POLICY NO.: Technical Policy, TECH-024  EFFECTIVE DATE: DRAFT 1/27/20

POLICY NAME: Avoidance and Minimization Requirements When a Project Site Contains Regulated Riparian Habitat

PURPOSE: To clarify, Section 16.30.040.A.1 of the Floodplain Management Ordinance (Ordinance) that states a permit applicant shall provide “Evidence that no reasonably practicable alternative exists to the proposed impact on mapped habitat and evidence that the impact has been minimized to the maximum extent practicable.” This policy provides guidance on avoiding and minimizing impacts to mapped regulated riparian habitat (hereafter riparian habitat) during the entitlement and permitting processes.

BACKGROUND:

The primary purpose of Chapter 16.30 of the Ordinance, entitled Watercourse and Riparian Habitat Protection and Mitigation Requirements, is to preserve natural floodplain functions. A functioning floodplain provides multiple benefits, including groundwater recharge, flood attenuation, erosion control, and improved surface water quality and ensures the long-term survival of native plants and wildlife dependent upon riparian habitat. These functions remain intact when riparian habitat along watercourses, floodplains, and areas of shallow groundwater are preserved and enhanced.

In 2005, the Flood Control District Board of Directors modified Chapter 16.30 and adopted the Riparian Classification Maps that designate regulated riparian habitat. The Ordinance requires that a property owner avoid and/or minimize disturbance to riparian habitat. This is accomplished when staff provides accurate information to the public during the site planning stage and works with either the property owner, applicant, developer, and/or consultant during the review of the development.

On May 19, 2015 the Board of Supervisors approved the Comprehensive Plan Update (hereafter Pima Prospers). Pima Prospers established a goal to require development to avoid floodplain and riparian habitat as shown on the included Regional Hydrology Maps, which consists of riparian habitat, FEMA and local floodplains. Specifically, Pima Prospers, Section 4.9 Flood Control and Drainage Element, Goal 1 Implementation Measures, a., states, the District shall “Require, when appropriate, avoidance of development in Resource Areas as identified in the included Regional Hydrology Maps.” This policy will identify when avoidance is appropriate.

The District’s goal in implementing this policy is to ensure that design alternatives that avoid and/or minimize disturbance have been considered before the disturbance of riparian habitat is allowed.
POLICY:

When a property or project site is impacted by riparian habitat, permit and entitlement applications are reviewed for avoidance of this habitat. Avoidance of disturbance to riparian habitat may require the applicant to be flexible during site design, and can be accomplished by coordinating with the District to identify alternate locations for the improvements, use of modified development standards, and/or use of sustainability features in site planning on a project site. While the Ordinance and Pima Prospers prioritize avoidance and minimization of disturbance to riparian habitat there will be situations when impacts to riparian habitat cannot be avoided. This policy provides guidance to help the Regional Flood Control District (District) staff, applicants, and the public apply rules of avoidance and minimization consistently.

DEFINITIONS:

The following definitions shall apply to this Technical Policy:

1. Disturbance is defined in Technical Policy TECH-004, Delineating Riparian Habitat Disturbances. The following are examples of riparian habitat disturbances:

   • Removal of native vegetation, including understory vegetation (small trees, shrubs, perennials, annuals, and grasses),
   • Removal or placement of soil,
   • Removal of woody debris, and other organic matter,
   • Human encroachments such as fencing, structures and placement of impervious surfaces (i.e.: pavement or sidewalks),
   • Parking of vehicles, or placement of other materials that disturbs existing grade.

2. Development Review refers to the review and permitting process of residential subdivisions and commercial development. This includes residential plats, land division for non-residential development and site permits.

3. Entitlement Review refers to the recommendation provided by District staff to the Development Services Department, Planning and Zoning Commission, Design Review Committee and/or Board of Supervisors for applicant requests to change permissible yield and/or use of a property. This includes comprehensive plan amendments, rezoning, rezoning time extensions, and modification of rezoning conditions, specific plans, variances, minor land division, lot splits, and plat note waivers.

A. SINGLE LOT DEVELOPMENT:

When locating proposed and future improvement(s) on a single residential lot that contains riparian habitat, the following shall be considered and applied to the project:
1. **Avoidance.** When only a portion of a parcel or project site contains riparian habitat, the following shall be applied, unless adequately justified as outlined in Paragraph F:
   a. Locate the improvement(s) outside the riparian habitat.
      i. In order to avoid riparian habitat, a request to reduce minimum setbacks for structures to property lines and/or distances between buildings can be made to the Development Services Zoning Administrator/Inspector. The modification shall be processed pursuant to Section 18.07.080 and no fee is applied to the request.
   b. Provide the location of a construction staging area on the site plan. Locate the construction staging area outside of the riparian habitat.
   c. Plan ahead for future improvements and provide a buffer between the currently proposed improvement(s) and the riparian habitat to account for planned or unplanned future improvements.

2. **Minimize.** When the entire property is designated as riparian habitat, or if riparian habitat cannot be avoided, the following minimization techniques shall be applied, unless otherwise justified:
   a. Avoid existing drainage patterns or swales containing denser, more diverse vegetation.
   b. Avoid areas that provide riparian habitat connectivity to adjacent properties.
   c. Locate the improvement(s) on bare ground or existing disturbed areas.
   d. Avoid mature tree species, including those specific to riparian areas such as Fremont cottonwood, Arizona sycamore, and Arizona black walnut.
   e. When two classifications exist on a parcel, locate improvements within the lesser class habitat.
   f. Use elevation methods that create the least amount of disturbance. The preferred method of elevation is a stem wall foundation.
   g. Reduce the construction footprint, including driveway width and/or length of access from right of way, walled in patio areas and location of detached accessory structures to reduce pedestrian or vehicular circulation lengths.
   h. Place utilities in one location, or within a driveway or access easement.
   i. Locate the septic system to where it provides a buffer between site improvements and the riparian habitat.

**B. DEVELOPMENT REVIEW PROJECTS:**

Projects that are required to use the development review process shall follow the criteria listed below. This criteria is in addition to the requirements and development conditions from previous approvals such as, a conditional use permit, rezoning, specific plan or comprehensive plan amendment.

1. **Avoidance.** When only of a portion of parcel or project site contains riparian habitat, the following shall be applied, unless adequately justified as outlined in Paragraph F:
   a. Locate building and construction envelopes outside of the riparian habitat. In order to avoid riparian habitat, minimum lot size requirements for subdivision lots in the CR-1, CR-2, CR-3, GR-1 and CMH-1 zones may be modified at the time of plat approval using Section 18.07.080. Below is the list of potential reduction;
i. Minimum lot size requirements for lots in a CR-1 or GR-1 subdivision may be reduced from thirty-six thousand square feet to eighteen thousand square feet;

ii. Minimum lot size requirements for lots in a CR-2 subdivision may be reduced from sixteen thousand square feet to twelve thousand square feet;

iii. Minimum lot size requirements for lots in a CR-3 or CMH-1 subdivision may be reduced from eight thousand square feet to seven thousand square feet.

b. Use modified development standards for parking. Pursuant to 18.07.080, when it is demonstrated a change to the off-street parking requirements does not result in a danger to the public or property, or result in an increased traffic volume, the subdivision and development review committee can approve a modification that allows for avoidance to riparian habitat.

c. Design drainage infrastructure to avoid riparian habitat.

d. Locate the construction staging area outside of the riparian habitat.

e. Pursuant to Section 18.07.080, when riparian habitat is avoided and preserved the number of trees required in bufferyards may be reduced.

2. Minimize. When the entire property is designated as riparian habitat, or if riparian habitat cannot be avoided, the following minimization techniques shall be applied, unless otherwise justified:

   a. Minimize construction footprint. Consolidate buildings, supporting site infrastructure and other impervious areas to reduce the building footprint to demonstrate all efforts are being made to avoid the riparian habitat.

   b. Locate improvements and construction envelopes in previously disturbed areas.

   c. When drainage infrastructure impacts riparian habitat it shall be designed to minimize the impact.

   d. When roads and utility crossings impact riparian habitat, locate the infrastructure perpendicular to riparian habitat corridors and where riparian corridors are the narrowest.

   e. When a proposed road crossing requires supporting drainage infrastructure that impacts riparian habitat, the road crossing shall be designed to minimize encroachment and allow for the movement of wildlife, such as dip crossings or concrete arch structures.

C. DEVELOPMENT ENTITLEMENT PROJECTS:

Pima Prospers, Section 4.9 Flood Control and Drainage Element established Flood Control Resource Areas (hereafter Resource Areas) as shown on the Regional Hydrology Maps which requires, when appropriate, avoidance of development within these Resource Areas.

Projects that require development entitlements provide an opportunity through site planning to avoid the disturbance of riparian habitat. Requests that propose avoidance or minimize impacts to riparian habitat will be supported by the District.

1. Development clusters and modification of development standards shall be encouraged to reduce development footprints while achieving minimum required yields. The following methods can be used to reduce development footprints;

   a. Provide a reduction in building setbacks,
b. Reduce residential lot size,
c. Place functional square footage on multiple levels,
d. Decrease road width and provide off-street parking, and
e. Reduce parking lot size.

2. When proposed development reduces water availability to riparian habitat, first flush and/or flow from proposed drainage infrastructure will supplement the water availability to the riparian habitat.

3. When a project has riparian habitat that is denuded and the adjacent off-site upstream and/or downstream habitat is viable, the proposed drainage infrastructure will be designed to direct flow to the riparian habitat.

4. Road crossings shall be designed with only minor encroachment.

5. When avoidance is not possible and encroachment is proposed the District may recommend rezoning policies and/or conditions limiting encroachment and/or establishing mitigation criteria such as water supply design, plant density, size and species mix.

D. WAIVER OF THE SUBDIVISION PLAT REQUIREMENT OR A VARIANCE TO PIMA COUNTY CODE REQUIREMENTS:

1. Waiver and variance requests that result in an increased disturbance of riparian habitat will not be supported by the District. District staff will recommend denial or require special conditions during a hearing for any request that propose an increase of disturbance to riparian habitat.

2. Waiver and variance requests that propose avoidance or minimize impacts to riparian habitat will be supported by the District.

E. TYPE II OR TYPE III CONDITIONAL USE PERMIT:

Requests to modify or expand the development potential of a site shall take the following criteria into account:

1. Requests for a Conditional Use Permit that result in an increased disturbance of riparian habitat will not be supported by the District. District staff will recommend denial or apply special conditions for any request that does not avoid or apply measures for minimizing impacts to riparian habitat.

2. When two classifications of riparian habitat impact a property and one type of classification is Important Riparian Areas (IRA), preservation of the IRA in a natural or undisturbed condition is preferred.

3. Road crossings and the extension of utilities which impact riparian habitat are the only disturbances that will be supported.

4. District staff will not support a request that disturbs more than 5% of riparian habitat classified as IRA.

F. JUSTIFICATION OF DISTURBANCE:
The following do not eliminate any requirements for mitigation of riparian habitat disturbance, but can be considered reasonable justification for disturbance:

1. When the entire property is impacted by riparian habitat, disturbance will be supported when the following areas are avoided:
   a. floodplain and erosion hazard areas,
   b. densely vegetated areas,
   c. natural flow paths, and
   d. areas near riparian habitat corridors on adjacent properties.

2. Development proposals on parcels with more than one classification of habitat will be reviewed for opportunities to avoid and minimize disturbance of the higher classification of riparian habitat.

3. The proposed improvement's function should be considered when assessing its location on the property. For example, an addition to an existing structure that is within riparian habitat is an allowable disturbance since it must be located adjacent to the existing development. However, a detached structure, such as barn or shed, does not need to be placed adjacent to the primary structure unless it is sufficiently demonstrated that riparian habitat avoidance would effectively preclude the intended use of the structure.

4. New improvements may be placed within riparian habitat that was disturbed prior to the effective date of the Riparian Classification Maps if the area has been in continual use since the time of disturbance.

5. Riparian habitat that has had historical disturbance prior to the mapping.

6. Placement of solar panels that require special site conditions to function, such as a particular orientation, shading, etc.

7. Placement of a “low impact” improvement, such as a well site, in which placement within riparian habitat is unlikely to lead to additional improvements.

8. Establishing legal and physical access when the only buildable area on a parcel cannot avoid the riparian habitat. When buildable areas exist where access can avoid disturbing the riparian habitat, that area should be utilized first.

9. Grading and/or paving of physical access that crosses riparian habitat within a previously established access easement.

10. Site constraints, such as rock outcroppings, Hillside Development Zone (HDZ) restrictions, floodway, floodplain and erosion hazard setback limitations, cultural resource conflicts, or other site conditions that restrict placement of improvements.

11. Riparian habitat that lacks continuity (“islands” of riparian vegetation) and a natural source of water within urban and designated growth areas may be disturbed without demonstrating avoidance on a case by case basis.

12. Improvements disturbing riparian habitat necessary for public safety do not require demonstration of avoidance. Examples include placement of road intersections to increase visibility, drainage improvements, or other public safety considerations.

An applicant’s personal preference, aesthetic reasons, financial hardship, lot yield, or conflicts with other non-public safety requirements are not reasonable justifications for disturbance.

G. IMPACTS LESS THAN 1/3 ACRE:
To ensure the purpose of the Ordinance and Pima Prospers is met, staff reviews projects for impacts to riparian habitat, regardless of the size of proposed disturbance. By reviewing development proposals, staff can assist applicants with site planning that avoids and/or minimizes impacts to riparian habitat, prevents the need for a riparian habitat mitigation plan, and ensures that floodplain function and riparian resources are preserved.

APPROVED BY:

________________________________________
Suzanne Shields
Director Date

Original Policy Approved:
Date(s) Revised: