

Revised Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines, January, 2009.

District Response to Comments provided by SAHBA on March 20, 2009:

Mitigation Standards & Requirements

Q. There should be greater flexibility for large phased projects. 14,520 sq. ft. or 1/3 of an acre of disturbance as the trigger for large projects is excessively low. We would like to work with you to determine an appropriate percentage of total regulated habitat as the trigger.

R. No change. The 1/3 acre disturbance trigger is defined by the Floodplain and Erosion Hazard Management Ordinance No. 2005-FC2 (Ordinance) and cannot be addressed by the Guideline revisions. An Ordinance revision would be required to change the 1/3 acre mitigation trigger.

Q. Off-site mitigation scenarios, requirements and ratios must be clearly detailed for each habitat classification. Consideration should be given for mechanisms/ratios for mitigating one classification with another. Consideration should be given for using off-site mitigation to enhance existing effluent fed streams to speed habitat establishment, expansion and density.

R. No change. Offsite mitigation requirements will be addressed though a separate document that is currently under development (“Offsite Mitigation Standards”). The offsite mitigation standards will go through a similar public review process as the onsite mitigation standards. The MWG members (including SAHBA) are invited to participate in guideline development.

Q. There should be a reduction of calculation of in-lieu fees – cost and delivery of nursery grown replacement material, installation of plants and irrigation is more expensive than raw land acreage.

R. No change. Offsite mitigation requirements, including calculation of in-lieu fees, will be addressed in the Offsite Mitigation Standards, currently under development. Until new offsite guidelines are adopted, determination of in-lieu fees will be based upon the cost to mitigate onsite.

Q. The requirement for a 100% inventory of riparian acreage could be impractical and costly. Representative sampling for large areas should be an option. Plant inventory should be for mature plants only and not seedlings without proven viability or survivability.

R. See revised Technical Procedure 116, “Quantitative Methods for Regulated Riparian Habitat (RRH) Boundary Modifications and Onsite Vegetation Surveys” for a representative sampling option.

Riparian habitat is defined by the entire plant community associated with a watercourse (perennial, intermittent, or ephemeral) and/or areas of shallow groundwater and is inclusive of all plant life forms, no matter the size, age or viability of plants within the community. Based upon this definition, only counting trees and shrubs of a specific caliper size or viability is not representative of the plant community to be disturbed. When onsite mitigation occurs, the goal is replacement of the plant community disturbed. This is accomplished by re-planting with containerized trees and shrubs along with application of a seed mix that incorporates shrubs, grasses, annuals, perennials, and vine plant species. This methodology of mitigation requires the surveyor to identify and count all tree and shrub species within the sampled area to determine quantity and species composition of containerized plants along with identification of all other plant species (not a count), so that a proper seed mix may be selected. TECH-116 outlines onsite vegetation survey requirements.

Q. There should be the ability to utilize all of the 30% set-aside for compliance with NPPO for Riparian Areas without additional upland NPPO required.

R. As cited in the Zoning Code (18.72.090), the applicant may set-aside 30% of the riparian habitat on the site, in addition to “*the preservation in place or salvaging and transplanting on-site of safeguarded plants and specimen saguaros and ironwoods*” to achieve compliance with the NPPO. (The District is not responsible for implementation of Title 18 and is only citing language outlined in the Code. SAHBA will need to consult with Development Services staff regarding interpretation of 18.72 and NPPO requirements).

Q. Going to the Board of Supervisors for approval for mitigation plans and in lieu fees for Habitat C and D is unnecessarily time consuming. Staff should have the ability to do this.

R. No change. Board of Supervisors (BOS) approval is not required for mitigation plans submitted for impacts to Xeroriparian Classes C and D habitat. BOS approval is required when greater than 1/3 acre of Class H and/or IRA is disturbed and the disturbance exceeds 5% of the total mapped habitat onsite (see 16.30.050), or if an in-lieu fee proposal is submitted, as defined by the Ordinance and cannot be addressed by the Guideline revisions. An Ordinance revision would be required to change the BOS approval requirement.

Q. Is the ‘Q’ of a designated Important Riparian Area (IRA) important? Is a ‘Q’ of greater than 2000 cfs a threshold?

R. The Riparian Classification Maps, including IRA, were not created based upon a single factor, such as the 100-year discharge or ‘Q’ that is referred to, but were based upon a number of factors that have been summarized in the following report: <http://www.pima.gov/cmo/sdcp/reports/d25/129MAPRE.PDF>. To offer a visual explanation, go to the Pima County MapGuide, turn on the greater than 2,000 cfs

layer and the riparian habitat layer, and you'll find that not all washes that are greater than 2,000 cfs are mapped IRA and vice versa, not all IRA is associated with washes greater than 2,000 cfs.

It would appear the 2,000 cfs threshold was obtained from a particular source, so, to place the reference into context, please clarify where the “Q’ of greater than 2000 cfs threshold” was obtained from, so we may be able to more adequately answer your question.

Q. If all contributing Xeroriparian washes to an IRA are eliminated the conservation value is minimized. Is IRA designation intended to provide “habitat preservation”? Is it intended to provide “watershed function protection”?

R. The Ordinance and Mitigation Guidelines are designed to preserve the continuity and watershed function of watercourses in Pima County, including xeroriparian habitats. That said, if an unusual case occurred, in which all of the contributing xeroriparian habitat were removed, the “conservation value” of the IRA would, if anything, increase. IRA is one of seven conservation land categories in the Conservation Land System (CLS), and was delineated based upon its high biological value as well as providing important corridors for the survival of native plants and wildlife. The SDCP states, “The overarching purpose of the Sonoran Desert Conservation Plan (SDCP) is to ensure the long-term survival of the full spectrum of plants and animals that are indigenous to Pima County through maintaining or improving the habitat conditions and ecosystem functions necessary for their survival.” preservation of IRA, regardless of the condition of the contributing watershed(s) is essential for success of the SDCP.

The Ordinance lists avoidance of habitat as highest priority, followed by mitigation. Required mitigation shall be tailored to reflect onsite conditions while maintaining the biological and hydraulic continuity of the corridor.

Maps & Designations

Q. It is stated that Important Riparian Areas and Xeroriparian Class D are based on Total Vegetation Volume. But it is our understanding they are actually based on aerial photography. Are the determinations made by TVV or aerial photography? If based on TVV, can we have a copy of the data?

R. The answer is both. To clarify, xeroriparian habitat is based upon TVV (see reports cited below on riparian mapping). Class H is based upon a combination of data layers, such as satellite imagery, water resources data, and plant community structure and composition data. The polygons known as the Riparian Classification Maps were delineated on aerial photographs at a scale of 1” = 2000’, using a combination of the data layers mentioned above. Please view the following report and associated references for a detailed explanation on how the Maps were created, [shttp://www.pima.gov/cmo/sdcp/reports/d25/129MAPRE.PDF](http://www.pima.gov/cmo/sdcp/reports/d25/129MAPRE.PDF). This report and

other reports cited in the reference section can be found by clicking on the “Reports” link of the SDCP homepage (<http://www.pima.gov/cmo/sdcp/index.html>).

The original working maps were not retained once the polygon boundaries were digitized by Pima County’s GIS department and the Riparian Classification Maps adopted by the Board of Supervisors. The Riparian Classification Maps found on MapGuide are the regulatory maps and shall be used for compliance with Title 16.30.

Q. There must be the ability to easily adjust the mapped boundaries (including for IRA), and modify the qualitative grade of the habitat based upon what is actually on site. The process should be fair and clearly defined.

R. See Technical Procedure 116, “Quantitative Methods for Regulated Riparian Habitat (RRH) Boundary Modifications and Onsite Vegetation Surveys”, which outlines methodology for onsite vegetation surveys, boundary modifications, etc. IRA boundaries were adopted under the Comprehensive Plan and were mapped based upon their high biological value along with providing a framework of linkages and landscape connections between existing preserves/open space areas and their associated upland areas and not subject to change.

Q. Some large (2000-5000 cfs) washes on the Pima County MapGuide are not shown on the SDCP MapGuide maps. This is an omission that should probably be corrected.

R. The District’s GIS personnel reviewed the 2,000-5,000 cfs layer on both the SDCP and Pima County MapGuide webpages and were unable to find a discrepancy between the two webpages. If you could provide a specific geographic location as to where the omission occurred, we can forward the information on to our GIS personnel for further review and resolution.