

# THE RESTORATION TRUST

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May 27, 2010

Mr. Keith Lichten  
SF Bay RWQCB  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

**Re: Wilder Notice; No R2-2009-0017**

Dear Keith:

I am writing on behalf of the Friends of Orinda Creeks (FOC) and The Restoration Trust (Trust) with regards to the approval of a Supplemental Environmental Project (SEP) for the Wilder Project (Wilder).

Although Wilder, the Board, FOC and the Trust were not able to reach a combined agreement on a SEP prior to the April 28 deadline, this letter provides new information that we hope will allow the Board and Wilder to approve the SEP.

First, we have included the Urban Creeks Council (UCC) as the primary SEP funding recipient. Our understanding is that because the FOC is not an approved 501(c)(3), the SEP could not be awarded to FOC. UCC is recognized as a leader in the field of creek restoration and we have welcomed their involvement. The Trust and UCC worked together on the Strentzel Meadow project, an important restoration effort also sponsored by the Friends of Alhambra Creek, Contra Costa County, and Congressman George Miller. This cooperative approach allows us to utilize the strong design skills of UCC, the implementation experience of the Trust and the on the ground capabilities of the FOC. The previously submitted SEP has been amended to reflect this new partnership and is attached (Attachment A).

Second, we are providing additional specific information on the capabilities and experience of FOC. The proposed restoration work builds upon already completed projects and experience in Orinda Creeks. Beginning more than five years ago, FOC, with assistance from the Trust, removed invasives and restored native vegetation along two reaches of San Pablo Creek near downtown. Both sites were highly similar to the proposed restoration sites in the attached SEP—that is, reasonable cover by native trees but an exotic-dominated understory that was threatening the natives. With funding from the Bodfish Grant and the Buehler Estate, the FOC and Trust removed those invasives and planted a variety of native species.

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We have maintained those areas for the past five years and they now meet our projected performance standards. Attachment B includes the first year monitoring report from one of these reaches. In short, FOC, working with the Trust has a good deal of experience in the specific restoration work proposed in the SEP and in maintaining these types of projects. Our cost estimates reflect that experience and our commitment to ensure these projects are successful.

FOC and the Trust also have a good deal of experience in generating community enthusiasm and support for restoration work. For the past six years, we have sponsored student restoration work and specific projects in Moraga and San Pablo Creeks. For more information on FOC, see FOC's web site at <http://www.orindacreeks.org>.



*Del Rey elementary school students remove ivy from a Creekside slope; fall, 2008. Note plug tray of Santa Barbara sedge in background, to be planted on creek banks, and white plastic bag for collecting trash.*

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Finally, we are providing additional information on The Restoration Trusts' capabilities in these areas. The Trust is a 501(c)(3) land trust, organized to support community-level restoration and related education efforts. The Trust has been active since 1995, helping communities develop and implement restoration plans. For a selection of articles, see <http://www.lamorindaweekly.com/archive/issue0225/Restoring-the-Creeks-at-Del-Rey-Elementary.html>, a Lamorinda Weekly article for an example on Moraga creek. Also, see [http://www.landbasedlearning.org/\\_pdf/January-6th-Fairfield-Republic.pdf](http://www.landbasedlearning.org/_pdf/January-6th-Fairfield-Republic.pdf) for a regional parks example or [http://www.ccrd.org/news/crosscurr%20su\\_06\\_reduced.pdf](http://www.ccrd.org/news/crosscurr%20su_06_reduced.pdf) for an article on the Strentzel Meadow project completed with UCC. For more information, see the Trust web site at <http://www.therestorationtrustonline.org/>.

We look forward to working further with you on this project.

Best regards,

John Zentner  
Friends of Orinda Creeks  
The Restoration Trust

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**ATTACHMENT A**

**Urban Creeks Council (UCC)/Friends of Orinda Creeks (FOC) and The Restoration Trust  
Proposed Supplemental Environmental Projects (SEP)  
For Moraga and San Pablo Creek Restoration**

**1. Moraga Creek Restoration**

- a. **Restore Moraga Creek at two locations adjacent to Del Rey Elementary School (DRES) and one location at Miramonte High School (MHS).** Approximately 500 ft of stream will be restored at each of the three locations; trash hot spots at the restoration area will be identified and the trash collected and identified by category. Other restoration work will consist of the removal of non-native exotic species and securing and planting of native species. Students and community members will be involved in this work.

Cost: \$60,918

**Moraga Creek Restoration: 3 sites; 500 linear ft each; approx. 0.3 acres each**

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Plan development	T&M	\$7,400	UCC/Trust	
Permitting	T&M	\$1,000	Trust	Minimal action
Debris removal	Lump sum	\$3,400	Contractor	Includes dump fees
Mow and hand removal of exotics	Lump sum	\$9,500	Contractor	Includes chipping and/or removal
2 <sup>nd</sup> round of weed and exotic removal	Lump sum	\$5,300	Contractor	Includes chipping and/or removal
Planting	20,000 plugs	\$9,900	Contractor	Includes plants
	4,000 RP	\$9,000	Contractor	Includes plants
	200 cuttings	\$1,600	Contractor	Includes plants
	200 tree-bands	\$1,800	Contractor	Includes plants
	3,000 plugs	\$230	Students	Plant costs only
Drip irrigation	Lump sum	\$4,300	Contractor	Includes materials
Trash ID and removal	Lump sum	\$300	Volunteers	Includes dump fee
Signage	Lump sum	\$1,650	Contractor	3 signs, includes materials
Design/Mgm't/Admin	10%	\$5,538	UCC/Trust	
<b>Total</b>		<b>\$60,918</b>		



Notes:

- Creek and upper terrace overstory (live oak-buckeye association) in relatively good shape; lower riparian (willows, cottonwoods, alders) almost completely missing; understory completely dominated by invasive exotics (ivy) damaging natives..
  - “UCC” refers to the Urban Creeks Council, “FOC” refers to the Friends of Orinda Creeks. “Trust” refers to The Restoration Trust, a non-profit land trust working with FOC on its restoration projects. “Contractor” refers to Los Robles Native Plants, the landscape contractor that has worked with FOC and the Trust on past Orinda restoration projects.
  - Plan development will include contact with agency staff. At this time minimal permit requirements are expected; cost is based on materials and time costs for transmittals and communications to agencies to verify permit status. Base maps to be used are those previously developed by Cinda MacKinnon for the City of Orinda; these will be updated and digitized as part of Task 2 below.
  - Debris removal varies by stream; large organic debris (LOD) will be placed on-site to form wildlife cover. Large falling pine at Miramonte will be taken down and the LOD used for wildlife cover. Large eucalypti at Miramonte are not proposed for removal at this time. Ficus at Del Rey will be removed and chipped.
  - Debris removal and mowing, and broad-leaf spray should all occur in June - August; school is out and work will allow definition of planting areas. Noxious exotics, *e.g.* ivy will not be chipped but will be composted and/or removed.
  - Plugs include creeping wild rye, Baltic rush, Santa Barbara sedge, field sedge and similar. RP (Rosepots) include California rose, coffeeberry, toyon, elderberry, thimbleberry, and similar shrubs. Cuttings are willows. Tree-bands are alders and cottonwoods (Fremont and black). Planting will occur after first rains, from about November through January; plants need to be ordered ASAP.
  - The schools have water lines with gate valves adjacent to each site. Contractor will install drip system to be connected by volunteers to water as needed.
  - Signage will be silk-screened to metal (such as aluminum or other durable metal, approximately 24” x 18” and mounted on two, 4”x4” posts, and read “Habitat restoration area. Please help us protect the plants and animals”. Logos for the UCC, FOC, City of Orinda, Trust, RWQCB and Wilder will be included.
- b. **Creek base map digitizing and trash identification for Moraga Creek.** FOC has stream data on a variety of elements, including trash hot spots, developed by Cinda MacKinnon for the City of Orinda. This data is now on hard paper but will be transferred to a GIS-based system compatible with the County’s data base by UCC. Trash hot spots for as much of Moraga Creek as practicable will be re-verified in the

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field. This will also provide the base maps for the future monitoring and mapping work (see Task 3 below) in conjunction with FOC GPS efforts. Cost: \$11,000

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
GIS base sheets	T&M	\$4,500	UCC	
Re-verify trash spots	T&M	\$3,700	UCC	
Prepare analysis	T&M	\$1,800	UCC	
Design/Mgm't/Admin	10%	\$1,000	UCC	
<b>Total</b>		<b>\$11,000</b>		

- c. **Monitoring and mapping of stream health and restoration results.** The FOC has installed a temperature recorder and has conducted Benthic Macroinvertebrate (BMI) sampling in Moraga Creek. Moraga Creek has a viable population of rainbow trout and the FOC has been working to define differences and similarities between Moraga and San Pablo (SP) Creeks. This work will establish a baseline for the Creek, allow us to compare it with SP Creek, track the progress of the restoration sites and provide verifiable results on elements such as trash build-up, bank stability, plant cover, and wildlife use. Cost: \$4,180

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Water quality monitor	Lump sum	\$1,600	FOC	
GPS Equipment	Lump sum	\$2,200	FOC	
Installation	Volunteer	N/C	FOC	
Monitoring	Volunteer	N/C	FOC	
Design/Mgm't/Admin	10%	\$380	Trust	
<b>Total</b>		<b>\$4,180</b>		

Notes:

- Water Quality equipment consists of a YSI Model 556 Multi-Parameter Probe with case, 4m cable with Temp/Cond and DO sensors, pH/ORP sensor, calibration solution, and case. Cost shown above represents 50% of the cost (remainder is shown in San Pablo Creek Tasks).
- GPS equipment consists of Trimble GeoXM GPS with software. Cost shown above represents 50% of the cost (remainder is shown in San Pablo Creek tasks).
- Upon receipt of funding, FOC will immediately acquire the equipment and begin monitoring water quality parameters at a number of fixed sampling stations in Moraga Creek on a regular sampling schedule basis, at least quarterly. The GPS equipment will be used in connection with each of the water quality sampling events, as well as in connection with each mapping of stream and riparian habitat

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- parameters (e.g., barriers, debris, potential pollution input sources, streambank slope, streambank stability, vegetation, biological resources, etc.; see Task 2 above).
- FOC's monitoring and mapping program, using the digitized base maps (Task 3) and the new equipment, will collect and store environmental data from numerous sites throughout Moraga Creek. FOC intends to train student and adult volunteers in the use of the monitoring and GPS equipment for the field data collection. Upon analysis of the stored data from the field monitoring program plus relevant data acquired from other sources, FOC, and the community as a whole, will be better educated and informed of the status of our creek environments and be in a position to prioritize problem areas for resource management actions towards the goal of preserving and restoring healthy creek environments and their associated fish and wildlife resources.

- d. **Community Education for Moraga and San Pablo Creeks.** The Trust has already developed a worksheet for creek functions for use with DRES 4<sup>th</sup> graders; this will be modified as a brief curriculum for 2<sup>nd</sup> through 5<sup>th</sup> grades for all elementary schools and Miramonte high school students on creek functions, restoration and the effects and problems of trash in creeks. Curriculum will be tied to State science standards for each grade (see provided example). Also included are costs for FOC/Trust personnel to do two field trips in 2010 and 2011 (fall and spring) for each of the elementary schools. Note: this cost does not include student transportation costs and assumes that the relevant teachers are willing to make these trips. Cost:  
\$21,450

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Curriculum development	T&M	\$9,900	Trust staff;	See examples
Fall field trip	T&M	\$4,800	FOC/Trust, plus intern	Includes planting, assumes 50 minutes per class
Spring field trip	T&M	\$4,800	FOC/Trust, plus intern	Includes weeding, trash removal.
Design/Mgm't/Admin	10%	\$1,950	Trust	
<b>Total</b>		<b>\$21,450</b>		

Notes:

- Curriculum development will focus on elements from the State science standards developed in consultation with Orinda teachers and administrators. These will also be reflective of local creek ecology. For example, 4<sup>th</sup> grade science standards (life science) focus on energy exchange through producers and consumers.

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- Accordingly, a part of the curriculum for this grade will be a food web game using producers and consumers typically found in Orinda Creeks.
- Fall field trip will include: weed removal as applicable; identification of local plants and wildlife, planting plugs of native species, and a game (e.g. food web game for 4<sup>th</sup> graders).
- Spring field trip will include: weed removal, trash identification and categorization, measurements of planted material from fall, and game/discussion, e.g. scouring and deposition for 4<sup>th</sup> graders.
- Cost above assumes 2 classes from each of grades 2 through 5 from 4 elementary schools, *i.e.* 32 classes for each of the spring and fall field trips.

e. **Maintenance and Monitoring.** For the costs noted here, we will complete one year of maintenance and and five years of monitoring at the restoration sites to eliminate or at least severely curtail the resurgence of ivy, Himalayaberry and other invasive exotics.

Cost: \$9,240

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Maintenance review	T&M	\$500	FOC/Trust	Includes report
Weed and exotic removal	Lump sum	\$5,800	Contractor	To be done in summer
Replant	Unit cost	\$2,100	Contractor	Assumes 15% loss
Chip placement	Lump sum	N/C	FOC	
Monitoring	Volunteer	N/C	FOC/Trust	5 years
Design/Mgm't/Admin	10%	\$840	Trust	
<b>Total</b>		<b>\$9,240</b>		

Notes:

- Weed and exotic removal will focus on noxious exotics such as ivy and Himalayaberry. Work will be completed in summer 2011. Note: some weed removal will be done by students as part of the spring 2011 field trip.
- Wood chips, (chipped trees and shrubs) available at no cost from local tree service companies and the City, will be placed around the plant materials and over parts of the restored areas outside the flood zone by volunteers to assist with weed suppression and plant growth. This cost assumes chips are available locally at no cost.





- FOC will continue maintenance on these sites for at least 3 years or until they are relatively self-sufficient. This work will be done through FOC’s continuing creek volunteer and education efforts.
- FOC and the Trust will monitor these sites for 5 years using a combination of permanent photo stations and vegetation sampling; annual reports will be submitted to the RWQCB on about September 1 of each year in accordance with the monitoring program included in the restoration plans. Each report will describe the growth of the planted vegetation and the targeted noxious exotics; any changes to creek geomorphology; trash conditions; and other elements of interest.

## 2. Restoration at San Pablo Creek in Preparation for Re-Establishment of a Resident Trout Population.

- a. **Restore SP Creek near and upstream of the EBMUD treatment plant.** This area has been eroded by past flows and other damage. FOC would use biotechnical erosion control to provide slope cover and then plant the creek banks with species native to the area that also provide good bank stabilization (e.g., willows and Santa Barbara sedge). The restoration is intended to allow introduction of a resident strain of rainbow trout to SP Creek above the barrier weir in the future. Cost: \$36,960

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Plan development	T&M	\$3,000	UCC/Trust	
Permitting	T&M	\$500	Trust	Permits may not be required
Debris removal	Lump sum	\$1,100	Contractor	Includes dump fees
Mow and hand removal of exotics	Lump sum	\$4,600	Contractor	Includes chipping and/or removal
2 <sup>nd</sup> round of weed and exotic removal	Lump sum	\$3,200	Contractor	Includes chipping and/or removal
Erosion control	Lump sum	\$6,300	Contractor	Includes materials
Planting	12,000 plugs	\$6,000	Contractor	Includes plants
	2,600 RP	\$5,850	Contractor	Includes plants
	150 cuttings	\$1,600	Contractor	Includes plants
	100 1-gal	\$900	Contractor	Includes plants
Signage	Lump sum	\$550	Contractor	1 sign, includes materials
Design/Mgm’t/Admin	10%	\$3,160	UCC/Trust	
<b>Total</b>		<b>\$36,960</b>		



Notes:

- Site includes approximately 500 ft of creek, approximately 0.25 acres. Plan will avoid bridge construction area (to be defined by City). Generally, native canopy is in reasonable shape but understory and lower riparian trees are either missing or non-native. Exotics to be eliminated include ivy, Himalayaberry and broom.
- Erosion control will consist of installation of coir netting, coir logs, and stakes.
- This site has a relatively higher number of plants (relative to Moraga Creek) due to the erosion control requirements.
- No student plantings are contemplated for this area as of yet; this will await EBMUD approval.
- Signage will be silk-screened to metal (such as aluminum or other durable metal, approximately 24” x 18” and mounted on two, 4”x4” posts, and read “Habitat restoration area. Please help us protect the plants and animals”. Logos for the FOC, City of Orinda, Trust, RWQCB and Wilder will be included.
- See Moraga Creek notes for more detail and timing.

- b. **Creek and Trash Mapping.** This will duplicate the creek GIS and trash hot spot mapping described for Moraga Creek. Note that the education function assigned here previously is now located within the Moraga Creek tasks. As noted above, this will also provide the base maps for the future monitoring and mapping work (see Task 4 below) and chart the progress of restoration in conjunction with the community education efforts. Cost: \$7,700

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
GIS base sheets	T&M	\$4,500	UCC	
Re-verify trash spots	T&M	\$3,700	UCC	
Prepare analysis	T&M	\$1,800	UCC	
Design/Mgm't/Admin	10%	\$1,000	UCC	
<b>Total</b>		<b>\$11,000</b>		

- c. **Monitoring and Mapping of Stream Health and Restoration Results.** The FOC has installed temperature recorders and has conducted BMI sampling along SP Creek and requires funding for GPS and water quality equipment to establish baseline conditions in important creek reaches and to track important habitat parameters in a GIS mapping system that would be compatible and could be integrated with the current Contra Costa County system as noted for the Moraga Creek portion of our proposal. This work is critical to defining the condition of SP Creek concurrent with the trout establishment and would allow us to verify the success of the work noted

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here by measurements of channel stability, vegetation cover and water quality parameters. Cost: \$4,180

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Water quality monitor	Lump sum	\$1,600	FOC	
GPS Equipment	Lump sum	\$2,200	FOC	
Installation	Volunteer	N/C	FOC	
Monitoring	Volunteer	N/C	FOC	
Design/Mgm't/Admin	10%	\$380	Trust	
<b>Total</b>		<b>\$4,180</b>		

Notes:

- Creek and upper terrace overstory (live oak-buckeye association) in relatively good shape; lower riparian (willows, cottonwoods, alders) almost completely missing; understory completely dominated by invasive exotics (ivy) damaging natives.
- “UCC” refers to the Urban Creeks Council, “FOC” refers to the Friends of Orinda Creeks. “Trust” refers to The Restoration Trust, a non-profit land trust working with FOC on its restoration projects. “Contractor” refers to Los Robles Native Plants, the landscape contractor that has worked with FOC and the Trust on past Orinda restoration projects.
- Plan development will include contact with agency staff. At this time minimal permit requirements are expected; cost is based on materials and time costs for transmittals and communications to agencies to verify permit status. Base maps to be used are those previously developed by Cinda MacKinnon for the City of Orinda; these will be updated and digitized as part of Task 2 below.
- Debris removal varies by stream; large organic debris (LOD) will be placed on-site to form wildlife cover.
- Debris removal and mowing, and broad-leaf spray should all occur in June - August; school is out and work will allow definition of planting areas. Noxious exotics, *e.g.* ivy will not be chipped but will be composted and/or removed.
- Plugs include creeping wild rye, Baltic rush, Santa Barbara sedge, field sedge and similar. RP (Rosepots) include California rose, coffeeberry, toyon, elderberry, thimbleberry, and similar shrubs. Cuttings are willows. Tree-bands are alders and cottonwoods (Fremont and black). Planting will occur after first rains, from about November through January; plants need to be ordered ASAP.
- Signage will be silk-screened to metal (such as aluminum or other durable metal, approximately 24” x 18” and mounted on two, 4”x4” posts, and read “Habitat

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restoration area. Please help us protect the plants and animals”. Logos for the UCC, FOC, City of Orinda, Trust, RWQCB and Wilder will be included.

- d. **Maintenance and Monitoring.** For the costs noted here, FOC will complete one year of maintenance and five years of monitoring at the restoration site to eliminate or at least severely curtail the resurgence of Himalayaberry and other invasive exotics.  
Cost: \$7,992

<i>Task</i>	<i>Item</i>	<i>Cost</i>	<i>Responsible</i>	<i>Notes</i>
Maintenance review	T&M	\$500	FOC/Trust	Includes report
Replant	Unit cost	\$2,000	Contractor	Assumes 20% loss
Erosion repair	Unit cost	\$865	Contractor	Assumes 20% repair
Weed removal	Unit cost	\$3,900	Contractor	Pulling ivy and Himalyaberry
Chip placement	Lump sum	N/C	Volunteers	
Design/Mgm't/Admin	10%	\$727	Trust	
<b>Total</b>		<b>\$7,992</b>		

Notes:

- Weed and exotic removal will focus on noxious exotics such as ivy and Himalayaberry. Work will be completed in summer 2011. Note: some weed removal will be done by students as part of the spring 2011 field trip.
- Wood chips, (chipped trees and shrubs) available at no cost from local tree service companies and the City, will be placed around the plant materials and over parts of the restored areas outside the flood zone by volunteers to assist with weed suppression and plant growth. This cost assumes chips are available locally at no cost.
- FOC will continue maintenance on these sites for at least 3 years or until they are relatively self-sufficient. This work will be done through FOC’s continuing creek volunteer and education efforts.
- FOC and the Trust will monitor these sites for 5 years using a combination of permanent photo stations and vegetation sampling; annual reports will be submitted to the RWQCB on about September 1 of each year in accordance with the monitoring program included in the restoration plans. Each report will describe the growth of the planted vegetation and the targeted noxious exotics; any changes to creek geomorphology; trash conditions; and other elements of interest.

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**Subtotal :     \$166,920.00**

**Contingency (20%):         \$33,384**

**Note: we assume contingency costs would primarily be applied to maintenance, e.g. to counter deer grazing and generally to ensure that the project is meeting its goals.**

**Total Costs:                 \$200,304**



## ATTACHMENT B

### **Buehler Streamside Restoration Project: Year One Report**

The Restoration Trust  
November 2007

The first steps in the restoration of San Pablo Creek in downtown Orinda have begun as the Friends of Orinda Creeks completed the first phase of the Buehler streamside restoration project. The ultimate destination is a completely restored Creek, meandering through what are now parking lots and concrete embankments, vegetated with white alders, valley oaks and the other native plants once found along Orinda's creeks. For now, though, the Friends have focused on restoring the almost 4,500 sq ft of creekbanks at the southern end of the Creek in downtown with the generous assistance of the Bodfish Preserve Fund, part of the Muir Heritage Land Trust, the Buehler Estate, donations from Board members, the Restoration Trust, Los Robles Native Plants, and numerous Orinda volunteers.

Almost 5 years ago, the Friends started removing invasive weeds and planting native trees and shrubs in occasional openings in the dense vegetation along the banks. The Friends were also responsible for securing funding for a comprehensive San Pablo Creek restoration plan, which envisions restoring the Creek to a more natural condition. However, implementation of that plan is some way into the future and, in the meantime, the Friends have concentrated on restoring sections of the Creek banks to demonstrate the values and attractions of native riparian plantings.

Those efforts bore fruit this past year with a \$1,000 grant from the Bodfish Preserve Fund through the Muir Heritage Land Trust to clear dead pine trees and the dense mostly non-native understory of Himalayablackberries, poison oak and German ivy from a larger section of creek banks. Friends Board members had already earmarked the creek banks behind the Buehler building at 23 Orinda Way for this first phase due to the past cooperation of the Buehlers and were not disappointed when access and work permissions were rapidly granted by the Buehlers' estate manager.

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Los Robles Native Plants contributed labor and equipment to help clear the site of dead trees and noxious vines and the City Public Works staff generously hauled or composted the remnant debris piles. On Earth Day, April 22, volunteers from throughout Orinda gathered to weed the slope, newly christened the Buehler Streamside Restoration Site, plant 44 native trees and shrubs and learn about creeks and native plants. Valley and coast live oaks, wild rose, golden currants, big-leaf maples, coffeeberries, willows, cottonwoods, and dogwoods were all planted, watered and mulched in one day even though these were distributed broadly over the site. Restoration Trust volunteers helped demonstrate planting and poison oak avoidance techniques and installed almost 300 ft of drip irrigation to water the plants through the first few summers.

Over the spring and summer, the plants grew significantly, aided by the relatively mild weather and a weeding and mulching day on September 30 sponsored by the Friends and the Trust; again, well-attended by Orinda volunteers. Only one of the plants, a dogwood, perished; apparently as a result of planting shock. Three coffeeberries, left off the irrigation system as an experiment, survived, although their growth was much less than coffeeberries watered through the summer.

Future phases include planting native understory species such as Santa Barbara sedge (also known as white root and an important Native American basketry species) and creeping wild rye (one of the former dominants of Orinda creeklands) in December of this year. If funding is secured and permission granted, the Friends and the Trust will also seek to remove non-natives and restore the next section of creek bank to the north of the Buehler site.