

Contra Costa Volunteer Monitoring Advisory Committee (VMAC)
GPS Protocol Revision Meeting Summary
July 5, 2006

Aspen Madrone, Volunteer Watershed Monitoring Coordinator, began the meeting with introductions Attendance (see list below)

Biological Monitoring Update

The Volunteer Watershed Monitoring Program completed all duties necessary to collect data from the 42 bioassessment sites. We assisted each volunteer bioassessment survey by providing directions to sites, technical assistance in the form of supervision, guidance and equipment. The logistical coordination of equipment and scheduling was challenging in small sampling period, but we did it! The 2006 bioassessment sampling was successful in expanding from 38 sites in 2005 to 42 sites. The samples have been transferred to the lab to be identified and will be ready for analysis in September 2006.

Volunteer Monitoring Update

Abby Fateman updated the group about the funds secured to ensure that Volunteer Monitoring Program will be funded through the 2007 bioassessment season. The Fish and Wildlife committee graciously rewarded the program \$17,625 and the Clean Water Program contributed \$55,000.

Aspen Madrone announced that she will be leaving the program and expressed her gratitude for all the generous help and enthusiasm. She distributed the job announcement for the coordinator position, which closes on July 25, 2006. Many people stated that she will be missed and expressed their appreciation for her service. She agreed not to be a stranger and that she would sincerely miss everyone.

GPS Creek Survey Protocol Recommendations

Aspen Madrone stated that the revisions are needed to evaluate and guide data collection, analysis, and utilization. The features with recommendations to be modified are listed below by team.

50 ft Interval Team (Pink)

This section is very important to document the creek location and type of creek system. Substrate and Canopy Cover are the most useful categories for queries and graphic displays. The addition of photo documentation is recommended for this team, since it is a good visual tool to assess habitat conditions and to document annual variations. At each 50 ft interval an upstream and downstream photo should be taken from the thalweg with the angle in degrees stated for each photo.

Substrate: add a % vs. just the dominate type for more accurate description.
Evaluate the percentage and type of particles in the creek bottom for the 5 foot wide transect at the 50 ft interval.

The drop down menu on the data logger will have ranges of percent cover for the categories of substrate and the total must add up to 100 percent.

- 1-25 %
- 26-50 %
- 51-75 %
- 76-100 %
- 100 %

**Substrate
Composition:**

% Fines (<2mm)	25
% Gravel (2-50mm)	50
% Cobble (50-256mm)	25
% Boulder (>256mm)	0
% Bedrock (solid)	0

Human Disturbance Team (Yellow)

This section of the survey is extremely valuable to document what kinds of impacts are present. The most important aspect is the bank composition, outfalls, debris jams, dams, drop structures, severe erosion and dumping areas.

Add photos for Dams, Drop Structures, Debris Jams, and Special Areas. If photos are added they must have the bearing direction attached and the GPS time attached.

Bank Composition: need to find an easier way to convert points to lines, but no new ideas. We do have an arduous system that is documented and does work.

Outfalls: take GPS point at the base of the outfall rather than thalweg for more accurate locations. Do not collect drainage pipes smaller than 3 inches.

Drop Structures: this feature is confusing for volunteers due to the US and DS categories. Also it's hard for data management to have 3 points and the categories often aren't to be trusted. Also the 3 points can overlap since the accuracy of the GPS unit has limitations in the creek channel. Delete US and DS categories and use pictures to clarify.

Vegetation Team (Green)

Vegetation: The most useable portion of this data was the amount of bare soil and the emergent vegetation information. Vegetation is such a hard category to collect that we need more input from the "Friends of Creek" groups on how they would like to use this

data. Another idea is to document the percentage of native vs. non-native, but not all groups have the expertise to do this level of documentation. If no use is found, we suggest that only the Bare % and the # of trees be collected. # of Trees: No good display method found. If we counted the trees at regular intervals (50ft) we could attach those points to the creek line and use the graduated color symbology to graphically display the amount of trees on each bank. Canopy cover is a better descriptor for shade, so perhaps we want this category to help describe the bank stability. Attaching tree info with slope and % non-vegetation area should be a better indicator of bank stability. The combined descriptors can lead to assessing how much the vegetation stabilizing the bank.

Invasives: Our desire to know the invasive plant type and amount tracks the intensity and range of the problem. Prioritizing invasive removal projects is a lofty goal, since most invasive – native projects are desired around libraries and other already determined public locals. Not enough volunteer labor at present to spark multiple removal projects. If the main goal is baseline information, then we should try and document the invasives a bit more accurately and add a percentage category. We decided to leave the invasive section the same.

Lisa Anich and Elizabeth O’Shea advocated that keep the vegetation section the same for the sake of consistency. At this point we aren’t sure how to use the vegetation data besides the bare section, but after Aspen spoke with Phil Kaufmann at the EPA, she wants to keep the vegetation section of the protocol the same.

The main recommendations to change the protocol are adding photo documentation and a percentage category for substrate to the 50 ft interval team. We will take the GPS point at the outfall rather than in the thalweg. Add photos for Dams, Drop Structures, Debris Jams, and Special Areas. All the suggestions and keen interest was greatly appreciated.

The meeting wrapped up by scheduling GPS Creek Survey events.

Pinole Creek: August 19

San Pablo Creek: August 26

Mt. Diablo Creek: September 16

Thanks for all your great ideas and for attending!

Name	Affiliation
Reg Barrett	Friends of Orinda Creeks
Jim Luini	Friends of Orinda Creeks
Mitch Schweickert	Friends of Kirker Creek
Igor Skaredoff	Friends of Alhambra Creek
Shirley Skaredoff	Friends of Alhambra Creek
Lawrie McDonnell	SPAWNERS
Elizabeth O'Shea	The Watershed Project / SPAWNERS
Anne Littlejohn	Friends of Marsh Creek
Abby Fateman	CCC Community Development
John Kopchik	CCC Community Development
Brian Curran	Friends of Marsh Creek
Lisa Anich	Friends of Mt. Diablo Creek
Jessica Hamburger	Contra Costa Resource Conservation District