



# Section 3 Phasing Plan

### GOALS

To identify the order and timing of mitigation, funding, and construction of trail alignment segments.

### PROJECT PROCESS

- Projected the earliest construction start dates for the segments of the trail alignment that depend on completion of concurrent public projects by the following agencies:
  - USACE
  - City of Norco
  - JCSD
  - RCTC
- Estimated time frames for mitigation and permitting and encroachment permits.
- Divided the trail into segments that provide connectivity to existing trails, bikeways or sidewalks at both ends, or that have multiple connection points throughout.



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## Introduction

The SART phasing plan provides an estimate of the order and timing of:

- Environmental permitting for the trail,
- Mitigation for the trail, and
- Construction of trail elements.

Although there are many considerations that can be part of developing a phasing plan, the phasing plan for the SART project is especially influenced by practical considerations that are specific to the SART recommended alignments.

- The segments of the trail that are to be located on concurrent public projects cannot be constructed and opened for use until the public project is first completed.
- Environmental permits have the following restrictions:
  - The trail alignment needs to be contiguous from one end to the other (no gaps),
  - Environmental permits have a five year life span for project elements, and
  - Portions of the trail that cannot be completed within five years can be designated as programmatic elements, but they will require a separate permit that must be obtained at a future time.
- Necessary environmental permits are planned to be completed during the fall of 2011. The window for project construction is, therefore, from late 2011 to late 2016.
- A fourth practical consideration is funding availability. Until final cost estimates are available, it is not known whether additional funds will be required, and if so, their timing requirements.

## Process

The following expected completion dates for concurrent public projects underlying the recommended alignment were obtained from the land managing agencies (see Table 3-2 for more detailed information). They are listed in geographic order starting at the west end, with the Eastvale portions last.

• Santa Ana River outflow channel maintenance roads and bridge	USACE	Completed
• Auxiliary dike construction	USACE	12/2012
• Alcoa dike construction	USACE	07/2013
• Norco Dr. and Bluff St. widening	City of Norco	12/2012
• Hamner Park and Ride	City of Norco	Completed
• Norco Bluff stabilization (downstream of Hamner Ave.)	USACE	02/2014
• Norco Bluff stabilization (upstream of Hamner Ave.)	USACE	Completed
• River Road bridge completion	RCTC	06/2011
• Archibald Bluff	JCSD	Unknown
• Eastvale Community Park	JCSD	12/2011
• JCSD trail downstream of Hamner Ave.	JCSD	Unknown
• Hamner Ave. widening	City of Norco	12/2011
• Hamner Ave. bridge construction	RCTC	Unknown

After the various alignment segments were sorted by the completion dates of concurrent projects, beginning with the most future projects, the remaining segments were evaluated.

All recommended alignments that could be completed within a five year environmental permitting window were identified. They were evaluated to identify a chain of contiguous segments from just downstream of SR-71 to Hidden Valley Wildlife Area and were identified as project elements.

Elements that did not pass this sort were evaluated to determine if they had value as a spur trail, leading to important trail destinations that were existing or are projected to be completed within the five year permitting window.

Elements that were non-contiguous because they would not be completed within the five year environmental permitting window were identified as programmatic elements, to be permitted at a later date.

## Phasing Recommendations

It is assumed that resources will be achieved to complete the entire project within five years, utilizing existing and future funding. This step will likely involve seeking additional funding sources, as well as partnering with other entities as a means of achieving savings. Therefore, the controlling aspect for determining phasing will be when the particular reaches are available for construction.

It is recommended that construction of the trail be divided into three phases in order to respond to this key factor.

The first phase would involve all identified trail upgrades and developments within the reaches within the Cities of Norco and Eastvale. These improvements can be initiated as soon as applicable permits and rights-of-way can be secured, plans prepared, and construction bidding accomplished.

The second phase involves all segments within the Prado Basin from SR-71 to the intersection of Bluff Street and Stagecoach Drive. The majority of these improvements will jointly utilize flood protection dikes to be developed by the USACE. These two dikes are projected to be completed by mid-year, 2013, at which time the trail can be built in conjunction with the finished facility. Due to the interrelationship of all trail segment improvements within Prado, it is suggested that they all be grouped together, if possible. Again, various permits, rights of way easements, etc., will need to be accomplished, as well as plans prepared and construction bidding completed. This phase should tentatively be timed for start of construction in the last half of 2013.

The third phase is beyond the scope of this project. It is limited to Riverside County Transportation Commission's Hamner Ave. bridge expansion and/or replacement, and the two short segments to be developed through conditions on proposed developments within the JCSD. In the case of the bridge, completion is anticipated in the 2016-2020 time frame. It is anticipated that the bridge construction will include the necessary trail elements, as well as all CEQA/NEPA evaluations, documentations, and permits. The JCSD segments are anticipated to be accomplished as a condition of approval by future developments, the timing of which is presently unknown.



Table 3-1: Santa Ana River Trail Phasing Plan

USACE - U.S. Army Corps of Engineers  
 OCFCD Division - Orange County Flood Control Division  
 RDRPSP - Riverside County Regional Parks and Open Space District  
 OCWD - Orange County Water District  
 JCSD - Junipera Community Services District  
 RCTC - Riverside County Transportation Commission

Access Group**	Trail Segment	Sep to Feb 2011	Mar to Aug 2011	Sep to Feb 2012	Mar to Aug 2012	Sep to Feb 2013	Mar to Aug 2013	Sep to Feb 2014	Dec 2015-2020	By Dec 2020	Land Owner	Agency with Concurrent Construction
<b>Reach I</b>												
1	SR-71 to spillway structure	Title Reports Use Agreements	Mitigation Permitting Use Agreements					Construction			USACE	USACE
<b>Reach II</b>												
1	Spillway structure to auxiliary dike	Title Reports Use Agreements	Coordination Mitigation Permitting Use Agreements	Coordination	Coordination	Coordination	Coordination	Construction			USACE	USACE
<b>Reach III</b>												
1	On and at base of auxiliary dike to Auto Center Dr.	Design Title Reports Use Agreement	Design Mitigation Permitting Use Agreements	Coordination	Coordination	Coordination	Coordination	Construction			USACE	USACE
<b>Reach IV</b>												
1	Auto Center Dr. staging	Title Reports Use Agreements	Mitigation Permitting Use Agreements	Coordination	Coordination	Coordination	Coordination	Design Construction			OCFC Division	n/a
<b>Reach IV &amp; V</b>												
	Auto Center Dr. to Butterfield Park	Title Reports Use Agreements	Mitigation Permitting Use Agreements	Coordination	Coordination	Coordination	Coordination	Construction			USACE	USACE
<b>Reach VI &amp; VII</b>												
	Butterfield Park to Bluff St. at Stagecoach Dr., includes airport, Alcoa dike, and Rincon St.	Title Reports Use Agreements	Title Reports Use Agreements	Coordination	Coordination	Coordination	Coordination	Construction			USACE City of Corona (lease park and airport) City street - Corona	USACE
<b>Reach VIII</b>												
	Stagecoach Dr. to River Rd. on Bluff St.		Permitting	Construction							County Street - Riverside	n/a
	Stagecoach Dr. to River Rd. on base of bluff			Use Agreements	Use Agreements	Use Agreements	Use Agreements	Construction			Private OCWD	n/a
<b>Reach IX</b>												
	Norco streets - River Rd. at Bluff St. on Corydon Ave. to Norco Dr.	Coordination	Coordination	Construction							City street - Norco	n/a
	Norco streets - Norco Dr. from Corydon Ave. to Cedar Ave.	Coordination	Coordination	Construction							City street - Norco	n/a
<b>Reach X</b>												
	Norco streets - from Norco Dr. to Detroit St.	Coordination	Coordination	Construction							City street - Norco	City of Norco
	Soft surface trail on existing USACE bench on bluff stabilization upstream of Hammer Ave.	Coordination	Coordination	Construction							City street - Norco	City of Norco
<b>Reach XI &amp; XII</b>												
	Norco streets - Detroit St. to Arlington Ave.	Coordination	Coordination	Construction							City street - Norco	City of Norco
	Arlington Ave. - Crestview Dr. to Hidden Valley Wildlife Area	Title Reports Use Agreements	Mitigation Design Use Agreements	Construction							City street - Norco County street - Riverside	n/a
	Existing USACE bench - equestrians	Title Reports Use Agreements	Coordination	Construction							USACE	n/a
	Base of Norco bluff to Hidden Valley - equestrians								Permitting and Use Agreements at such time as the base of the bluff is reinforced by other agency	Construction at such time as the base of the bluff is reinforced by other agency	City of Norco So Cal Edison Private	n/a

\*\*The four access groups identified, include several trail segments in a row with only two points of access for the group, one at each end of the cluster. They have at least one segment in the middle with no access. To ensure access to all trail segments as they are built, the trail segments in each access group should be built as a group.

**Table 3-1: Santa Ana River Trail Phasing Plan**

USACE - U.S. Army Corps of Engineers  
 OCFCD Division - Orange County Flood Control Division  
 RDRPOSP - Riverside County Regional Parks and Open Space District  
 OCWD - Orange County Water District  
 JCSD - Jurupa Community Services District  
 RCTC - Riverside County Transportation Commission

Access Group**	Trail Segment	Mar to Aug 2011	Sep to Feb 2011	Mar to Aug 2012	Sep to Feb 2012	Mar to Aug 2013	Sep to Feb 2013	Mar to Aug 2013	Sep to Feb 2014	Dec 2015-2020	By Dec 2020	Land Owner	Agency with Concurrent Construction
2	River Rd. bridge - Bluff St. to Archibald Ave. connections	Mitigation Permitting Use Agreements	Construction of connections only; Construction of bridge by others									County bridge - Riverside	RCTC
2	Eastvale bluff - Archibald Ave. to existing JCSD trail (future SART trail)	Title Reports Use Agreements	Construction									JCSD	n/a
	Eastvale Community Park - Cleveland Ave. to Hammer Ave.	Title Reports Use Agreements	Construction									JCSD	JCSD
3	Hammer Ave. - Citrus St. to Hammer Ave.	Coordination	Roadway widening anticipated completion date									City Street - Norco	City of Norco
3	Hammer Ave. bridge	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Construction of bridge by others	County bridge - Riverside	RCTC
3	Hammer Ave. bridge connection to River Dr. upstream	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Construction	City of Norco Private	n/a
4	Hammer Ave. bridge connection from USACE Norco bluff stabilization - Norco side downstream of Hammer Ave.											Private	n/a
4	USACE Norco bluffs stabilization - proposed bench downstream of Hammer Ave.	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Coordination	Construction	USACE Private	USACE
2	Eastvale bluff - on bluff between Prado Basin Park Rd. and existing JCSD trail (future SART trail)								Title Reports Use Agreements	Mitigation Permitting	Construction	Private	n/a

\*\*The four access groups identified, include several trail segments in a row with only two points of access for the group, one at each end of the cluster. They have at least one segment in the middle with no access. To ensure access to all trail segments as they are built, the trail segments in each access group should be built as a group.

Table 3-2: Santa Ana River Trail Phasing Plan Analysis									
Concurrent Project by Other Agencies Underlying or Adjacent to Recommended Alignments									
Trail Segment	Ownership Type	Special Project Coordination/ Features	Construction Begins	Construction Complete	Lead Agency	Mitigation	Construction Costs	Required Improvements	Comments
<b>Reach I</b>									
SR-71 to spillway structure	Easements - USACE	USACE outflow channel maintenance roads (existing)	Completed	Completed	USACE	Moderate	Moderate	Striping, signage, and fencing along the existing outflow channel maintenance roads.	Spillway Channel improvements will not be adjacent to the trail, and should not affect construction. A barrier fence may be needed during the USACE's ongoing construction.
<b>Reach II</b>									
Spillway structure to auxiliary dike	Easements - USACE	Spillway Channel (construction)	June 2012	October 2014	USACE	Moderate	Moderate	Clearing, grading, base preparation, paving and striping, surfacing of horse trail, and signage.	Spillway Channel improvements will not be adjacent to the trail, and should not affect construction. A barrier fence may be needed during the USACE's ongoing construction.
<b>Reach III</b>									
On auxiliary dike to Auto Center Dr.	Easements - USACE	Auxiliary dike (construction)	October 2010	December 2012	USACE	Moderate	Moderate	Clearing, grading, base preparation, paving and striping, surfacing of horse trail, fencing, viewing area, and signage.	Coordination with the USACE needs to be ongoing while they finalize their dike plans. The bike trail will be on the bench on top of the dike, and will include a viewing area that needs to be incorporated into the USACE's plans. The equestrian trail will be at the base of the dike.
<b>Reach IV-V</b>									
Auto Center Dr. staging	Easements - Orange County Flood Control Division	None	Not Scheduled	N.A.	N.A.	High	Moderately high	Install water main, clearing, grading, base preparation, paving and striping of bicycle parking, surfacing of equestrian parking and corral, install drainage structures, fencing, signage, install drinking fountains and animal watering.	The existing water main should be adequate to support future restrooms. Sewage lines can be added later if restrooms are installed.
Auto Center Dr. to Butterfield Park	Easements - USACE	Borrow pit (construction)	October 2010	October 2013	USACE	High	Moderate	Clearing, grading, base preparation, install drainage structures, paving and striping, surfacing of horse trail, fencing, and signage.	The borrow pit will be used by the USACE for several projects, the last of which will be the River Road Dike, scheduled to be completed October, 2013. A barrier fence may be needed during the USACE's ongoing construction.
<b>Reaches VI &amp; VII</b>									
Butterfield Park to Bluff St. at Stagecoach Dr.	Easements - USACE Easement - Weyerhaeuser	Alcoa dike (construction)	December 2011	July 2013	USACE	High	Moderate	Clearing, grading, base preparation, paving and striping, surfacing of horse trail, fencing, airport gates and traffic barriers, signage, and stop sign at Stagecoach Dr. and Bluff St.	The trails will enter and leave the airport property. Gates and traffic barriers will be needed to protect the airport.
<b>Reaches VIII</b>									
Stagecoach Dr. to River Rd. on Bluff St.	Transportation Corridor	None	n/a	n/a	n/a	None	Low	Striping, signage, stop signs, traffic signals (or upgrades), and road reflectors.	The existing equestrian trail on the south side of Bluff St. in Norco's jurisdiction, is adequate. The paved trail will consist of Class II bike lanes, the westbound lane will be in Riverside County jurisdiction, and eastbound lane will be in the City of Norco jurisdiction.
Stagecoach Dr. to River Rd. on base of bluff	Private	None	n/a	n/a	n/a	Moderate	High	Clearing, grading, base preparation, install drainage structures, paving and striping, fencing, and signage.	The properties along the base of the bluff are privately owned and would require acquisition of easements for all of the properties.

**Table 3-2: Santa Ana River Trail Phasing Plan Analysis**

Concurrent Project by Other Agencies Underlying or Adjacent to Recommended Alignments									
Trail Segment	Ownership Type	Special Project Coordination/ Features	Construction Begins	Construction Complete	Lead Agency	Mitigation	Construction Costs	Required Improvements	Comments
<b>Reaches IX</b>									
Norco streets - River Rd. at Bluff St. on Corydon Ave. to Norco Dr.	Transportation Corridor	Streets (widening)	n/a	n/a	Norco	None	Low	Striping, signage, stop signs, traffic signals, and road reflectors.	The on-street portions of the SART need to be coordinated with the City of Norco street widening projects. Normal street widening costs will be borne by the City of Norco, but trail specific costs will be funded through the SART trails budget.
Norco streets - Norco Dr. from Corydon Ave. to Cedar Ave.	Transportation Corridor	Streets (widening)	June 2011	December 2012	Norco	None	Low	Striping, signage, stop signs, traffic signals, and road reflectors.	The on-street portions of the SART need to be coordinated with the City of Norco street widening projects. Normal street widening costs will be borne by the City of Norco, but trail specific costs will be funded through the SART trails budget.
<b>Reaches X</b>									
Norco streets - from Norco Dr. to Detroit St.	Transportation Corridor	Streets (widening)	Ongoing	December 2010	Norco	None	Low	Striping, signage, stop signs, traffic signals, and road reflectors.	The on-street portions of the SART need to be coordinated with the City of Norco street widening projects. Normal street widening costs will be borne by the City of Norco, but trail specific costs will be funded through the SART trails budget.
River Rd. bridge - Bluff St. to River Rd. bridge connection	Transportation Corridor	River Rd. Bridge (replacement)	n/a	June 2011	Riverside County Transportation	None to trail	None to Project	n/a	Nearly completed
<b>Reaches IX &amp; X</b>									
Eastvale bluff - Archibald Ave. to existing SART trail	Easements - USACE	None			n/a	Medium	Moderately high	Clearing, grading, base preparation, drainage structures, paving and striping, surfacing of horse trail, and signage.	There are no special circumstances in this area.
Eastvale Community Park - Cleveland Ave. to Hamner Ave.	Easements - JCSD	Eastvale Community Park (construction)	February 2011	December 2011	JCSD	None to trail	Moderate	Clearing, grading, base preparation, paving and striping, surfacing of horse trail, and signage.	The trail routes, bicycles along the northern perimeter leading to Hamner Ave. and equestrians through park, leading to the proposed Hamner Ave. causeway and the Hamner Ave. Class 1b, need to be coordinated with the JCSD as they plan the park.
Hamner Ave. - Citrus St. to Hamner Ave.	Transportation Corridor	Hamner Ave. (widening)	Ongoing	December 2011	Norco/ Riverside County Transportation	None to trail	Low	Striping, signage, stop signs, traffic signal upgrades and road reflectors.	The on-street Hamner Ave. portion of the SART needs to be coordinated with the City of Norco street widening projects. Normal street widening costs will be borne by the City of Norco, but trail specific costs will be funded through the SART construction budget.
Hamner Ave. bridge	Transportation Corridor	Hamner Ave. Bridge (construction)	Unknown	Unknown	RCTC	None to trail	Unknown	n/a	A separated SART trail lane needs to be coordinated with bridge design and construction process.
Hamner Ave. bridge connection Norco side upstream	Easements - USACE	None	n/a		n/a	Medium	Moderate	Clearing, fine grading, base preparation, paving and striping, surfacing of horse trail, and signage.	Using the existing maintenance road would help reduce construction costs and mitigation requirements.
Proposed Norco bluffs stabilization with bench, downstream of Hamner Ave. bridge	Easements - USACE	Norco bluffs stabilization (construction)	September 2012	February 2014	USACE	None to trail	Moderately low	Surfacing of horse trail, fencing, and signage.	The SART trail needs to be coordinated with the USACE stabilization design and construction process.
Hamner Ave. bridge connection Norco side downstream	Easements - USACE	None	n/a		n/a	Medium	Moderate	Clear arundo, reinforce bluff, create bench for trail, connect to and cross Hamner Ave.,	Coordination with the USACE is needed to develop a joint effort to make this connection.



**Table 3-2: Santa Ana River Trail Phasing Plan Analysis**

Concurrent Project by Other Agencies Underlying or Adjacent to Recommended Alignments									
Trail Segment	Ownership Type	Special Project Coordination/ Features	Construction Begins	Construction Complete	Lead Agency	Mitigation	Construction Costs	Required Improvements	Comments
<b>Reaches XI &amp; XII</b>									
Norco streets - Detroit St. to Arlington Ave.	Transportation Corridor	Streets (widening)	n/a	n/a	Norco	None	Low	Striping, signage, stop signs, traffic signals, and road reflectors.	The on-street portions of the SART need to be coordinated with the City of Norco street widening projects. Normal street widening costs will be borne by the City of Norco, but trail specific costs will be funded through the SART trails budget.
Arlington Ave. - Crestview Dr. to Hidden Valley Wildlife Area	Transportation Corridor - within designated 128' right of way	None	n/a	n/a	n/a	Low - MSHCP	Moderate	Clearing, grading, base preparation, paving and striping, surfacing of horse trail, and signage.	There is adequate right of way for the Class I and soft surface trails adjacent on the north side of Arlington Ave. Further planning and construction will need to be coordinated with the City of Norco and Riverside County transportation.
Existing USACE bench - equestrians	Easements - USACE	USACE bench (existing)	n/a	n/a	n/a	None to trail	Moderately low	Surfacing of horse trail, fencing, and signage.	The existing bench is suitable for an equestrian trail.
Base of Norco bluff to Hidden Valley - equestrians	n/a	n/a				None to trail	Moderately low	Signage.	Equestrians will continue to use informal an existing trail route in river bed. A permanent trail will be constructed if in the future the bluff is stabilized for flood control purposes.
<b>Reaches IX &amp; X</b>									
Proposed Norco bluffs stabilization with bench	Easements - USACE	Norco bluffs stabilization (construction)	September 2011	February 2014	USACE	None to trail	Moderately low	Surfacing of horse trail, fencing and signage.	SART trail needs to be coordinated with the stabilization design and construction process.
Eastvale bluff - on bluff between Prado Basin Park Rd. and existing JCSD trail (future SART trail)	Private	None	n/a	n/a	n/a	Low - MSHCP	Moderate	Clearing, grading, base preparation, paving and striping, surfacing of horse trail, and signage.	This portion of the trail will require easements from private owners. A short term alignment will be on Archibald Ave.