines for Unincorporated Pima County (Offsite Guidelines)*. The property owner shall choose which offsite mitigation option is appropriate for the project. Options include:

- In-Lieu Fee (Section 2)
- Onsite mitigation on an offsite parcel of land (Section 4.1)
- Land Transfer (Section 4.2)

Step 6: Pima County Board of Supervisors (Board) review and approval. Board review and approval is required when disturbance of Class H habitat and/or Important Riparian Areas exceeds 1/3 acre and exceeds 5% of the total mapped RRH on the property or when offsite mitigation is proposed (Title 16, Chapter 16.30).

Step 7: Special covenant. Depending upon the mitigation option chosen, the property owner may be required to sign a special covenant. When required, the property owner will sign special covenants that run with the land to disclose the presence of mitigation area(s) to future property owners.

Step 8: In-Lieu Fee (ILF) or Land Transfer. If the property owner chose either the ILF or Land Transfer option, payment of the ILF or conveyance of an offsite parcel of land to the District is required prior to issuance of the FPUP (Offsite Guideline, Section 3.1).

Step 9: Issuance of Floodplain Use Permit (FPUP). Once the steps above have been achieved, and compliance with all other applicable Ordinance requirements have been met (<http://rfcd.pima.gov/fpm/permits/>), the FPUP will be issued to the property owner, authorizing development in accordance with FPUP conditions.

Post-permitting obligations

Onsite mitigation

Step 1 – Install mitigation area in accordance with the Onsite Guidelines, Appendix C, *Installation and Maintenance Requirements* (p. C-2 thru C-9 and C-11).

Step 2 – Maintain and monitor mitigation area for a period of five years in accordance with the Onsite Guidelines, Appendix C, *Installation and Maintenance* (p. C-9 thru C-10 and C-12) and Section 3, *Mitigation Plan Components* (p. 46-50).

Xeroriparian habitat monitoring report submittal timeframe

- “As-built”, submit when RHMP is implemented
- Year 1, submit first monitoring report
- Year 3, submit second monitoring report
- Year 5, submit third monitoring report

Class H and/or IRA habitat monitoring report submittal timeframe

- “As-built”, submit when RHMP is implemented
- Year 1, submit first annual monitoring report
- Year 2, submit second annual monitoring report
- Year 3, submit third annual monitoring report
- Year 4, submit fourth annual monitoring report
- Year 5, submit fifth annual monitoring report

Step 3 – Mitigation area achieves 80% success criteria (Appendix C, *Installation and Maintenance*, p. C-12)

Offsite Mitigation

Option 1:

Pay In-Lieu Fee (ILF) after issuance of the FPUP, but Prior to Slab (P2S) or Prior to Electrical (P2E) inspection. Upon written request by the property owner, payment of the ILF may be delayed until the Prior to Slab (P2S) or Prior to Electrical (P2E) inspection (Offsite Guidelines, Section 3.1.1).

Option 2:

Step 1 – Install mitigation area on an offsite parcel of land in accordance with the Onsite Guidelines, Appendix C, *Installation and Maintenance Requirements* (p. C-2 thru C-9 and C-11).

Step 2 – Maintain and monitor mitigation area for a period of five years in accordance with the Onsite Guidelines, Appendix C, *Installation and Maintenance* (p. C-9 thru C-10 and C-12) and Section 3, *Mitigation Plan Components* (p. 46-50).

Xeroriparian habitat monitoring report submittal timeframe

- “As-built”, submit when RHMP is implemented
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- Year 3, submit second monitoring report
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Class H and/or IRA habitat monitoring report submittal timeframe

- “As-built”, submit when RHMP is implemented
- Year 1, submit first annual monitoring report
- Year 2, submit second annual monitoring report
- Year 3, submit third annual monitoring report
- Year 4, submit fourth annual monitoring report
- Year 5, submit fifth annual monitoring report

Step 3 – Mitigation area achieves 80% success criteria (Appendix C, *Installation and Maintenance*, p. C-12)

References cited in this document

Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines (Onsite Guidelines)
Regulated Riparian Habitat Offsite Mitigation Guidelines for Unincorporated Pima County (Offsite Guidelines)
Title 16 – Floodplain Management Ordinance (Ordinance)
Title 18 – Zoning Ordinance (Title 18)
Technical Policy 024, *Avoiding Riparian Habitat – Requirement*
Technical Procedure 107, *Calculating Riparian Habitat Disturbance*

Exhibits

Exhibit A - Mitigation Options Available for Disturbance of Regulated Riparian Habitat (RRH)
Exhibit B - Regulated Riparian Habitat (RRH) Mitigation Options

Primer for Developers – Navigating Chapter 16.30 Regulatory Requirements

Overview

Development review process:

- Step 1 – Site Planning
- Step 2 – Avoid and/or minimize impacts to RRH
- Step 3 – Calculate amount of RRH disturbed
- Step 4 – Meet with District Staff to discuss mitigation proposal
- Step 5 – Select mitigation option (onsite mitigation, combination onsite and offsite mitigation, or offsite mitigation.)
- Step 6 – Submit Development Review Package to Pima County Development Services Department (DSD)
- Step 7 – District approves mitigation proposal
- Step 8 – Pima County Board of Supervisors (Board) review and approval, if required
- Step 9 – Land Transfer, other Offsite Mitigation options (transfer of water rights)
- Step 10 – Tentative plat or development plan is approved
- Step 11 – Pay In-Lieu Fee (ILF) prior to issuance of any permits
- Step 12 – Improvement Plan is approved
- Step 13 – Final Plat is approved

Post-development obligations:

Onsite mitigation

- Option 1: Onsite mitigation in accordance with the Onsite Guidelines
 - Step 1 – Install mitigation area
 - Step 2 – Maintain and monitor mitigation area for a period of five years
 - Step 3 – Mitigation area achieves 80% success criteria
- Option 2: Conservation Plan
 - Step 1 – Implement the approved Conservation Plan

Offsite Mitigation

- Option 1: Onsite mitigation on an offsite parcel of land
 - Step 1 – Install mitigation area on an offsite parcel of land
 - Step 2 – Maintain and monitor mitigation area for a period of five years
 - Step 3 – Mitigation area achieves 80% success criteria
- Option 2: Riparian Habitat Preservation Plan (RHPP)
 - Step 1 – Implement the approved RHPP