

PAJARO RIVER WATERSHED FLOOD PREVENTION AUTHORITY

Phase 4b: Implementation Plan for Soap Lake Floodplain Preservation Project and Watershed Flood Protection Actions



Technical Memorandum No. 4.2.1

Task: Land Acquisition Strategy

To: PRWFPA Staff Working Group

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Table of Contents

Introduction	2
Background	2
Land Acquisition Methods	
Fee Title Acquisition and Leaseback	4
Flood Conservation Easement	4
Determining Which Method is More Appropriate	5
Acquisition Priorities	7
Flooding Frequency	
Proximity to Urban Development and Urban Features	8
Proximity to Preserved Areas	
Overall Strategy	
Acquisition Schedule	
Conclusions	
Resources	13
Appendices	
Appendix A: Fee vs Easement list	
Appendix B. Parcel Rankings	19

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Introduction

This technical memorandum (TM) describes the results of work completed as part of Task 4.2.1: Land Acquisition Strategy for the Soap Lake Floodplain Preservation Project as part of the Pajaro River Watershed Study. RMC was tasked with identifying which parcels located within the Soap Lake floodplain could be purchased in fee title versus purchasing a conservation easement, recommending a strategy for acquisition of land, identifying target properties to receive priority for acquisition, and developing a schedule for project implementation. Discussion about the two primary preservation methods proposed, fee title acquisition or conservation easement, is provided, different parcel prioritization strategies are outlined, and the project duration and rate of preservation is estimated

Background

Previous phases of the Pajaro River Watershed Study have identified the Soap Lake floodplain as an essential aspect of the Pajaro River Watershed for attenuating flows in the lower reaches of the Pajaro River. Figure 1 shows the location of the Soap Lake floodplain within the watershed as well as the location of the watershed in relation to local counties and cities. Should the floodplain, which acts as a natural detention basin, lose its attenuation characteristics, downstream flows could increase by about 36% in a 100-year flood event. A preservation project to maintain the current floodplain without increasing damage costs due to flooding was defined in Phase 3 of the Study. The preservation could occur, either through fee title land acquisition or development restrictions, so long as the long-term land use was consistent with the necessary floodplain operations.

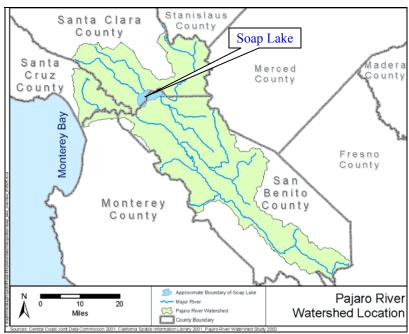


Figure 1: Soap Lake and Pajaro River Watershed boundaries.





While many acquisition and preservation methods were discussed in Phase 3, two methods are most relevant to this project timeframe and feasibility of implementation. Parcels or portions of parcels could be purchased in fee title or a conservation easement could be purchased for the land. When land is purchased in fee title, all rights to the land are transferred. The land can then be leased to a third party or converted to another use consistent with floodplain operations. When a conservation easement is acquired, only the development rights are transferred to the purchasing party.

Over 1,200 acres (13%) of the approximately 9,000-acre floodplain have been acquired to date and protected from additional development. Table 1 highlights information about the preserved parcels while Figure 2 shows where these parcels are within the floodplain.

Table 1: Parcels acquired and preserved within Soap Lake floodplain.

Purchasing Party	Size	Date Purchased	Acquisition Type
Santa Clara Valley Water	478 Acres	2003	Fee title – A majority of the
District & Santa Clara			land will be resold with an
County Land Trust			easement precluding future
(Carnadero Preserve)			development
Santa Clara County Open	301 Acres	2003	Conservation Easement
Space Authority			
Wildlands	300 Acres	2004	Fee title – Purchased as a
			mitigation bank; Half will be
			converted to wetlands
CA Department of Fish	200 Acres	1990	Conservation Easement
and Game			

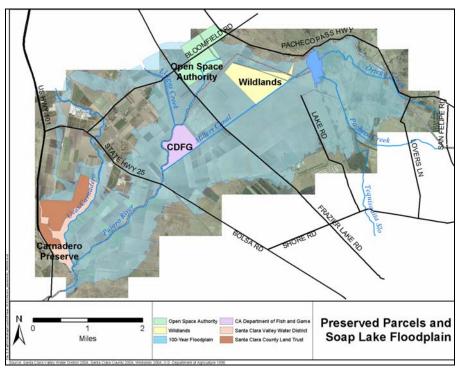


Figure 2: Floodplain map with preserved areas.





The following section will further discuss the two acquisition methods and make parcel recommendations.

Land Acquisition Methods

Many methods were considered in Phase 3 for preservation of the Soap Lake floodplain. Zoning and General Plan land use changes and floodplain management ordinances were examined. Incentive programs such as Williamson Act lands and Farmland Security Zones were also evaluated. All of these methods could contribute to short term solutions to the threat of development but none could provide the long term protection benefits required for the Soap Lake Floodplain Preservation Project to be successful. Alternatively, fee title acquisition and conservation easements, could be held in perpetuity by an organization dedicated to the continued preservation of the floodplain as agriculture and open space.

Land acquisition and conservation would be through a willing seller/willing buyer transaction. Eminent domain is not recommended for this project.

Both fee title acquisition and conservation easements are appropriate for the Soap Lake Floodplain Preservation Project; but there are significant differences between the two alternatives. One may not always be appropriate based on various requirements and requests of the buyer and seller. Below is a discussion on these two acquisition alternatives.

Fee Title Acquisition and Leaseback

With fee title acquisition and leaseback, the owner sells his property rights to the buying authority and yields all claim to the land. The land is then leased back to its original or a new owner. The buying authority then has control of the land use but allows a second party to maintain and use the land in an acceptable manner. By allowing the land to be leased, some of the purchase price for the land can be recouped. Title acquisition is one of the options available to the Pajaro River Watershed Authority to provide flood protection to the lower Pajaro River.

Flood Conservation Easement

In the case of flood conservation easements, the land ownership would be retained by the existing owner, or sold to a new owner, with the purchase of an easement by a third party to allow third party control of land use in the area. A flood easement is an agreement between the landowner and purchasing authority that land within a flood zone will be allowed to flood. The owner maintains the property rights and use. The original land use, such as agriculture, can be continued while that area of land is not flooded. Due to the productive agricultural land in the watershed, this will likely be the most attractive option for land acquisition.

The easement purchase would allow land to be flooded temporarily and would restrict the building of structures or facilities that could impede the flood attenuation benefits of the floodplain, that could be damaged by the flood, or cause damage to the surrounding area.





Examples of these structures include buildings, parking lots, fill materials, and septic tanks.

Obtaining easements would also complement the work of parks and open space agencies, private land trusts, and other land conservation organizations such as the San Benito Agricultural Land Trust, Land Trust for Santa Clara County, Santa Clara County Open Space Authority, American Farmland Trust, and The Nature Conservancy, and others. These groups are working to acquire lands for agricultural, open space, and habitat preservation and enhancements.

Determining Which Method is More Appropriate

To preserve flood attenuation benefits, both fee title acquisitions with use restrictions and flood conservation easements work equally well. Flood conservation easements should be the first option to be considered as a preservation method. Easements are less expensive than fee title acquisitions and do not require the easement holder to maintain the land. Easements are especially preferable for parcels that are only partially within the floodplain. Easements can be purchased on portions of parcels but parcels can not easily be subdivided for fee title acquisition.

There are several factors that could make fee title acquisition preferable over conservation easements. These include:

- Owner Preference: The land owner may not be interested in selling an easement but could be interested in selling the title. The land could be purchased and resold with a conservation easement in place or leased with restrictions to a third party. The resale or leasing would decrease the net cost to the original buyer.
- Land Use Changes: If the buyer has intentions to change the current land use it would be easier to do so if the land were acquired in fee title. Although no land use changes are recommended in the Soap Lake Floodplain Preservation Project, particular agencies or organizations acting as purchasing agents might need to change the land use. Land identified as particularly suitable for habitat of critical species could fall into this category.

Other land applications and opportunities, such as mitigation banking, could make fee title acquisition preferable to flood conservation easements. Farm characteristic improvements, such as irrigation methods, could increase the value of the banking credit. These improvements could more easily be dictated and managed if the land was owned in fee title and leased back to an active farmer with guidelines and restrictions in place. Prime farmland is the most suitable classification for mitigation banking since it holds the most value.

Each parcel should be evaluated on a case-by-case basis but with the intent of obtaining an easement on the property. Only in special circumstances should a fee title acquisition be considered an option. For purposes of this TM and future program cost estimates, recommendations based on the factors discussed in this section are included in Appendix A. These designations are not confirmed recommendations but are intended only to provide a relative estimate of the total amount of land that would be purchased in fee title





versus easements. Figure 3 below shows an example of a decision tree that can be quickly used to evaluate whether or not a fee title acquisition should be considered. This decision tree was used to generate the recommendations included in Appendix A.

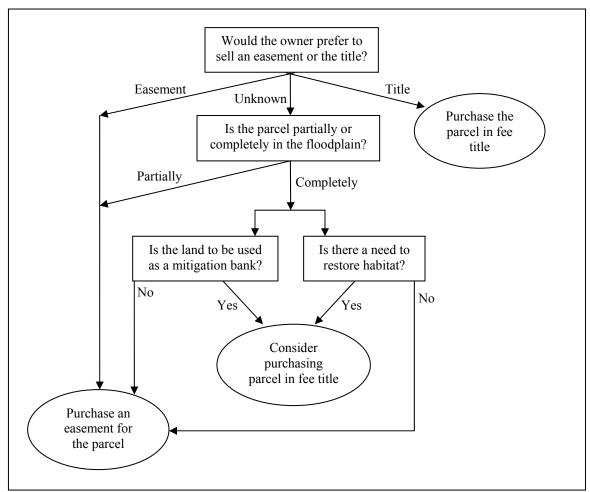


Figure 3: Decision tree for parcel acquisition method.

Table 2 shows the results of the floodplain parcel analysis based on the logic outlined in Figure 3. As can be seen in the table, fee title acquisition should only be considered for a small portion of the total number of floodplain parcels.

 Table 2: Summary of acquisition recommendation

 analysis

Acquisition Category	Number of Parcels
Easement	134
Fee Title	6*
Consider Fee Title	30

^{*}The parcels identified as fee title recommendations have already been acquired. No owners have expressed a preference for future fee title sales.





Acquisition Priorities

As identified in Phase 3 of the Pajaro River Watershed Study, there are many factors that would impact the priority of parcels to be acquired. These include:

- Flooding frequency
- Proximity to urban development and urban features
- Proximity to already preserved areas

Each of these prioritization factors is discussed below.

Flooding Frequency

More frequently flooded parcels should receive acquisition priority over parcels that are flooded less frequently. Reasons for this include:

- More frequently flooded parcels will sustain greater damage to buildings and infrastructure due to the frequency and depth of water. To avoid this, the existing and new development would need to be raised above the level of flooding. Unless heavily mitigated, this would likely cause deeper, faster water elsewhere.
- Not preserving the more frequently flooded parcels could lead to increased flow capacity in a given area. For example:

In larger events, if the 2-year floodplain is developed and paved, flood flows entering Soap Lake will flow downstream rather than flow outward and be stored on land within the 25, 50 and 100-year floodplains. This is because the area within the 2-year floodplain can carry more water faster when paved and will result in more frequent flooding downstream.

Therefore, from a hydraulic standpoint, the 2- and 10-year floodplain areas should be a higher priority for preservation than lands within the 25-, 50-, and 100-year floodplains.

Figure 4 below shows how each parcel compares to the 2- through 100-year floodplain. The darker red parcels are closer to or completely within the 2-year floodplain while the greener parcels are closer to or within the 100-year floodplain. Parcels are ranked based on their relative location within the floodplain, and therefore how well they fulfill this criterion, in Appendix B.





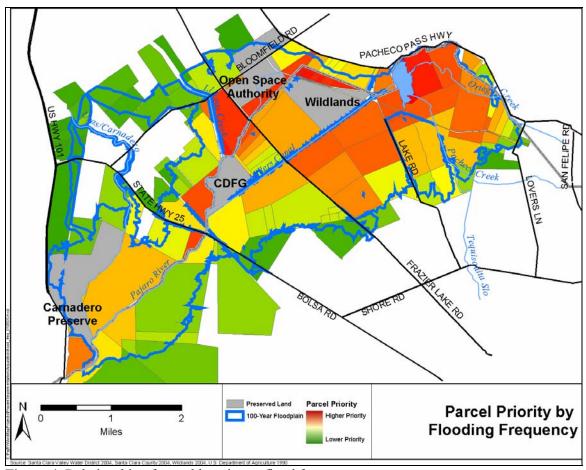


Figure 4: Relationship of parcel location to flood frequency.

Proximity to Urban Development and Urban Features

Parcels that are more likely to be developed would have a higher priority for acquisition. New development usually falls into two general categories: urban growth or fragmentation. Fragmentation is when new development occurs randomly and is not necessarily connected to any existing urban area. It is difficult to predict where fragmented development will occur and therefore is difficult to prevent. Urban growth stems from existing urban areas and support features such as roads and utilities such as water, sewer, and electrical service. The closer the parcel is to these areas and facilities the more likely it is to be developed. Therefore these parcels would have a higher priority than those parcels farther away from the roads and utilities that could easily support additional development. Figure 5 shows the relative distance of the parcels from the nearest urban feature or major road. Those parcels that are closer to an urban feature are given a higher priority than those farther away. Major roads included in the analysis are Highway 101, Highway 25, Bloomfield Road, Pacheco Pass Road, Shore Road, Frazier Lake Road, and Lake Road. The urban boundary was considered to be the edge of the utilities service. Parcels are ranked with regards to this criterion in Appendix B.





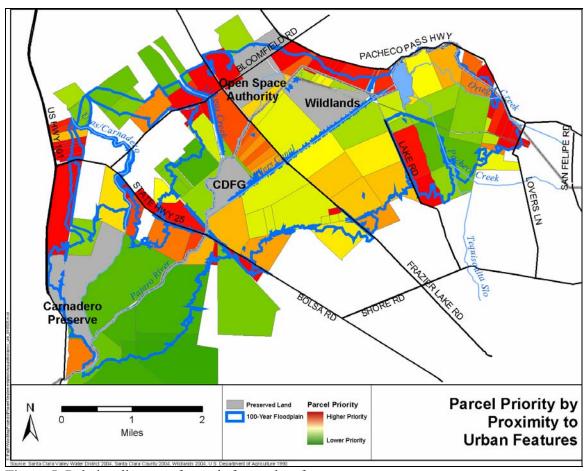


Figure 5: Relative distance of parcels from urban features.

Proximity to Preserved Areas

There are several reasons why parcels that are closer to already preserved parcels are more important to the success of the Soap Lake Floodplain Preservation Project. As preserved parcels are linked together they can form a barrier to urban development. Larger preserved areas are more difficult to route utilities such as water and power around which drives up the cost of construction and the resulting development. Preserving larger swaths of land can also improve public relations and improve public perception of the project. By creating large areas of preserved agricultural land, scenic views from the local roads are maintained. There are additional benefits as well. Should any land within the floodplain be developed, large pockets of preserved land will reduce the amount of exposure that farmers have to the public and therefore reduce the likelihood of vandalism and trespassing. The public exposure, on the flip side, to dust, odors, pesticides, and slow moving machinery will also be minimized by acquiring neighboring parcels. In addition to serving as a barrier to further urban growth and urban-agricultural conflict, there are significant benefits associated with providing a corridor of agricultural or open space land. The corridor will provide a pathway for many species that would not exist if development were interspersed among preserved areas.

¹ Institute for Local Self Government. *Farmland Protection Action Guide: 24 Strategies for California.* 2002.





Trails would not be possible without recreation easements that were contiguous. Figure 6 shows the relative distance of Soap Lake parcels from currently preserved parcels. Those parcels that are closer to an already preserved parcel are given a higher priority than those farther away. Parcels are ranked according to this criterion in Appendix B.

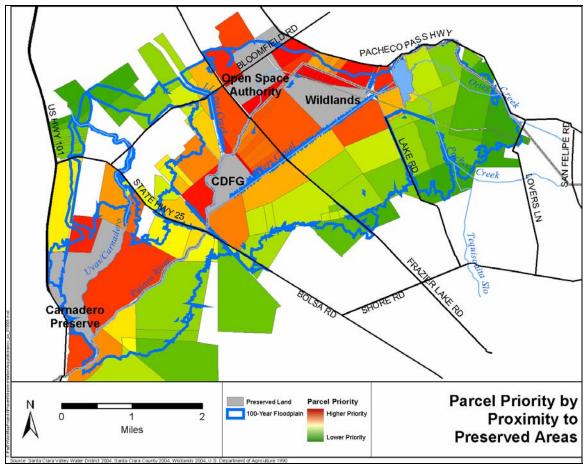


Figure 6: Relative distance of parcels from currently preserved parcels.

Overall Strategy

Based on the above criteria, it is possible to assemble an overall parcel prioritization strategy. It is recommended that, to best meet the Authority's goals, flooding frequency be considered the most important consideration. Priority should be given to those parcels that are flooded the most frequently. More frequently flooded parcels have more value in terms of maintaining the flood attenuation benefits of the Soap Lake floodplain than less frequently flooded parcels. Additional considerations, including proximity to urban features and infrastructure and congruency with other preserved parcels, should be considered as well. Acquisition of these parcels meeting these criteria would inhibit land use and topography changes that, unmitigated, could increase downstream flows. Other floodplain features that bring or could bring additional value to the floodplain or Project should also be considered if all other factors are equal. Though not the primary mission of the Authority, acquiring lands with recreational trails, historic sites, and high environmental value land would increase the value of the project for the public. This, in





turn, would provide incentive for donations and support from sectors that are not primarily concerned with maintaining flood attenuation benefits.

Acquisition Schedule

The past two years have garnered increased interest in the preservation of the Soap Lake floodplain and surrounding area. The Santa Clara County Open Space Authority (2003), the Carnadero Preserve (2003), and the Wildlands (2004) properties have shown that local land owners are willing to sell their land or development rights and are willing to do so multiple parcels at a time. Organizations with experience in land acquisitions have indicated that about 3 parcels per year is a reasonable parcel acquisition rate up to 500 acres per year. Assuming the acquisition rate is 3 parcels per year, it could take up to 60 years to acquire the entire floodplain. Assuming the acquisition rate is 10 parcels per year, or 500 acres per year with an average parcel size of 50 acres, the Soap Lake acquisition program could take up to 20 years. Table 3 shows the timeline for acquisition at various rates based on the priority groupings established in this TM.

Table 3: Acquisition timeline by assumed group.

Group	Number of Parcels	Ave. Parcel Size (Acres)	Years @ 3 parcels/yr	Years @ 5 parcels/yr	Years @ 10 parcels/yr
Already preserved	~14	85	-	-	-
1	9	150	3-4	2-3	1
2	22	100	7-8	4-5	2-3
3	66	50	20-25	12-15	6-7
4	59	20	20-25	12-15	6-7
Total (Approximate)	170	50	50-60	30-40	15-20

The preservation of the floodplain will ideally take place much more rapidly than 3 parcels per year. It's likely that the parcels will be acquired in blocks which could easily be larger than 3 parcels each. It is also clear that Soap Lake is an area in which multiple organizations are interested in preserving various aspects of the floodplain. Ideally these groups will not compete with one another but will create partnerships to promote preservation and conservation can achieve many goals. Cooperation among the organizations could also increase the acquisition rate. While a proactive program administrator could increase the acquisition rate during some years, it's important to keep in mind that parcels may only be acquired from a willing seller. During years with no willing sellers, the acquisition rate will be below target.

The experience of buying agencies and organizations is that it generally takes 1-2 years to finalize the property transfer once the seller has indicated that the land or right to develop the land is for sale.





Conclusions

This TM has further developed concepts originally proposed in Phase 3 of the Pajaro River Watershed Study. While there are many short term options available for preservation of the floodplain, land acquisition through either fee title or conservation easements are the most likely to provide assurance of long term preservation. Advantages and disadvantages of fee title and conservation easement acquisitions have been identified and a method to determine which is more appropriate for a given parcel has been developed. In general, it is far more likely that an easement would be an appropriate conservation tool unless the owner of the land prefers to sell the land in fee title.

The other major aspect of this TM was prioritizing the parcels in the recommended order of acquisition. Parcels were ranked according to four criteria: flooding frequency, proximity to urban development and urban features, proximity to already preserved parcels, and floodplain features of note. Based on all of these criteria rankings, an overall prioritization strategy has been proposed. The first group of parcels creates a buffer zone along the north bank of the Pajaro River. The second group of parcels consists of the remainder of the parcels abutting the major waterways in the floodplain. The third group is comprised of the majority of the remainder of the floodplain. The final group collects the fringe parcels and completes the acquisition and preservation of the Soap Lake 100-year floodplain.

Since the Soap Lake Floodplain Preservation Project is based on the participation of willing sellers, many of the details are dictated not by the Authority or buying agent but by the land owner. If the owner wishes to sell the land in fee title, he or she may not be willing to consider an easement. The land will therefore likely only be for sale with all rights to the land included. The order of parcel acquisition is also dependent on the seller. Any parcel in the floodplain, regardless of its group, should be considered for purchase.

The Soap Lake Floodplain Preservation Project will take a great deal of time to complete. It's estimated that it will take 20 to 60 years to acquire the land or development rights to all of the parcels within the floodplain. Based on the priority groups established in this TM, a significant portion of the floodplain can be preserved within the next 10 to 15 years.





Resources

Institute for Local Self Government. Farmland Protection Action Guide: 24 Strategies for California. 2002.

The Land Conservancy of San Luis Obispo. Bibliography. October 2001

Placer County. West Placer Agricultural Study. January 2001.

Whatcom County Purchase of Development Rights Advisory Committee. *Recommendations*. August 2002.





Appendices

Appendix A: Fee vs Easement list

The acquisition recommendations contained in the table below is based on the decision tree outlined in Figure 3.

		Fee/Easement Criteria				
APN	Acquisition Recommendation	Owner Preference	Within Floodplain	Agricultural Importance	Environmental Preservation or Restoration	Existing Agreement
84126012	Easement	Unknown	Partial	Prime	No	No
84126013	Easement	Easement	Partial	Prime; State	No	Yes
84126030	Easement	Easement	Partial	Prime; State; Local	No	Yes
84129023	Easement	Unknown	Partial	Prime; State	No	No
84140005	Easement	Unknown	Partial	Prime; State;	Yes	No
84126032	Easement	Easement	Partial	Local; Grazing Prime; State; Local	No	Yes
84129030	Easement	Unknown	Partial	State	No	No
89828012	Easement	Unknown	Partial	Prime; Grazing	No	No
84127001	Easement	Unknown	Partial	Prime; State	No	No
84140006	Easement	Unknown	Partial	State; Local	Yes	No
89826011	Easement	Unknown	Partial	State; Local	Yes	No
84140013	Easement	Easement	Yes	Local	Yes	Yes
89826010	Easement	Unknown	Partial	State; Local	No	No
89828013	Easement	Unknown	Partial	Prime; Grazing	No	No
89826008	Easement	Unknown	Partial	State; Local	Yes	No
84140011	Easement	Easement	Yes	Prime; State; Local	Yes	Yes
89826005	Easement	Unknown	Partial	State; Local	Yes	No
89828007	Easement	Unknown	Partial	Prime; Grazing	No	No
89826003	Easement	Unknown	Partial	State; Local	Yes	No
84128018	Easement	Unknown	Partial	Prime; State	No	No
89826001	Easement	Unknown	Partial	State; Local; Grazing	Yes	No
84140009	Easement	Easement	Yes	Local	Yes	Yes
89826002	Fee	Fee	Partial	State; Local	No	Yes
84130004	Easement	Unknown	Partial	Prime	No	No
84140010	Easement	Easement	Yes	State; Local	Yes	Yes
89828008	Easement	Unknown	Partial	Prime; Grazing	No	No
84140008	Easement or Fee & Leaseback	Unknown	Yes	State; Local	Yes	No
84140004	Easement	Unknown	Yes	Prime; State	No	No
84129022	Easement	Unknown	Partial	State	No	No
84131003	Easement	Unknown	Partial	Prime	No	No
84130007	Easement	Unknown	Partial	Prime; State; Grazing	No	No
84129024	Easement	Unknown	Partial	Prime; State	No	No
84130003	Easement	Unknown	Partial	Prime; State; Grazing	No	No
84139017	Easement	Unknown	Partial	Prime; State	Yes	No
84128020	Easement	Unknown	Partial	Prime; State	No	No
84131004	Easement	Unknown	Partial	Prime	No	No





		Fee/Easement Criteria					
APN	Acquisition Recommendation	Owner Preference	Within Floodplain	Agricultural Importance	Environmental Preservation or Restoration	Existing Agreemen	
84139015	Easement	Unknown	Partial	Prime	No	No	
84139005	Easement	Unknown	Partial	Prime	No	No	
84131005	Easement	Unknown	Partial	Prime	Yes	No	
84139020	Easement	Unknown	Partial	Prime	No	No	
84139009	Easement	Unknown	Partial	Prime; State	Yes	No	
84131006	Easement	Unknown	Partial	Prime	Yes	No	
84131007	Easement	Unknown	Partial	Prime	Yes	No	
84132004	Easement	Unknown	Partial	Prime	Yes	No	
84132005	Easement	Unknown	Partial	Prime	Yes	No	
84132006	Easement	Unknown	Partial	Prime	Yes	No	
84139010	Easement or Fee & Leaseback	Unknown	Yes	Prime; State	Yes	No	
84138010	Easement	Unknown	Partial	Prime; State	Yes	No	
84132007	Easement	Unknown	Partial	Prime	No	No	
84132008	Easement	Unknown	Partial	Prime	No	No	
84132009	Easement	Unknown	Partial	Prime	No	No	
84132011	Easement	Unknown	Partial	Prime	No	No	
84132013	Easement	Unknown	Partial	Prime	No	No	
84138006	Easement	Unknown	Partial	Prime	No	No	
84134002	Easement	Unknown	Partial	Prime; State	No	No	
84138009	Easement or Fee & Leaseback	Unknown	Yes	Prime; State	Yes	No	
84138007	Easement	Unknown	Partial	Prime	No	No	
84135003	Easement	Unknown	Partial	Prime	Yes	No	
84151006	Easement	Unknown	Partial	Prime	Yes	No	
84137011	Easement	Unknown	Partial	Prime	No	No	
84138008	Easement	Unknown	Partial	Prime	No	No	
84137014	Easement	Unknown	Partial	Prime	No	No	
84137024	Easement	Unknown	Partial	Prime	Yes	No	
84137010	Easement	Unknown	Partial	Prime; State	Yes	No	
84137027	Easement	Unknown	Partial	Prime; State	Yes	No	
84136001	Easement	Unknown	Partial	Prime; State	No	No	
84136009	Fee	Fee	Partial	Prime; State; Grazing	Yes	Yes	
84137009	Easement or Fee & Leaseback	Unknown	Yes	Prime; State	Yes	No	
84136009	Easement	Unknown	Partial	Prime; State; Grazing Prime; State;	Yes	No	
84136008 84136009	Fee Fee	Fee Fee	Partial Partial	Grazing Prime; State;	No Yes	Yes Yes	
84136010	Easement	Unknown	Partial	Grazing Prime; Grazing	Yes	No	
		Unknown		Prime; Grazing Prime; Grazing			
130020006	Easement Easement	Unknown	Partial	, 0	Yes	No No	
130020005 130020004	Easement	Unknown	Partial Partial	Grazing State; Local; Grazing	Yes Yes	No No	
130010031	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	
130030007	Easement	Unknown	Yes	Prime; Grazing	No	No	
130010019	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	





		Fee/Easement Criteria					
APN	Acquisition Recommendation	Owner Preference	Within Floodplain	Agricultural Importance	Environmental Preservation or Restoration	Existing Agreement	
130010025	Easement	Unknown	Partial	State	Yes	No	
130010017	Easement or Fee & Leaseback	Unknown	Yes	State; Local	Yes	No	
130010026	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	
130030007	Easement	Unknown	Partial	Prime; Grazing	No	No	
130010016	Easement or Fee & Leaseback	Unknown	Yes	State; Local	Yes	No	
130010014	Easement or Fee & Leaseback	Unknown	Yes	State; Local	Yes	No	
130030007	Easement	Unknown	Partial	Prime; Grazing	No	No	
130010029	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	
130010032	Fee	Fee	Partial	State	Yes	Yes	
130010032	Fee	Fee	Partial	State	Yes	Yes	
130010010	Easement	Unknown	Partial	State; Local	Yes	No	
130020020	Easement or Fee & Leaseback	Unknown	Yes	Local; Grazing	Yes	No	
130030007	Easement	Unknown	Partial	Prime; Grazing	No	No	
130020015	Easement	Unknown	Yes	Prime; State; Grazing	No	No	
150010001	Easement	Unknown	Partial	State; Grazing	No	No	
130020019	Easement or Fee & Leaseback	Unknown	Yes	State; Local; Grazing	Yes	No	
130010029	Easement	Unknown	Partial	State	Yes	No	
150010008	Easement	Unknown	Partial	Prime; State; Grazing	No	No	
130020017	Easement or Fee & Leaseback	Unknown	Yes	Local	Yes	No	
130020022	Easement	Unknown	Partial	Local; Grazing	Yes	No	
130020019	Easement	Unknown	Partial	State; Local; Grazing	Yes	No	
150010017	Easement	Unknown	Yes	Prime; State; Grazing	No	No	
130020021	Easement	Unknown	Yes	Grazing	No	No	
130020020	Easement	Unknown	Partial	Local; Grazing	Yes	No	
130020020	Easement or Fee & Leaseback	Unknown	Yes	Local; Grazing	Yes	No	
150010019	Easement	Unknown	Partial	Prime; Grazing	No	No	
150010015	Easement	Unknown	Yes	Prime; State	No	No	
150010010	Easement	Unknown	Partial	Prime; Grazing	No	No	
130020021	Easement	Unknown	Partial	Grazing	No	No	
130020010	Easement	Unknown	Partial	State; Local; Grazing	No	No	
130010001	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	
130010034	Easement	Unknown	Partial	State	Yes	No	
130020015	Easement	Unknown	Yes	Prime; State; Grazing	No	No	
150030029	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
130020009	Easement	Unknown	Partial	State; Local	No	No	
150030028	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150010016	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
130020001	Easement	Unknown	Partial	State; Local	Yes	No	





		Fee/Easement Criteria					
APN	Acquisition Recommendation	Owner Preference	Within Floodplain	Agricultural Importance	Environmental Preservation or Restoration	Existing Agreement	
150010018	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150010015	Easement	Unknown	Yes	Prime; State	No	No	
150030027	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150010021	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150020013	Easement	Unknown	Partial	Prime	No	No	
150030026	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150030021	Easement	Unknown	Partial	Prime	No	No	
150010020	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
130010035	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	
150010019	Easement	Unknown	Yes	Prime; Grazing	No	No	
150010020	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150020014	Easement or Fee & Leaseback	Unknown	Yes	Prime	No	No	
150020015	Easement	Unknown	Partial	Prime	No	No	
150020014	Easement	Unknown	Partial	Prime	No	No	
150030010	Easement	Unknown	Partial	Prime	No	No	
130010036	Easement	Unknown	Yes	State	No	No	
150030009	Easement	Unknown	Partial	Prime	No	No	
130010037	Easement	Unknown	Yes	State	No	No	
130020008	Easement	Unknown	Yes	State; Local; Grazing	No	No	
130010028	Easement	Unknown	Partial	State	No	No	
130010023	Easement	Unknown	Partial	State	Yes	No	
130010021	Easement	Easement	Partial	Prime; State	Yes	Yes	
130020014	Easement	Unknown	Partial	State; Local	No	No	
130050004	Easement	Unknown	Partial	Prime; State; Local; Grazing	No	No	
130040015	Easement or Fee & Leaseback	Unknown	Yes	State; Grazing	Yes	No	
130050005	Easement	Unknown	Partial	Prime; State; Grazing	No	No	
130050003	Easement	Unknown	Partial	State; Local; Grazing	No	No	
130020008	Easement	Unknown	Partial	State; Local; Grazing	No	No	
130040022	Easement	Unknown	Partial	State; Local; Grazing	No	No	
130040032	Easement	Unknown	Partial	State: Lead:	Yes	No	
130050017	Easement	Unknown	Partial	State; Local; Grazing State; Local;	No	No	
130040022	Easement	Unknown	Partial	Grazing	No	No	
130040028	Easement	Unknown	Yes	Grazing	No	No	
130040022	Easement	Unknown	Yes	State; Local; Grazing	No	No	
130040022	Easement	Unknown	Partial	State; Local; Grazing	No	No	
130040022	Easement	Unknown	Yes	State; Local; Grazing	No	No	
130040022	Easement	Unknown	Yes	State; Local; Grazing	No	No	
130040025	Easement	Unknown	Partial	State; Local; Grazing	No	No	





		Fee/Easement Criteria					
APN	Acquisition Recommendation	Owner Preference	Within Floodplain	Agricultural Importance	Environmental Preservation or Restoration	Existing Agreement	
130040033	Easement	Unknown	Partial	State; Local; Grazing	No	No	
130040032	Easement or Fee & Leaseback	Unknown	Yes	State	Yes	No	
130070008	Easement	Unknown	Partial	Prime; State	Yes	No	
130070009	Easement	Unknown	Partial	State	No	No	
130070006	Easement	Unknown	Partial	State	No	No	
130070005	Easement	Unknown	Partial	State	No	No	
130070012	Easement	Unknown	Partial	State; Grazing	No	No	
130070013	Easement	Unknown	Partial	State; Grazing	No	No	
130070010	Easement	Unknown	Partial	Prime; State	Yes	No	
130070014	Easement	Unknown	Partial	State; Grazing	No	No	
130090007	Easement or Fee & Leaseback	Unknown	Yes	Prime; State	Yes	No	
130090018	Easement	Unknown	Partial	Prime; State; Grazing	Yes	No	
130090020	Easement	Unknown	Partial	Prime; State	No	No	
130090008	Easement	Unknown	Partial	Prime; State	No	No	
130090010	Easement	Unknown	Partial	Prime; State; Grazing	No	No	
130090019	Easement	Unknown	Partial	Prime; State; Grazing	No	No	





Appendix B: Parcel Rankings

The following table summarizes how well the individual parcels fulfill the criteria established in this TM relative to the other parcels. The criteria are:

- Flooding frequency
- Proximity to urban development and urban features
- Proximity to already preserved areas

For parcels that meet the criteria equally well, they are sorted by assessor's parcel number (APN). The rank for each category reflects these groups, which is why a particular rank can be applied to more than one parcel.

	looding equency		Proxi	mity to Urban Areas		Proximi	ty to Preserved Areas
Rank	Parcel		Rank	Parcel	_	Rank	Parcel
1	84140009		1	84126013		1	84126013
2	130020004		1	84126030		1	84126030
3	130010031		1	84126032		1	84126032
4	130010026		1	84127001		1	84136008
5	130010025		1	84128018		1	84140004
6	130010019		1	84128020		1	84140009
7	84139010		1	84129024		1	84140010
8	130010016		1	84132007		1	84140011
9	130020005		1	84132008		1	84140013
10	130010017		1	84132009		1	89826002
11	130010010		1	84132011		1	130010010
12	84140013		1	84132013		1	130010014
13	130010014		1	84136008		1	130010016
14	84139017		1	84137014		1	130010017
15	84140008		1	84139005		1	130010019
16	84140010		1	84139015		1	130010021
17	84140006		1	84139020		1	130010023
18	84137009		1	84140004		1	130010025
19	130010001		1	84140005		1	130010026
20	84138009	_	1	84140009	_	1	130010031
21	130020019		1	84140011		1	130010032
21	130020019		1	84140013		1	130010032
22	130020006		1	84151006		2	84140008
23	130020020		1	89826005		3	84140005
23	130020020		1	89826008		4	89826003
23	130020020		1	89826010		5	84138009
24	130020001		1	89826011		6	84139010
25	130020009		1	89828007		7	84136001
25	150010015		1	89828008		8	84127001
25	150010015		1	130010019		9	89826001
25	150010016		1	130040028		10	84140006
26	130020015		1	130050003		11	84136009
26	130020015		1	130070005		11	84136009
27	130020017		1	130070009		11	84136009
28	130010034		1	130070012		12	84136010
29	84139015		1	130070013		13	84126012





	looding equency		Proxi	mity to Urban Areas		Proxim	ity to Preserved Areas
Rank	Parcel		Rank	Parcel		Rank	Parcel
30	84140011	-	1	130070014	-	14	84139017
31	89826001		1	150010001		15	130020017
32	84136010	-	1	150010010	-	16	130010029
33	130010021	_	1	150010017		16	130010029
34	130010032		1	150010018		17	130010028
34	130010032		1	150010019		18	130010035
35	130020008		1	150010019		19	84137024
35	130020008		1	150010020		20	130010036
36	130030007		1	150010020		20	130010037
36	130030007		1	150010021		21	130010034
36	130030007		1	150020013		22	89826005
36	130030007		1	150020014		23	130040032
37	84140004		1	150020014		23	130040032
37	89826002		1	150020015		24	84138010
38	150030029		1	150030021		25	130010001
39	150030028		1	150030026		26	130090018
40	89828012	-	1	150030027	-	27	89826010
41	130010035		2	84134002		28	84135003
42	130010029	-	3	84137010	-	29	89826008
42	130010029		4	130020010		30	89826011
43	130020022		5	89826003		31	130040015
44	150010008		6	84132004		32	130020019
45	130040015		7	150010008		32	130020019
46	89826011		8	89826001		33	84128018
47	84136009		9	84129022		34	84128020
47	84136009		10	84132005		34	84138008
47	84136009		11	84137009		34	84139005
48	130020010		12	84140010		34	84139015
49	130020021		13	84137024		35	130020001
49	130020021		14	84139017		36	84137010
50	89828013	-	15	130010001	-	37	84139009
51	130090007		16	84140006		38	84129022
52	130010036		17	130010036		39	130020004
53	150010017	_	18	89828012		40	84137009
54	150010018		19	89828013		41	130090007
55	130010023		20	130010034		42	84138006
56	89826003		21	84137027		43	84134002
57	84137010		22	84136010		44	84137027
58	130090018		23	130030007		45	130090008
59	84139009		23	130030007		46	130070009
60	130070008		23	130030007		47	130070008
61	130040032		23	130030007		48	84138007
61	130040032		23	150030010		49	84137014
62	84140005		24	84130007		50	84151006
63	130050004		25	130010037		51	130070005
64	89826010		26	130010035		52	84129024
65	150010001	-	27	130050017	-	53	84137011





	looding equency		Proxi	mity to Urban Areas		Proxim	ity to Preserved Areas
Rank	Parcel		Rank	Parcel		Rank	Parcel
66	89826005		28	130040033		54	84139020
67	89826008	_	29	130010028	_	55	130020009
68	84137024		30	130020006		56	130040022
69	130020014		31	130070008		56	130040022
70	84137027		32	130040032		56	130040022
71	150030027		32	130040032		56	130040022
72	150030026		33	84132006		56	130040022
73	89828008		34	130020014		56	130040022
74	130040028		35	130020008		57	130020005
75	150010019		35	130020008		58	130020022
75	150010019		36	89826002		59	130070012
76	130010037		37	84140008		60	130090019
77	130010028		38	130020004		61	130040033
78	130040022		39	84135003		62	84129023
78	130040022		40	130040025	_	63	130020008
78	130040022		41	130020009		63	130020008
78	130040022	-	42	130010014	_	64	130020020
78	130040022		43	130020001		64	130020020
78	130040022		44	84137011		64	130020020
79	130050003		45	130020005		65	130020010
80	84138010		46	130010016		66	130070010
81	84128018		47	150030009		67	84129030
82	130070009		48	130010029		68	130090020
83	84127001		48	130010029		69	84130007
84	130090020		49	130040015		70	130020006
85	84129022		50	130040022		71	84132007
86	150030010		50	130040022		71	84132008
87	84138008		50	130040022		71	84132009
88	150010021		50	130040022	_	71	84132011
89	130090008		50	130040022		71	84132013
90	89828007		50	130040022		71	130040028
91	84126032	-	51	130010017	_	71	130070013
92	130050005		52	84139009		71	130070014
93	84135003		53	130020019		72	130020014
94	150010020		53	130020019		73	84132006
94	150010020		54	150010015		74	89828012
95	84131006		54	150010015		75	130070006
96	130070006		55	130010031		76	130020021
97	130070010		56	150030028		76	130020021
98	150030021		57	130010025		77	130090010
99	84138006		58	130010026		78	130040025
100	84126030		59	130020017		79	84131007
101	84126013		60	84131003		80	84130003
102	130050017		61	130010010	_	81	84132005
103	150010010		62	84126012	-	82	130020015
104	130090010		63	130020020	_	82	130020015
105	84128020		63	130020020	_	83	130030007





Flooding Frequency			Proximity to Urban Areas			Proximity to Preserved Areas	
Rank	Parcel		Rank	Parcel		Rank	Parcel
105	84131007		63	130020020	-	83	130030007
105	150020013		64	84138009		83	130030007
106	84136001		65	130050004		83	130030007
107	84129024		66	84136001		84	84131006
108	84129030	-	67	130020015	-	85	130050017
109	84151006		67	130020015		86	89828013
110	84139020		68	84130003		87	130050003
111	130090019		69	84131004		88	84130004
112	130070005		69	84131005		89	130050004
113	84130007		69	84131006		90	84131003
114	130070012		69	84131007		90	84131004
115	84137011		69	84138006		90	84131005
115	150020014		69	84138007		90	84132004
115	150020014		69	84138008		90	89828007
115	150020015		69	84139010		90	89828008
116	84130004		69	130010023		90	130050005
117	84139005		69	150010016		90	150010001
118	84131005		69	150030029		90	150010008
119	84131004		70	130070006		90	150010010
120	130040025	_	71	130050005	_	90	150010015
121	130040033		72	84129023		90	150010015
122	84130003		73	84130004		90	150010016
123	84131003		74	130090018		90	150010017
123	84132006		75	130020022		90	150010018
124	150030009		76	84129030		90	150010019
125	84137014		77	130020021		90	150010019
126	84129023		77	130020021		90	150010020
127	84138007		78	84136009		90	150010020
128	84126012		78	84136009		90	150010021
128	84132004		78	84136009		90	150020013
128	84132005		79	130010032		90	150020014
128	84132007		79	130010032		90	150020014
128	84132008		80	130010021		90	150020015
128	84132009		81	84138010		90	150030009
128	84132011		82	130090007		90	150030010
128	84132013		83	130070010		90	150030021
128	84134002		84	130090019		90	150030026
128	84136008		85	130090008		90	150030027
128	130070013		86	130090020		90	150030028
128	130070014		87	130090010		90	150030029



