POLICY NAME: Delineating Regulated Riparian Habitat Disturbance

PURPOSE: To clarify Section 16.30.040 regarding how to delineate Regulated Riparian Habitat (RRH) disturbance.

BACKGROUND:
Section 16.30.040 of the Floodplain Management Ordinance (Ordinance) states the “...proposed development will be reviewed for impacts to mapped riparian habitat whenever more than 1/3 of an acre of a property’s regulated riparian habitat is disturbed.” However, the Ordinance does not describe how to delineate the areas of disturbance, which is needed in order to determine if, or when, the mitigation threshold is reached.

When RRH cannot be avoided, the extent of disturbance resulting from new development must be delineated. Different types of development have different impacts during and after construction. These types of disturbances may be temporary or permanent, or may result in either partial or complete disturbance of RRH. To ensure consistency among review staff when delineating RRH disturbance, this procedure will distinguish between these types of disturbances, define a “project” and describe how to calculate RRH disturbance for each project.

POLICY:

A. Defining Disturbance – Types of Disturbance

In order to determine if mitigation is required, or to determine the amount of mitigation required, the type of disturbance, as defined below, should be considered.

1. Complete disturbance of RRH. Complete disturbance of RRH is defined as any area that has been graded whereby all vegetation has been removed. In most cases, improvements will be constructed within the disturbed area and full mitigation will be required. Types of complete disturbance include:
   b. Excavation: The artificial (i.e., mechanical, manual, blasting or other such) means for removal of earth material.
   c. Grubbing: The removal of trees and other large plants by their roots.
   d. Filling: The placement of earth material upon an existing grade.

2. Partial disturbance of RRH. Partial disturbance of RRH is defined as any area where vegetation has been partially removed ("brushing") or where the total vegetation volume and diversity of the riparian plant community has been reduced. Types of partial disturbances include:
   a. Disturbance that removes understory vegetation (small trees, shrubs, perennials, annuals, and grasses), woody debris and/or organic matter while preserving mature
trees. When understory vegetation has been removed but trees have been preserved-in-place.

b. Disturbance for fire prevention. In certain areas of Pima County, the local fire district may require the creation of defensible space around existing structures. Within the defensible space, which shall be a distance no greater than 30 feet from the perimeter of the structure, vegetation can be thinned and/or pruned in accordance with local fire district directives. Documentation from the local fire district is necessary in order to establish this as disturbance that does not require mitigation.

3. Temporary disturbance of RRH. Temporary disturbance is defined as a disturbance that is expected to return to natural conditions, including grading within the sandy bottom of natural channels that are devoid of native vegetation, or the trimming of vegetation, without removing it, when no recurrent or long-term use is anticipated.

B. Cumulative Disturbance - Definition of a Project:

Disturbance that occurs after the effective date of the RCM is cumulatively counted toward the 1/3 acre mitigation trigger. Once 1/3 acre disturbance is reached, mitigation is required for the entire amount of disturbance and for each subsequent disturbance. However, for large scale development, including the disturbance that results from required off-site improvements or from the estimation of disturbance for future development within the project area, such as blocks within a block plat, can be punitive. Establishing a 1/3 of an acre threshold on a per project basis offsets the unintended consequence that might occur due to the size or scale of a development. This would apply to development that does not chose alternate mitigation strategies such as the Habitat Conservation Plan. For the purpose of determining cumulative disturbance of RRH, the following definitions of project shall apply unless specific conditions are established through a rezoning, specific plan, etc:

1. Master block plat: The spine roads and major utilities will be considered a single project. Each block will be considered a separate project and will have its own review at the time of development.
2. Development of a subdivision:
   a. When mass grading occurs, this is a single project and shall include any RRH disturbance within the subdivision lots in addition to disturbances associated with streets, utilities and other infrastructure,
   b. When large lots are proposed (no mass grading), the project will not include future disturbances related to development of the individual lot by the property owner.
3. Development Plan: A development plan will be considered an individual project.
4. Off-site improvements: Any off-site improvements required to support any new development will be considered a separate project.
5. Improvement plans: Improvement plans that not associated with an approved plat, or development plan, or an improvement plan associated with an older subdivision plat (ex. New Tucson) will be considered an individual project.
6. Private access easement: When the grading of a private access easement is proposed with the development of a single residential lot, impacts for both the easement and lot will be reviewed as one project.
   a. In cases where an access easement traverses RRH on property owned by someone other than the applicant, the easement shall be treated as an individual project.
the use of an easement disturbs greater than 1/3 acre RRH, the applicant (user) shall be responsible for mitigation. The in-lieu fee option shall be used to mitigate for disturbance, unless there is a suitable area available on the applicant’s property for onsite mitigation.

C. Exempt Disturbances – Those that do not count toward the 1/3 acre threshold:

The following disturbances do not count toward the 1/3 acre mitigation threshold regardless of when they occurred:

1. The disturbance of areas designated as jurisdictional Waters of the U.S. (WUS) by the U.S. Army Corps of Engineers and which will be mitigated through the Corps permitting process. The disturbed acreage of WUS located within mapped RRH that will be mitigated can be subtracted from the total acreage of RRH disturbance in order to not double count the disturbance and mitigation.
2. Temporary disturbances as defined in Section A.
3. Removal of noxious and invasive plants.
4. Disturbance for the creation of walking paths and trails that are identified within the Eastern Pima County Trails Master Plan or other trails required by Pima County. Additionally, disturbance for trails that are nominally no wider than 4 feet, avoids disturbance by weaving around mature vegetation and other sensitive areas, remains at-grade, and remains natural soil.
5. For road projects, only the area located within the grading limits shall be counted as disturbance. Other areas located within the road right-of-way that will not be disturbed during construction are not counted toward the 1/3 acre mitigation threshold.

D. Calculating Disturbances for commonly proposed improvements:

Unless specific information, evidence and/or procedures are provided showing less construction disturbance, the following procedures shall be used to calculate riparian habitat disturbance:

1. Grading limits for new structures: A minimum grading envelope that extends 15 feet from the perimeter of the structure shall be shown. A lesser distance, not less than 5 feet, may be proposed if protective fencing is used to delineate the grading envelope. In this case the following note shall be placed on the site plan:
   
   Preserved riparian habitat shall be protected during construction using protective fencing. Protective fencing must be located as shown on the site plan and must remain in place throughout the construction and development process.

2. Disturbance caused by utility trenches: An assumed width of 5 feet shall be used for utility trench construction. Multiply the linear footage of the trench within RRH by 5 feet to calculate the disturbance.
3. Disturbance caused by the septic system: Disturbance shall be calculated for the entire septic system, including all piping, the septic tank, the distribution box, and disposal area. An additional 5 feet of disturbance around the perimeter of the disposal area shall be provided. The reserve area is not counted as disturbance until such time when the reserve is needed and a septic permit obtained.
4. Disturbance caused by block wall or fence:
a) For standard decorative block walls and fences, disturbance shall be calculated by assuming a disturbance width of 5 feet. Multiply the linear footage of the wall within RRH by 5 feet to calculate the disturbance.
b) Disturbance for structural wall or retaining wall must be shown on a detail of the construction method used on the site plan.
c) For all open type fencing, (e.g. split rail, corral or barbed/smooth wire fencing), a width of 5 feet shall be used unless the applicant can demonstrate that the construction method used will be less disruptive. Within Important Riparian Areas, site specific placement of posts and fencing will be necessary to avoid mature vegetation and to minimize disturbance by locating the fence to avoid unique features such as mature tree species specific to riparian areas (such as Fremont cottonwood (Populus fremontii), Arizona sycamore (Platanus wrightii), and Arizona black walnut (Juglans major)) and existing drainage patterns or swales containing denser, more diverse vegetation.
d) When a perimeter block wall is located within Important Riparian Areas, sections of open type fencing shall be included in the wall design.

5. Disturbance caused by enclosing an area: Unless fifty percent of the wall is constructed of open-type fencing, wrought iron panels, or an equivalent type barrier, the entire area that is enclosed by a wall or fence shall be calculated as disturbed.

6. Private access easement: When the grading of a private access easement is proposed with the development of a single residential lot, impacts for both the easement and lot will be reviewed as one project.

7. Horse and other livestock grazing for residential or commercial primary uses: Pastures located within RRH shall be considered partial disturbance and counted toward the 1/3 acre mitigation threshold. RRH that is fenced-off to permanently exclude livestock will be considered preserved and does not count toward the 1/3 acre mitigation threshold.

8. Disturbance associated with an approved Site Construction Permit. The grading limits shown on the approved Site Construction Permit shall be used to calculate riparian habitat disturbance.

9. Mitigation for Partial Disturbance of RRH understory vegetation will not include the cost of replacing trees.

E. Disturbance of less than 1/3 acre RRH:

All projects will be reviewed by the District for impacts to RRH. By reviewing a project, staff can assist applicants with site planning that will avoid and/or minimize impacts to RRH, prevent the need for a riparian habitat mitigation plan, and ensure that floodplain function and riparian resources are preserved (see Technical Policy-024, Avoiding Regulated Riparian Habitat Requirement).

APPROVED BY:

[Signature]
Suzanne Shields
Director

Date

Original Policy Approved:
Date(s) Revised: