Riparian Corridors and Required Setbacks

This document is intended to explain where development and structures are allowed to be constructed adjacent to riparian corridors. Any proposed development (such as grading, land clearing, building and tree or shrub removal) within areas designated for protection through the Riparian Corridor and Wetlands Protection ordinance requires a Riparian Exception application.

The Riparian Corridor and Wetlands Protection ordinance prohibits development in the following areas unless exempted by the ordinance or through a riparian exception:

- riparian corridors
- areas within the urban and rural services lines within a buffer zone as measured from the top of an arroyo.

Riparian Corridor

The County of Santa Cruz's Riparian Ordinance defines the following a Riparian Corridor:

(1) Lands within a stream channel, including the stream and the area between the mean rainy season (bankfull) flowlines;

(2) Lands extending 50 feet (measured horizontally) out from each side of a perennial stream. Distance shall be measured from the mean rainy season (bankfull) flowline;

(3) Lands extending 30 feet (measured horizontally) out from each side of an intermittent stream. Distance shall be measured from the mean rainy season (bankfull) flowline;

(4) Lands extending 100 feet (measured horizontally) from the high watermark of a lake, wetland, estuary, lagoon or natural body of standing water;

(5) Lands within an arroyo located within the Urban Services Line, or the Rural Services Line.

(6) Lands containing a riparian woodland.

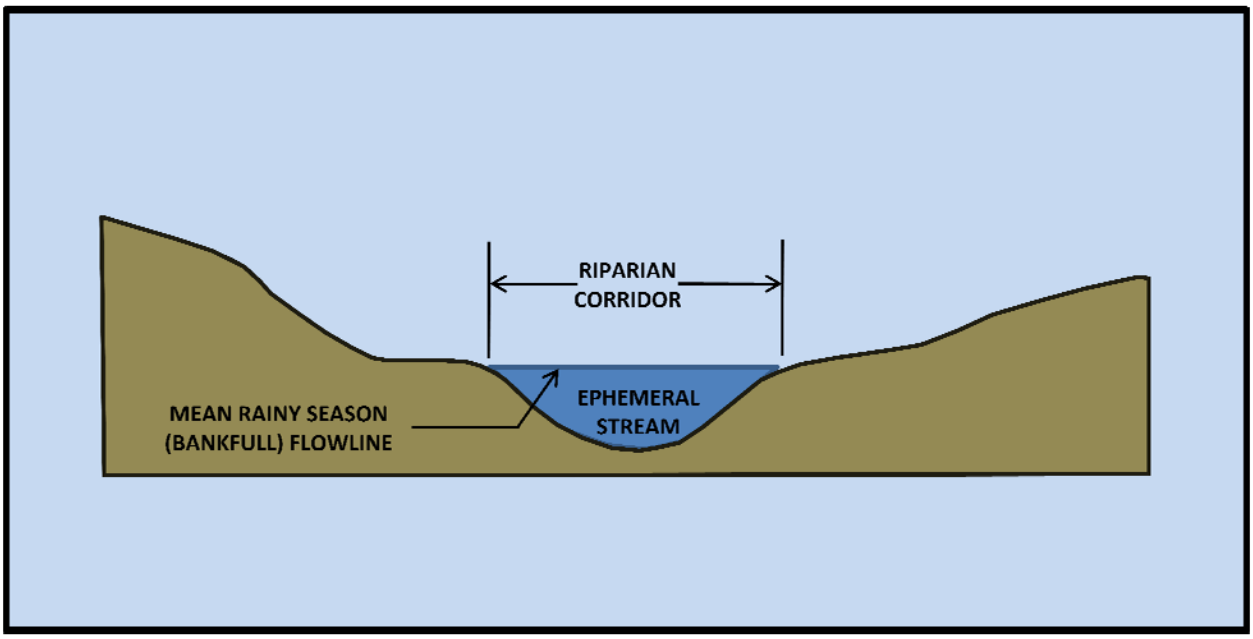
Areas within the urban & rural services lines within a buffer zone

See the bottom of this document for the charts to determine how to establish the size of the buffer.

Diagrams

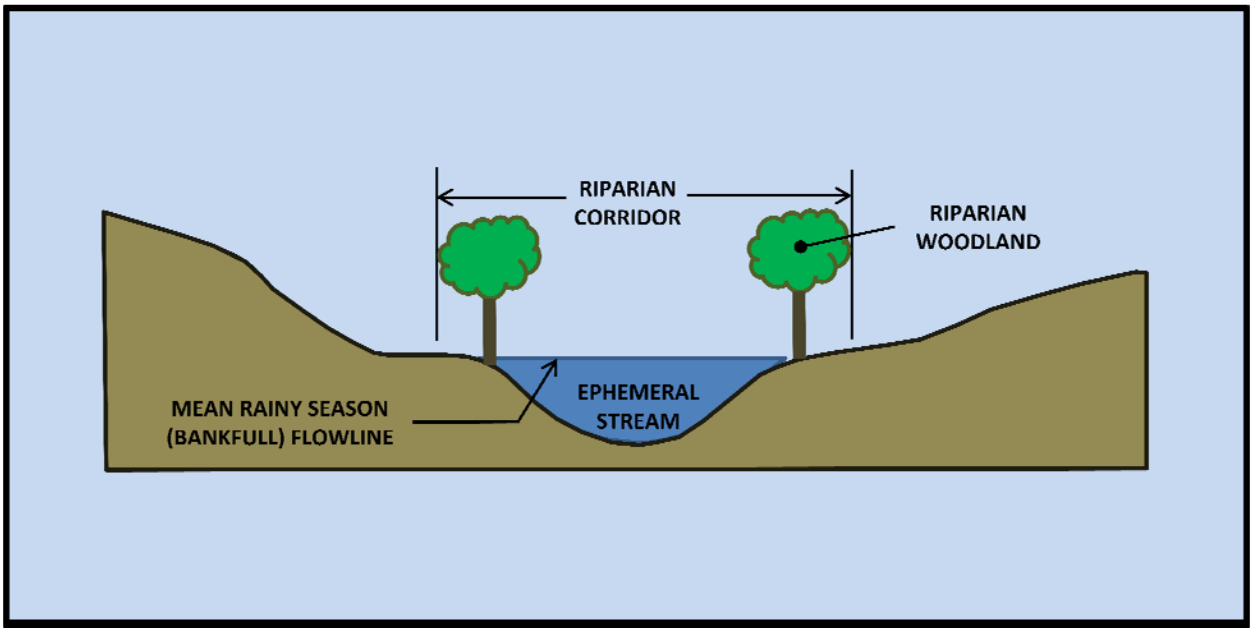
The following diagrams help to explain how to determine the Riparian Corridor on your parcel and where you can build on a parcel without the need for a Riparian Exception. Please note that the diagrams are not drawn to scale.

Example 1: Ephemeral Stream Located Outside of the Urban/Rural Services Line



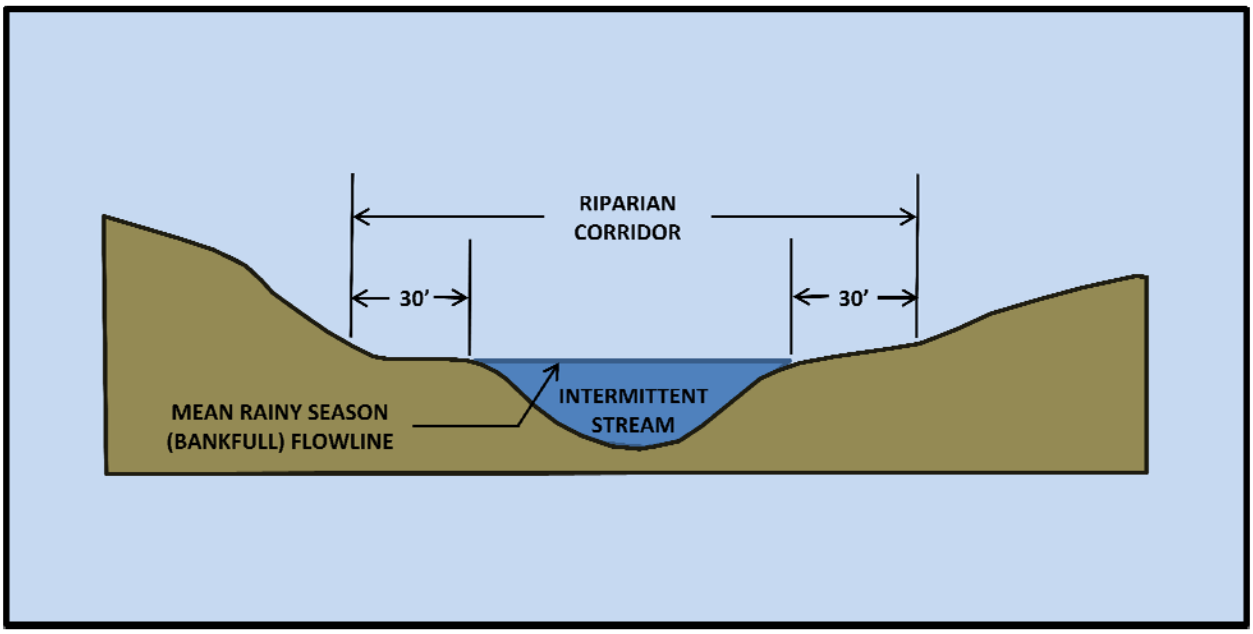
Since it's an ephemeral stream, the riparian corridor is the area encompassing the streams mean raining season (bankfull) flowline.

Example 2: Ephemeral Stream Located Outside of the Urban/Rural Services Line



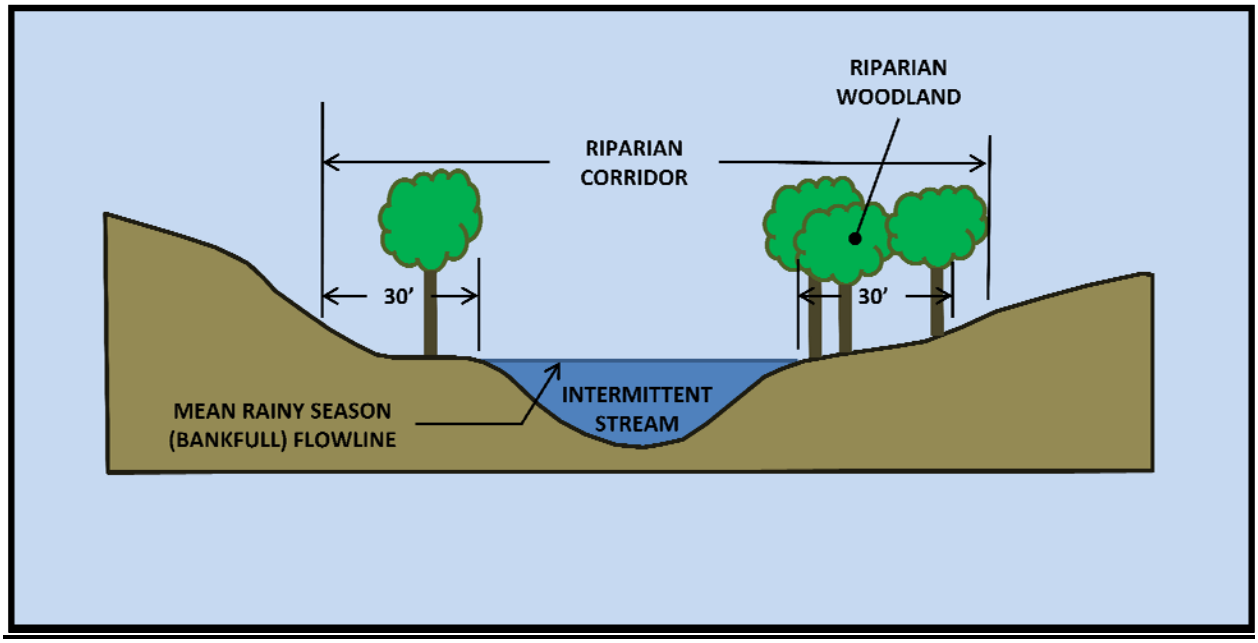
Since riparian woodland exists, the riparian area surrounding the stream now encompasses the area as shown.

Example 3: Intermittent Stream Located Outside of the Urban/Rural Services Line



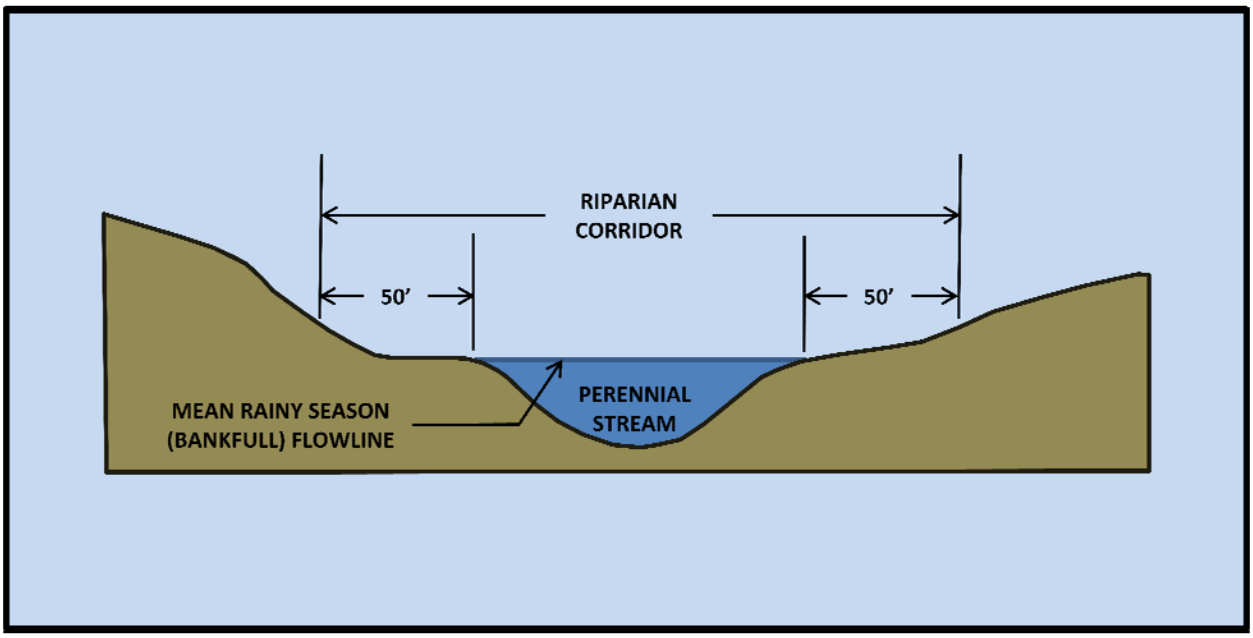
Since it's an intermittent stream, the riparian corridor is the area encompassing 30' from either side of the mean rainy season (bankfull) flowline.

Example 4: Intermittent Stream Located Outside of the Urban/Rural Services Line



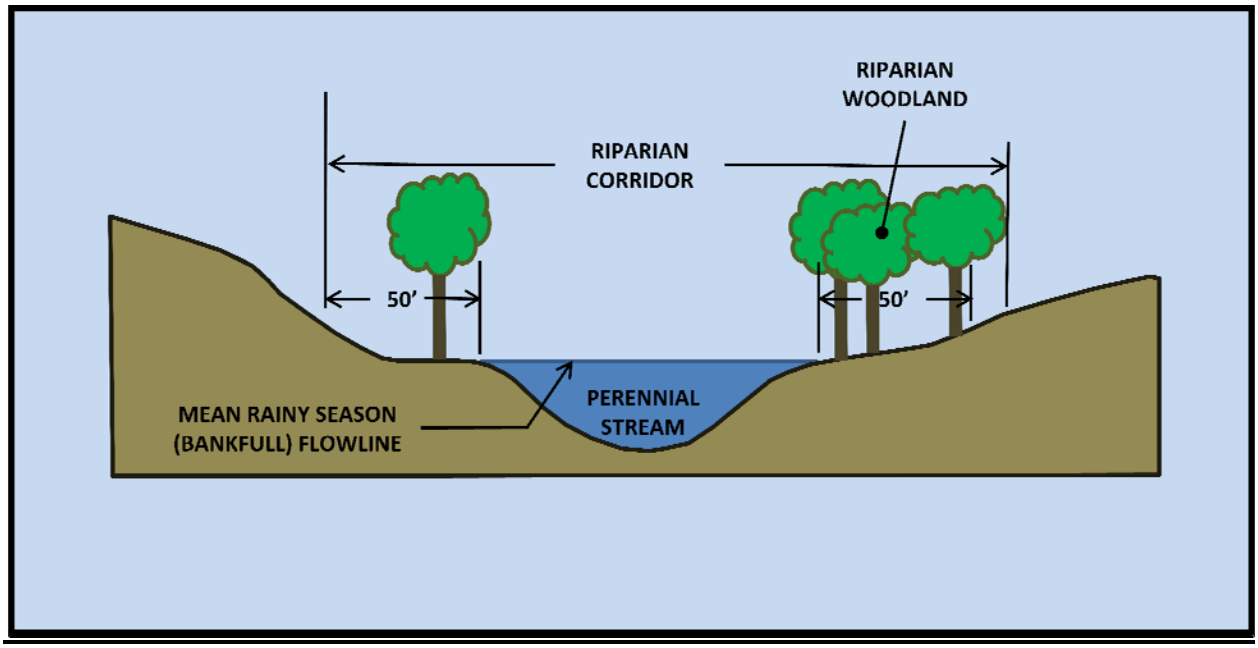
In this example, the extent of the riparian corridor is measured from the greater of 30' from the mean rainy season (bankfull) flowline or the edge of the riparian woodland.

Example 5: Perennial Stream Located Outside of the Urban/Rural Services Line



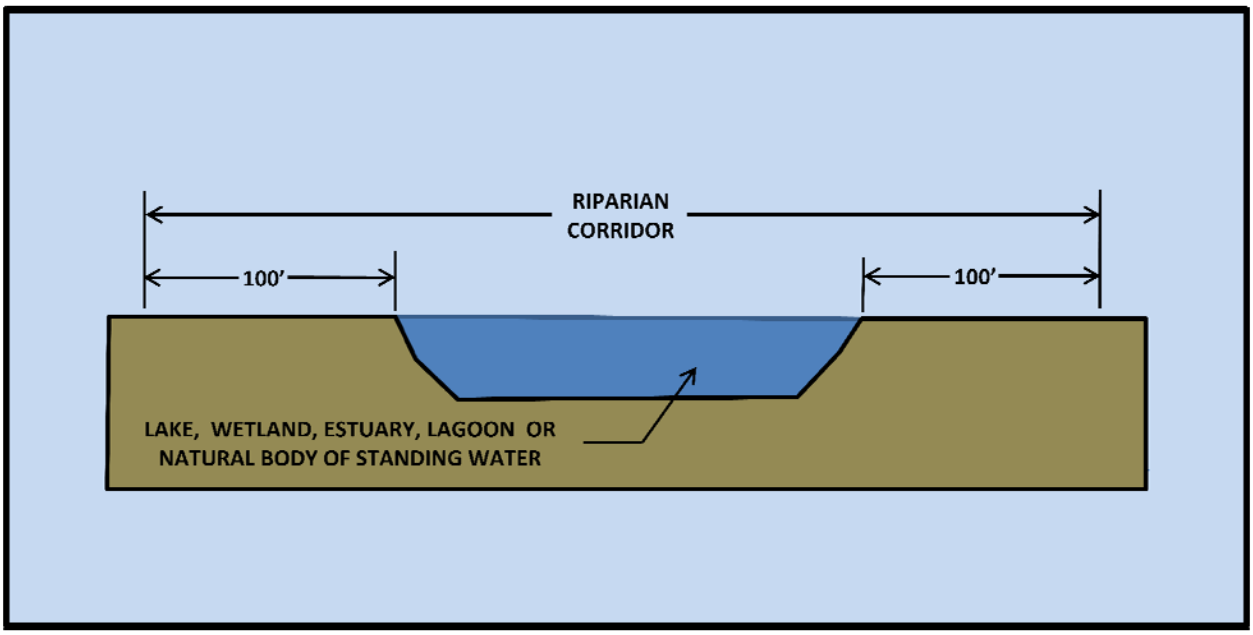
Since it's a perennial stream, the riparian corridor is the area encompassing 50' from either side of the mean rainy season (bankfull) flowline.

Example 6: Perennial Stream Located Outside of the Urban/Rural Services Line



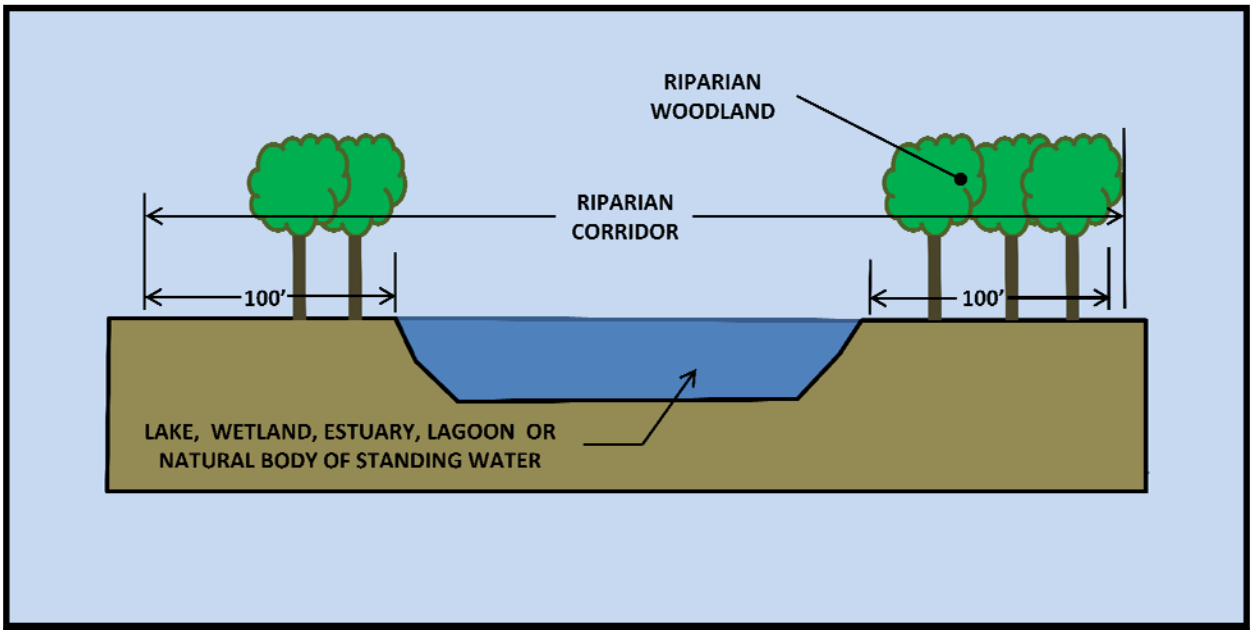
In this example, the extent of the riparian corridor is measured from the greater of 50' from the mean rainy season (bankfull) flowline or the edge of the riparian woodland.

Example 7: Lake, Wetland, Estuary, Lagoon, or Natural Body of Standing Water



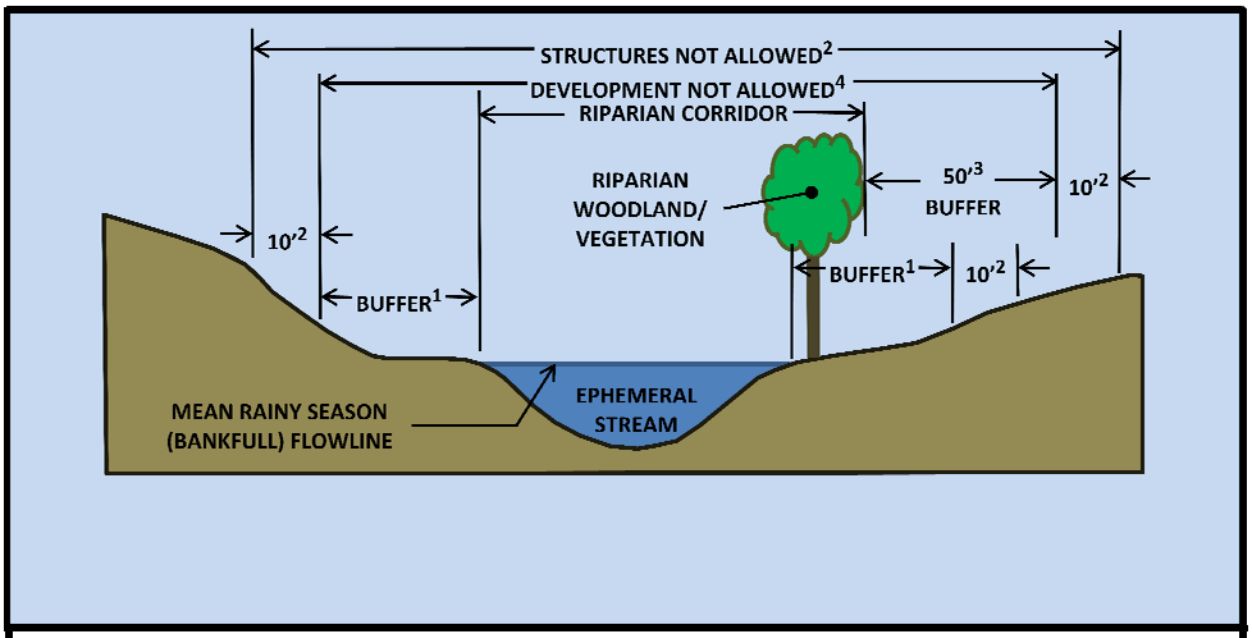
The riparian corridor extends 100' from the high water mark.

Example 8: Lake, Wetland, Estuary, Lagoon, or Natural Body of Standing Water



The riparian corridor extends 100' from the high water mark or out to the edge of riparian woodland, whichever is greater.

Example 9: Ephemeral Stream within an Arroyo Inside of the Urban/Rural Services Line



1 **The buffer distance is determined based upon the average slope within 30' of the arroyo and the type of vegetation with in the buffer (see Chart in Code Section 16.30.040). An arroyo includes the areas between the top of the arroyo banks defined by a discernible break in slope. Where there is no break in slope, the extent may be defined as the edge of the 100 year floodplain.**

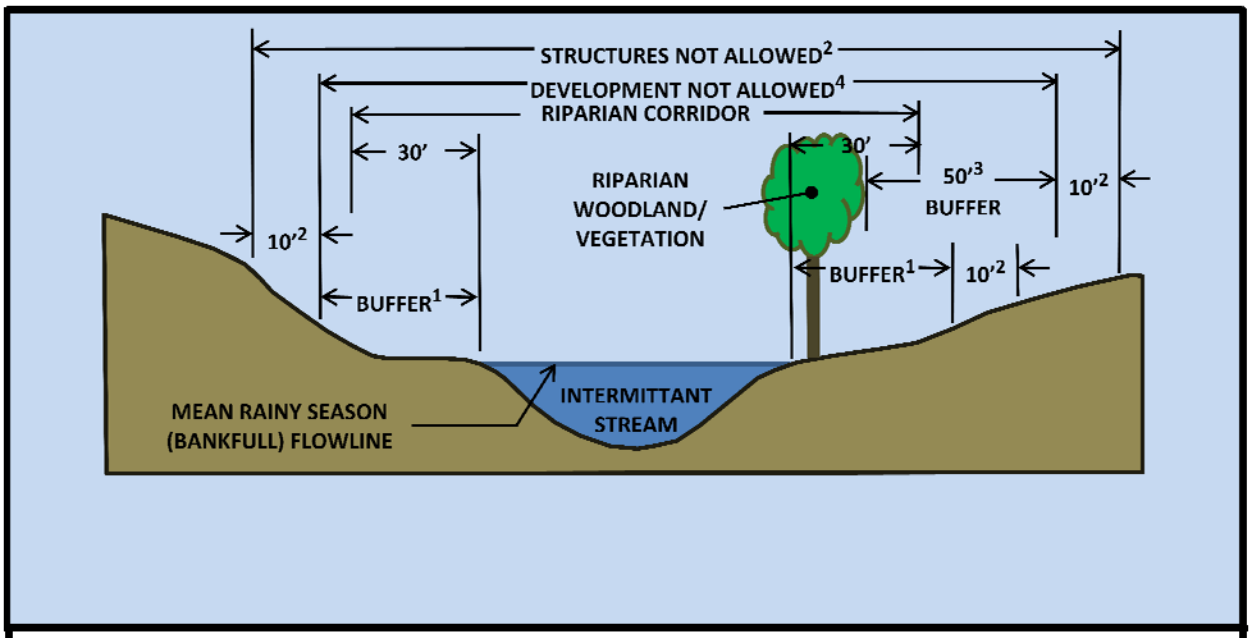
2 **Structures must be setback 10' setback from the edge of the buffer.**

3 **There is always a 50' buffer from the edge of riparian woodland and a 20' buffer from the drip line of the edge of other woody vegetation.**

4 **Development (as defined in Section 16.30.030) is not allowed within a buffer zone.**

For properties located inside the urban services or rural services line, it is more complicated to determine where development and structures may be constructed. In order to determine where development may occur, the riparian corridor, the buffer and the structure setback must be determined. The riparian corridor is determined similar to Example 1 and 2, above. The buffer is determined based upon the charts in Section 16.30.040 (see bottom of this document for the chart). Buffers only apply where there is an arroyo. Once the buffer is determined, structures must be setback 10' from the edge of the buffer. Please note that in this example several 10' structure setbacks are shown for illustrative purposes, however the most restrictive setback is applied.

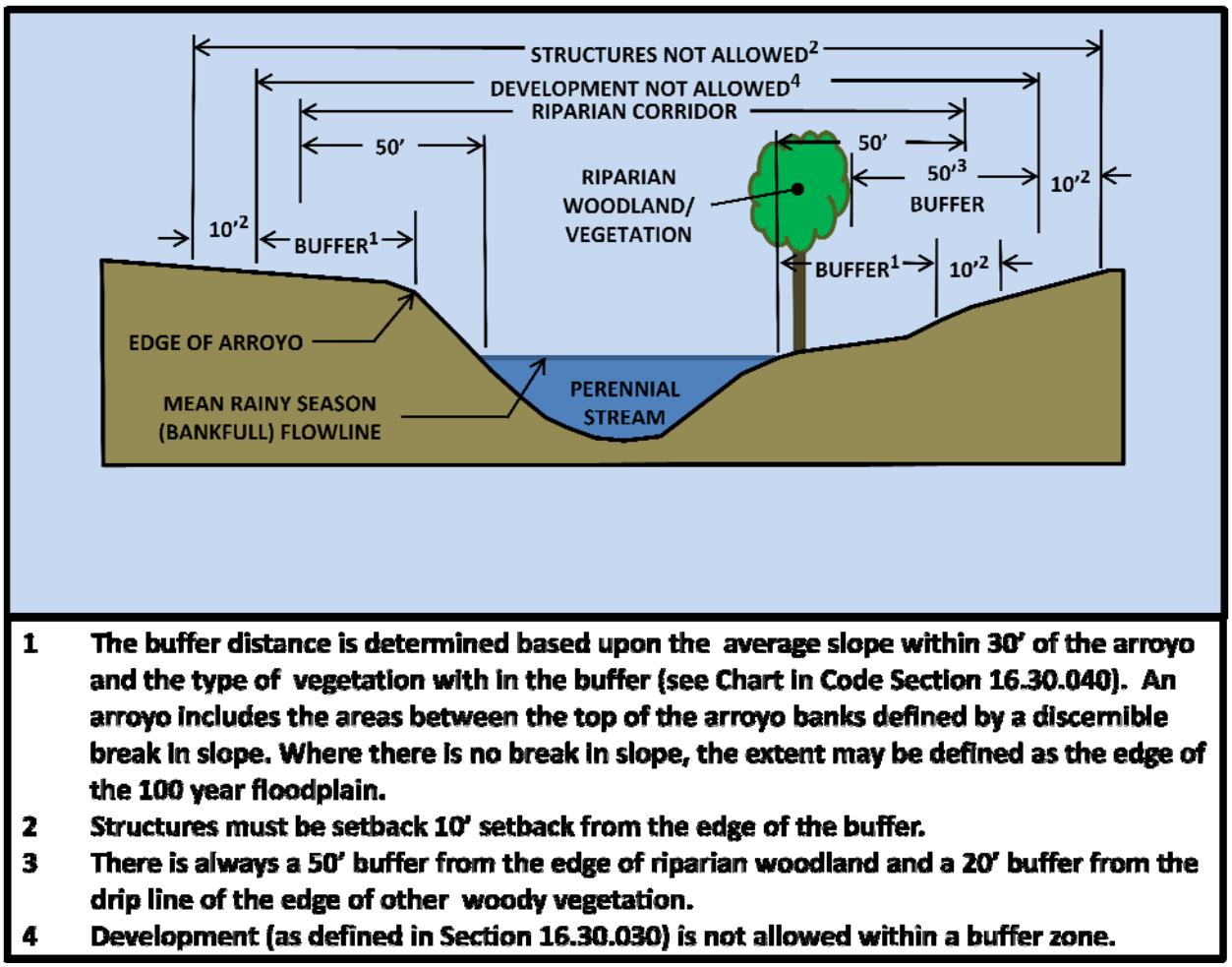
Example 10: Intermittent Stream within an Arroyo Inside of the Urban/Rural Services Line



1	**The buffer distance is determined based upon the average slope within 30' of the arroyo and the type of vegetation with in the buffer (see Chart in Code Section 16.30.040). An arroyo includes the areas between the top of the arroyo banks defined by a discernible break in slope. Where there is no break in slope, the extent may be defined as the edge of the 100 year floodplain.**
2	**Structures must be setback 10' setback from the edge of the buffer.**
3	**There is always a 50' buffer from the edge of riparian woodland and a 20' buffer from the drip line of the edge of other woody vegetation.**
4	**Development (as defined in Section 16.30.030) is not allowed within a buffer zone.**

In order to determine where development may occur, the riparian corridor, the buffer and the structure setback must be determined. The riparian corridor is determined similar to Example 3 and 4, above. The buffer is determined based upon the charts in Section 16.30.040 (see bottom of this document for the chart). Buffers only apply where there is an arroyo. Once the buffer is determined, structures must be setback 10' from the edge of the buffer. Please note that in this example several 10' structure setbacks are shown for illustrative purposes, however the most restrictive setback is applied.

Example 11: Perennial Stream within an Arroyo Inside of the Urban/Rural Services Line



1 **The buffer distance is determined based upon the average slope within 30' of the arroyo and the type of vegetation with in the buffer (see Chart in Code Section 16.30.040). An arroyo includes the areas between the top of the arroyo banks defined by a discernible break in slope. Where there is no break in slope, the extent may be defined as the edge of the 100 year floodplain.**

2 **Structures must be setback 10' setback from the edge of the buffer.**

3 **There is always a 50' buffer from the edge of riparian woodland and a 20' buffer from the drip line of the edge of other woody vegetation.**

4 **Development (as defined in Section 16.30.030) is not allowed within a buffer zone.**

In order to determine where development may occur, the riparian corridor, the buffer and the structure setback must be determined. The riparian corridor is determined similar to Example 5 and 6, above. The buffer is determined based upon the charts in Section 16.30.040 (see bottom of this document for the chart). Buffers only apply where there is an arroyo. Once the buffer is determined, structures must be setback 10' from the edge of the buffer. Please note that in this example several 10' structure setbacks are shown for illustrative purposes, however the most restrictive setback is applied.

Chart with Criteria for Determining Buffer From Arroyos (Per Code Section 16.30.040)

CRITERIA FOR DETERMINING BUFFER FROM ARROYOS

Character of Vegetation in Buffer						
	Riparian Vegetation			Live Oak or Other Woodland		
Average slope within 30 feet of edge	20-30%	10-20%	0-10%	20-30%	10-20%	0-10%
Buffer distance (feet) from: Perennial Streams, Wetlands, Marshes, Bodies of Water	50	50	50	50	40	30
Buffer distance (feet) from: Intermittent Streams	50	40	30	30	30	20
Buffer distance (feet) from: Ephemeral Streams	30	30	20	20	20	20

The buffer shall always extend fifty (50) feet from the edge of riparian woodland and twenty (20) feet beyond the edge of other woody vegetation as determined by the drip-line, except as provided for in Section 16.30.060. Once the buffer is determined, a ten (10) foot setback from the edge of buffer is required for all structures, to allow for construction equipment and use of yard area.

See allowable density credits within the General Plan.

CRITERIA FOR DETERMINING BUFFER FROM ARROYOS

Character of Vegetation in Buffer						
	Grassland or Other			Buffer area is developed or otherwise disturbed (does not include recent clearing)		
Average slope within 30 feet of edge	20-30%	10-20%	0-10%	20-30%	10-20%	0-10%
Buffer distance (feet) from: Perennial Streams, Wetlands, Marshes, Bodies of Water	50	30	20	30	20	20
Buffer distance (feet) from: Intermittent Streams	30	20	10	20	10	10
Buffer distance (feet) from: Ephemeral Streams	20	10	10	20	10	10

The buffer shall always extend fifty (50) feet from the edge of riparian woodland and twenty (20) feet beyond the edge of other woody vegetation as determined by the drip-line, except as provided for in Section 16.30.060. Once the buffer is determined, a ten (10) foot setback from the edge of the buffer is required for all structures, to allow for construction equipment and use of yard area.

See allowable density credits within the General Plan.