DRAFT

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SUBJECT: Draft Report on 2010 Projects entered into the California Wetlands Portal (CWP) previously referred to as the Wetland Tracker (Fourth Annual Report)

Introduction

Since August 2006, the San Francisco Bay Water Board (Water Board) has required submittal of the Wetland Tracker[1] form, now called the "California Wetlands Portal" (CWP) as a condition in many water quality certifications to track losses and gains of wetlands and streams[2]. This fourth annual report summarizes impacts to wetlands and streams for projects certified in 2010 from three types of projects: compensatory mitigation, restoration, and stream maintenance/repair. One large restoration project certified in 2010 will be discussed in more detail in this report. The primary purpose for tracking projects certified under the 401 program is to ensure that projects impacting wetlands and streams comply with the federal and State No Net Loss Policies and other federal and State water quality regulations. Gains are defined as wetland or stream habitat either created where none existed previously or restored where lost functions are returned to the original site. Improvements are defined as wetland or stream habitat either

[1] In February 2010 the online Wetland Tracker database was renamed "California Wetlands Portal". This name change was incorporated into all 401 certifications requiring the California Wetlands condition in June 2010.

[2] Streams include permanent, intermittent, or ephemeral fresh water flow through stream channels. Streams may flow through natural, restored, or man-made channels such as culverts or concrete trapezoidal channels. The term "stream" also includes riparian areas in and around stream channels. In this report, the terms "stream" and "riparian habitat" are used synonymously.

enhanced where functions are made better or preserved where sites are dedicated in perpetuity. In this report, gains equal restoration plus creation and improvements equal enhancement plus preservation. Final annual reports for 2008 and the pilot year (2006-2007) were presented to the Board in previous years[3] and are also posted on the Water Board's website under *Permits We Issue* at http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml. The 2009 draft report along with this draft 2010 report are also posted at the same website and are subject to changes after management review. Water Board staff has worked closely with the San Francisco Estuary Institute (SFEI) which manages the CWP to improve the wetland and riparian project tracking system over the past four years. For projects entered into the CWP see www.californiawetlands.net.

CWP Project Status and Types

In 2010, 60 projects were certified that required submittal of the CWP form. Seven more projects from 2009 were included and ten of the 2010 projects were delayed and will be analyzed with the 2011 projects. This report discusses the 57 projects that complied with the CWP form submittal condition by the end of 2010. Table 1 lists the numbers of 2010 compensatory mitigation (28), restoration (7), and stream repair/maintenance (22) projects required to submit the CWP form, with the total number of habitats they impacted.

I. Compensatory Mitigation Projects

Water Board policy is to avoid, minimize, and, as a last resort, mitigate for adverse impacts to wetlands and streams. The CWP was developed to accurately track losses and gains of wetlands and streams from certified projects. Twenty-eight compensatory mitigation projects

[3]The 2008 report and appendices are available on the linked web page, page 3, Item 10. http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2010/January/01-13-10_Board_Meeting_Agenda.pdf. The 2006-07 report is available here:http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2008/december/8/Final_Staff_Report.pdf

were entered in the CWP and analyzed for the 2010 report to evaluate compliance, compared to 32 in 2009. Monitoring such projects is usually required for five to ten years to ensure mitigation success.

II. Restoration Projects

Seven restoration projects were certified in 2010, compared to nine in 2009. Restoration projects should return wetland or stream functions where they existed historically. As with compensatory mitigation projects, the CWP facilitates tracking restoration projects to ensure that success criteria are met, since not all restoration projects are successful and some habitat losses occur during construction of the restored habitat. The seven restoration projects include the Cullinan Ranch Restoration Project which was approved by the Board in 2010.

III. Stream repair and maintenance projects

The stream repair and maintenance project category was added in 2008 to cover projects that do not require compensatory mitigation because they do not increase the footprint of the original project. In 2010, 22 of these were certified, compared to 33 in 2009. With both proper project design to improve existing conditions and implementation of best management practices during construction, these projects cause only temporary short-term impacts but achieve long-term benefits overall (e.g., reduced bed and bank erosion and subsequent sedimentation, improved riparian vegetation). As such, additional compensatory mitigation is typically not required, if projects are constructed as approved. Although there is no change of use or footprint associated with these projects, and consequently no long-term habitat gain or loss, monitoring is still required to ensure that the project improves existing conditions and does not cause unintended consequences upstream or downstream of the project. Tracking and mapping stream repairs and routine maintenance activities on the CWP can inform future needs on reach- or

watershed-scale improvements or restoration that might be more cost-effective than on a project by project basis.

Results

I. Compensatory Mitigation Projects

Figure 1 shows compensatory mitigation projects by the type of activity that altered the wetlands or streams. The total number of projects for each impact type is shown in parentheses. Twenty-eight compensatory mitigation projects were analyzed in 2010 compared to 32 in 2009, with the highest number (8) in the transportation category which was less than 2009 (12). There were fewer new construction projects in 2010 (six including four new commercial construction and two new residential construction) than in 2009 (9). A new category for reserves or mitigation banks was added in the 2010 report called "Habitat Reserve Projects". Project information for compensatory mitigation projects can be found in Appendix 1. Figure 2 shows habitat gains and losses by project activity type for compensatory mitigation projects. The gains include created and restored acres or linear feet, and the improvements include enhanced and preserved acres or linear feet.

In 2010 Region 2 complied overall with the No Net Loss Policy for compensatory mitigation projects as shown in Table 2 and Figure 2. The approximately 7.3 acres of lost or impacted wetland or riparian habitats was offset by about 20.1 acres gained (15.3 acres created and 4.79 acres restored) with an additional 13.6 acres of improvements (10.96 acres enhanced and 2.65 acres preserved). Counting only the true gains and losses -- improvements are considered valuable, but do not completely replace lost wetland or riparian habitats -- the overall mitigation ratio for 2010 compensatory mitigation projects was more than 2.75 acres of wetlands gained for each acre lost which should (but will not necessarily) ensure that lost wetland and

riparian functions are replaced. The 13.6 acres of improved acreage should also offset the wetland and riparian losses resulting from the compensatory mitigation project losses. The overall mitigation gain to loss ratios for each category shown in Figure 2 are as follows: 8 transportation projects at 1.4:1, with over 5 acres improved; four new commercial construction projects at 1.2:1 with less than one acre improved; 2 new residential construction projects at 2.3:1; five maintenance projects at 2.2:1 with less than one acre improved; 3 expansion of existing facilities at 2.7:1 with less than one acre improved; the single sediment project had a high ratio of 14:1 with 4.2 acres improved; and three projects placed in the new category "Habitat Reserve Projects" (HRP) had a ratio of 7.5:1 with almost two acres improved. In future the HRP category may have more losses with no further gains, since mitigation has already been provided. The data do not show the potential lost acreage avoided following project modifications recommended by 401 staff. Data on avoided losses will be tracked using the online 401 application system currently being developed by SFEI.

Table 2 shows net gains in acres and linear feet for the 28 compensatory mitigation projects that impacted 57 separate wetland and riparian habitats referred to in Table 1. The total net gain was 12.78 acres (6.0 acres for wetlands and 6.78 acres for riparian projects) and 3,592 linear feet (for riparian projects only).

II. Restoration Projects

The 2009 and 2010 reports describe restoration projects separately. Previously, they were grouped with compensatory mitigation projects (2008) or with repair and maintenance projects (2006-07). Seven restoration projects were certified in 2010, compared to 9 in 2009, 6 in 2008 (including Bair Island and South Bay Salt ponds), and 3 in 2006-07. The 2010 restoration projects are listed in Appendix 2 and the net gain in acres and linear feet by habitat type are shown in Table 3 (a), Figures 3 (a and b), and Figure 4. Table 3 (b) shows the primary habitats

restored by restoration projects in 2010. The Cullinan Ranch Restoration Project, which was approved by the Board in 2010, is included in these tables and figures but, because of its large size, is also described separately and more completely in Table 4. The habitat change at Cullinan Ranch from low quality depressional wetlands and unvegetated drainage ditches to the rarer and more ecologically valuable estuarine tidal marsh accounts for the unusually high wetland and channel losses and gains in 2010. The temporary but high loss of poor quality habitats was approved based on the overall expectation of better wetlands and tidal sloughs.

Net gains for the 7 restoration projects in 2010 totaled over 222 acres (Table 3a). The restoration of about 49,290 linear feet of high quality creeks and sloughs, 46,500 linear feet (approximately 44.5 acres) of which will be restored high quality tidal sloughs at Cullinan Ranch (Table 4), should compensate for the net loss of 28,340 linear feet. Table 3(b) shows that the primary habitat type restored or enhanced by the 7 restoration projects approved in 2010 were estuarine (3) and stream/riverine habitats, which include tidal sloughs (4). Figures 3(a) shows the habitat gain from 2010 restoration projects in acres and 3(b) in linear feet. The results show that restoration projects traded habitats of lesser value (unvegetated drainage ditches and depressional wetlands) for better ones (estuarine habitat with tidal sloughs). Figure 3(a) shows a small temporary loss of important vernal pool habitat from a restoration project that will replace it with seasonal pond and stream habitat for the endangered California red-legged frog.

Figure 4 shows the total of 7 restoration projects with total acres lost, restored, created, enhanced, and preserved by habitat type in 2010. As stated above, the unusually high loss of 1,264 acres of depressional wetlands and 72.7 acres of unvegetated drainage ditches will be replaced by the relatively scarce estuarine marsh and tidal sloughs which is important habitat for native species including endangered species, such as the salt marsh harvest mouse and California

clapper rail. Successful restoration at the site should balance out the high loss of depressional wetlands and degraded agricultural ditches and remnant sloughs.

Restoration projects should result in a higher wetland and riparian habitat gain proportional to their impacts since that is their purpose. The gains reported here are only projected and require long-term monitoring to ensure that planned gains are actually achieved by the project. The CWP can store annual monitoring reports which can be reviewed by agency staff and the public.

III. Riparian repair and maintenance projects

The 22 projects in this category all have only temporary impacts to streams, or to a lesser extent, wetlands, and do not require compensatory mitigation. The repair and maintenance projects are listed in Appendix 3. Project certifications require that impacts caused by repair and maintenance activities be mitigated on-site by replacing any removed vegetation with native plants. Numbers following impact categories in Figures 5 and 6 denote the number of projects, with Figure 5 showing acres and Figure 6 showing linear feet.

Figure 5 shows that most 2010 projects (16) were for stream bank stabilization which impacted fewer acres than the single vegetation management project. At the same time, Figure 6 shows that for linear feet, the 16 stream bank stabilization projects impacted most of the project lengths (73%).

Single projects often have several maintenance goals. The California wetlands stream repair form allows permittees to check off as many project types as applicable to their project. In preparing the data, a judgment was made as to what the primary purpose of the project was in order to make quantitative reporting possible. For example, a maintenance project might create a

temporary impact to a riparian area; however, in the long run it can benefit the area by making it more geomorphologically stable.

Table 5 shows the county locations for the 22 stream repair and maintenance projects analyzed for the 2010 report. Marin, Alameda, and Contra Costa counties each had 5 repair projects, with fewer from Solano (3), Santa Clara (2), San Mateo (one), and Napa (1) counties. No stream repair projects were recorded for San Francisco or Sonoma Counties. Improvement projects should not have any permanent adverse impacts since only the project footprint is impacted and that is returned to its original state, or better, upon project completion.

IV. Discussion of 2010 CWP Projects and Previous CWP Reports

Figures 7 and 8 compare the number of impacted habitats recorded in the CWP for 2010 with 2009, 2008 and 2006-07 projects. Note that all three project categories (compensatory mitigation, restoration, and repair/maintenance projects) are shown only for 2010, 2009, and 2008; 2006 and 2007 data included compensatory mitigation and restoration projects with no separate category for the repair and maintenance projects.

Figure 7 shows that in 2010 riparian habitats remained the habitat type with the most impacted habitats though there was a decline from 2009. In 2010 the number of impacted habitats increased for estuarine, depressional, seeps and springs and the unknown wetland categories. Vernal pools remained fairly constant for the past three annual reports after decreasing from 2006-07 levels. Buffer areas were added in 2010 and, because of the substantial amount of low quality unvegetated drainage ditches impacted by the Cullinan Ranch Restoration Project, that category was included in the 2010 Report.

As shown in Figure 8, a significant net gain in estuarine habitat occurred in 2010 due to the large Cullinan Ranch restoration project. As stated previously, although there was a net loss of acreage in riparian and depressional habitat in 2010, the Cullinan Ranch Restoration Project will restore estuarine habitat that will benefit native tidal marsh plants and animals.

Table 6 (a and b) shows similar information to Figures 7, 8, and 9 in tabular form and includes mitigation ratios. Net gains are determined by summing acres gained (except for the riparian analysis is in linear feet as shown in Table 6(b) by adding creation (column 4) and restoration (column 5), and subtracting the acres lost (column 3). Column 8 shows net gain in acres and column 9 shows gain in additional improvements by adding enhancement and preservation. Column 10 shows net gain mitigation ratios which take the gains (columns 4 + 5) divided by the loss (column 3). Column 11 shows mitigation ratios for improvements. Mitigation ratios enable more meaningful comparisons across habitats than raw gains in area as the number of projects varies across habitats. While enhancement does not contribute to net gains of wetlands or riparian systems on an acre-per-acre basis, it can improve functions such as pollutant filtration, flood peak attenuation, groundwater recharge, and crucial habitat for special status and for all biological species to feed, rest, breed, and hide from predators. Preservation alone does not compensate for net loss, but can protect and preserve habitats from permanent loss and provide opportunities for future restoration. Restoration and creation are usually required for compensatory mitigation projects, but credit can sometimes be given to enhancement and preservation as part of the overall compensatory mitigation if critical ecological, hydrological, or water quality benefits are expected to result in the watershed.

Table 6a shows an overall net gain of 231.13 acres for all 57 projects analyzed for 2010. Cullinan Ranch Restoration Project was responsible for the extremely high gains for estuarine

wetlands (1,515.6 acres net gain with a mitigation ratio of 482 acres gained for each acre lost) and the correspondingly high losses for depressional wetlands (loss of 1,261 acres and a mitigation ratio of 0.0031 gained for each acre lost). Seeps and springs showed a net gain of 3.31 acres and a high mitigation ratio of 4.7 acres gained for each acre lost with an additional 2.9 acres improved for each acre lost. While the number of vernal pool projects did not increase from 2009, there was an overall net loss of vernal pools of 0.38 acres with additional improvements -- which do not usually offset losses -- amounting to 1.55 acres. Future impacts to vernal pools should be avoided or mitigation ratios set high to avoid further damage to these fragile ecosystems. No lacustrine or playa wetlands projects were analyzed for the 2010 report.

Table 6(a) shows stream channels divided into three categories with the following results in acres for streams and riparian areas: lost 14.31, created 11.96, restored 4.64, enhanced 31.10, resulting in a net gain of about 231 acres and a net gain mitigation ratio of 1.2:1 indicating that 1.2 acres of stream and riparian areas will be restored or created for each acre lost. The high number of acres enhanced (31) should help offset some of the losses. Tidal sloughs show a gain of 44.5 acres of high quality tidal sloughs which will replace the 72.7 acres of low quality unvegetated agricultural drainage ditches. Overall results in acres for the 57 wetland and riparian CWP projects approved in 2010 showed the following approximations: 1,357 lost; 22 created; 1,567 restored; 43 enhanced; and 36 preserved; resulting in a net gain of 231 acres at a mitigation ratio of about 1.2 acres gained for each acre lost.

Table 6(b) shows linear feet required for riparian projects (and occasionally for wetland projects). The linear feet numbers are similar to the results for acres in Table 6(a) reflecting a high loss of 93,710 linear feet which will be offset by the following approximate values in linear feet: 13,108 created, 52,274 restored, 22,478 enhanced, and 680 preserved. While the net gain is

negative (-28,328) and the mitigation ratio low (0.7 acres gained for each acre lost), the restored high quality estuarine sloughs at Cullinan Ranch should be far superior to the existing unvegetated drainage ditches.

Figure 9 shows losses, gains, and improvements in linear feet for riparian projects certified for the 57 compensatory mitigation, restoration, and maintenance projects. In 2010, gains to riparian habitats measured in linear feet had the following mitigation ratios:

- Compensatory mitigation --1.28 gained for each linear foot lost; and 1.27 improved for each linear foot lost
- Restoration -- 0.63 gained for each linear foot lost; and 0.41 improved for each linear foot lost.

The compensatory mitigation ratio gain was higher based on acres (2.7 based on Figure 2) for wetlands and riparian habitats than shown here based only on linear feet (1.28) for riparian habitats only. The relatively low mitigation ratio for restoration reflects the habitat change from depressional and associated drainage ditches to estuarine tidal marsh.

Stream Repair and Maintenance does not show any loss since these projects are only temporary (approximately 4.2 acres and 3,580 linear feet of only temporary losses as shown in Table 7), should result in no loss or gain, and the impacts will be offset by increases in enhancement or other improvement. With proper project design and Best Management Practices (BMPs) during construction, their impacts typically do not require additional compensatory mitigation. Thus, both losses and gains for stream repair and maintenance projects are zero. Improvements from stream repair projects totaled 4,048 linear feet in 2010.

Table 7 shows the total 2010 losses, gains, and improvements for compensatory mitigation, restoration, and stream repair and maintenance projects. Figures 10 and 11 compare overall gains, losses, and improvements for 2010, 2009, 2008 and 2006-07 in acres (Figure 10)

and linear feet (Figure 11). Cullinan Ranch accounts for the high loss in depressional wetland and degraded riparian habitats in favor of producing high quality estuarine habitat which the U.S. Fish and Wildlife Service considers more beneficial for estuarine species.

Discussion and Conclusions for the 2010 CWP Projects

The 57 projects analyzed for the 2010 report replaced wetland and riparian areas -- though not necessarily their functions -- in the following ways:

1. Wetland and riparian habitats net gain in acres as shown in Table 6a and Figures 8 and 10 was about 231 acres, compared to 50 acres in 2009, 18 acres in 2008 (3,053 in 2008 if large restoration projects are included), and 11 acres in 2006-07. The high gains in 2008 included the Bair Island and the South Bay Salt Pond Restoration Projects (see the 2008 and 2009 wetland tracker reports). While 2010 also had a major restoration project -- the Cullinan Ranch Restoration Project – which contributed to high gains, the switch there from depressional wetlands with low quality drainage ditches to the rarer tidal estuarine habitat important for endangered species, resulted in a lower net gain than if that project had been restored from uplands to wetlands.
2. Estuarine wetlands gained the most acreage – 1,516 acres – following a similar high net gain in 2009 for the same habitat type.
3. Riparian net gains were the highest in acres for 2009 but much lower in 2010 primarily because of the tradeoff for low quality agricultural drainage ditches at Cullinan Ranch for high quality tidal sloughs that will evolve over the coming decades. Depressional wetlands also experienced a net loss in 2010, in favor of the scarcer estuarine habitat with naturally evolving tidal channels.
4. The number of impacted riparian habitats remained the highest of all habitat types, though the number decreased from 58 in 2009 to 52 in 2010. The number of impacted habitats increased in 2010 for estuarine, depressional, seeps and springs, and unknown wetland types (Figure 7). The number of impacted vernal pools remained approximately the same. However, as shown in Figure 7 and Table 6a, vernal pools had lower mitigation ratios than in the previous year, indicating the special attention should be paid to avoiding vernal pools and, if that is not possible, ensuring higher mitigation ratios to protect them from being lost or threatened.
5. Stream repair and maintenance projects decreased from 33 in 2009 to 22 in 2010. These repair and maintenance projects should not result in permanent losses of habitat and do not require compensatory mitigation. Tracking these projects has been streamlined by the availability of the Riparian Repair and Maintenance California Wetlands form (the Short Form).

6. The number of compensatory mitigation projects was lower in 2010 (28), compared to 2009 (32) and 2006-07 (36), but 2008 had even fewer compensatory mitigation projects (25) than 2010. Total net gain from compensatory mitigation projects was 12.8 acres in 2010.

7. The number of projects that used mitigation bank credits to mitigate for impacts increased slightly in 2010. San Francisco Public Utilities Commission created its own banks.

Next Steps

The San Francisco Estuary Institute has developed a prototype of the 401 certification online application tool. Once this tool is available, time spent on recordkeeping by both applicants and Water Board staff could be dramatically reduced, potentially freeing resources to conduct rapid conditional or more intensive functional assessments and other monitoring and enforcement activities.

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2010 California Wetland Portal Report
Tables

Table 1. Overview of 2010 California Wetland Portal Projects (2010)

Certification Requiring Wetland Tracker Form in 2010[1]	60
Number of Projects from 2009 analyzed in the 2010 report[2]	+7
Number of projects moved from 2010 to 2011 report[3]	-10
Number of Projects analyzed in the 2010 report	57 projects

Project Type	Number of Projects	Impacts to Streams[4]	Impacts to Wetlands[5]	Total Impacts to Buffer Areas[6]	Total Impacts to Streams, Wetlands, and Buffer Areas[7]
Compensatory Mitigation[8]	28	**23**	**34**	**1**	**58**
Restoration[9]	7	**7**	**12**	**0**	**19**
Repair and Maintenance	22	**20**	**2**	**0**	**22**
Total[10]	57	**50**	**48**	**1**	**99**

[1] 60 projects required the wetland tracker form in 2010. Analysis of one project (# 194 Chevron Pipe Line) was delayed because it was first included with the 2009 projects and a subsequent amendment (2010) was made to the California Wetland Portal form which needs to be verified.

[2] Of the 57 projects analyzed in 2010, 7 projects from 2009 are analyzed in this California Wetland Portal report and the remaining 50 are from 2010 master excel spreadsheet.

[3] Projects that sent in CW forms before June 1, 2010, were analyzed in the 2010 California Wetland Portal report; forms received after June 1, 2010, will be analyzed in the 2011 California Wetland Portal Report. Ten 2010 projects numbered 195, 205, 212, 216, 292, 294, 296, 302, 314, and 318 will be analyzed in the 2011 report.

[4] Streams include channels and riparian areas

[5] Wetlands include estuarine, vernal pools and swales, depressional wetlands, seeps and springs, playas, lakes, and unknown wetland habitats.

[6] Buffer areas do not fall into the category of streams or wetlands. They are used to protect streams and other wetlands from potential problems or stresses.

[7]The sum of impacts to streams, wetland habitats, and buffer areas. The number of impacts to stream habitats, wetlands habitats, and buffer areas is different from the number of projects.

[8] In 2010, San Francisco Public Utilities Commission and Sonoma Land Trust created the “Habitat Reserve Project” to compensate for losses from their compensatory mitigation projects.

[9]Cullinan Ranch Restoration project is included in the total count of 7 restoration projects, but will be discussed separately due to its large size and its ability to skew the restoration data. Unvegetated drainage ditch has been added to the restoration projects column, totaling 12 impacts in the restoration category.

[10] Impacts to habitats are greater than the number of projects because some projects impacted more than one habitat.

Table 2. Gains and Losses from Wetland and Stream Habitats for 28 Compensatory Mitigation Projects (2010)[1]														
	Losses		Gains				Improvements				Net Gains[2]		Additional Improvements[3]	
			Created		Restored		Enhanced		Preserved					
Habitat Types	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**
Wetlands[4]	3.27	N/A	8.24	N/A	1.03	N/A	4.14	N/A	2.35	N/A	6.00	N/A	6.49	N/A
Streams[5]	4.04	-12,500	7.06	11,108	3.76	4,984	3.42	15,230	0.30	680	6.78	3,592	3.72	15,910
Buffer Areas[6]	0.00	0	0.00	0	0.00	0	3.40	0	0.00	0	0.00	0	3.40	0
Total[7]	7.31	-12,500	15.30	11,108	4.79	4,984	10.96	15,230	2.65	680	12.78	3,592	13.61	15,910

[1] 28 compensatory mitigation projects for 2010 impacted 34 wetlands and 23 streams. Impacts were greater than the number of projects because some projects impacted more than one habitat.

[2] Net gains are calculated by subtracting the loss from gains (created + restored).

[3] Net gain has already accounted for the loss by subtracting it from restored and created—the loss is not subtracted again here.

[4] Wetland habitats include estuarine, vernal pools and swales, depressional wetlands, seeps and springs, playas, lakes (or lacustrine), and a category for unknown wetland habitats. Most wetland habitat are reported only in acres, not in linear feet.

[5] Stream habitats include streams, rivers, and riparian areas. Stream habitats should be reported in linear feet and acres.

[6] Buffer areas do not fall into wetlands or stream habitat types.

[7] Net Gain total is calculated by subtracting the loss from the sum of the total created and total restored. Additional Improvements total is calculated by adding the total enhanced and total preserved.

Table 3a. Restoration Net Gains and Improvements by Habitat Type for 7 Projects (2010)

Habitat Types	Number of Impacted Habitats	Losses		Gains		Improvements		Net Gains/Losses[1]		Additional Improvements[2]	
		Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet
Wetlands											
Estuarine	5	2.50	0	1,517.90	0	37.10	0	1,515.40	N/A	37.10	N/A
Vernal Pools & Swales	1	0.68	0	0.00	0	0.00	0	-0.68	N/A	0.00	N/A
Depressional	3	1,264.00	0	0.40	0	0.00	0	-1,263.60	N/A	0.00	N/A
Seeps and Springs	1	0.00	0	0.00	0	1.00	0	0.00	N/A	1.00	N/A
Playas	0	0.00	0	0.00	0	0.00	0	0.00	N/A	0.00	N/A
Lakes	0	0.00	0	0.00	0	0.00	0	0.00	N/A	0.00	N/A
Unknown	1	0.00	0	0.50	0	0.00	0	0.50	N/A	0.00	N/A
Stream Channels											
Streams and Riparian Areas[3]	7	6.28	1,795	5.78	2,790	21.09	3,200	-0.50	995.00	21.09	3,200
Tidal Slough[4]	0	0.00	0	44.5	46,500	0.00	0	44.5	46,500	0.00	0
Unvegetated Drainage Ditch	1	72.70	75,835	0.00	0	0.00	0	-72.7	75,835	0.00	0
Others											
Buffer Areas	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total											
Subtotal for Wetlands	11	1,267.18	0	1,518.80	0	38.10	0	251.62	0	38.10	0
Subtotal for Streams	8	78.98	77,630	50.28	49,290	21.09	3,200	-28.7	-28,340	21.09	3,200
Total for Restoration Projects	19	1,346.16	77,630	1,569.08	49,290	59.19	3,200	222.92	-28,340	59.19	3,200

[1] Net gain is calculated by subtracting losses from gains. The gains are calculated by adding all acres or linear feet from created or restored habitats.
[2] Additional improvements are calculated by adding all acres or linear feet from enhanced or preserved habitats. Net gain has already accounted for the losses and the losses are not subtracted again here.
[3] Streams and Riparian Areas include channels and riparian areas. The term Streams and Riparian Areas used in this document is interchangeable with the habitat category "Streams and Rivers" on the wetland form.
[4] 44.5 acres was derived for tidal sloughs based on 72.7 acres of unvegetated drainage ditches/75,835 linear feet = 44.5 acres/46,500 linear feet. Because wetland projects do not typically require linear feet measurements, the remaining acres based on linear feet measurements could not be derived.

Table 3b. Primary Habitat Restored or Enhanced for 7 Restoration Projects (2010)

CWP Number[1]	Primary habitat restored or enhanced[2]	Number of Estuarine Habitats Restored or Enhanced	Number of Streams and Rivers Habitats Restored or Enhanced
160	Estuarine	1	
181	Streams and Rivers		1
188	Streams and Rivers		1
192	Streams and Rivers		1
208	Estuarine	1	
221	Streams and Rivers		1
239	Estuarine	1	
Total		**3**	**4**

[1] California Wetland Portal Number

[2] The habitats are categorized by their primary enhancement or restoration to a habitat. Out of 7 restoration projects, the restoration projects were mainly estuarine or streams and river enhancement or restoration. Note: Streams and Rivers include channels and riparian areas.

Table 4. Cullinan Ranch Restoration Project

Habitat Types	Existing Habitat Types		Losses		Gains (Restored)		Improvements (Preserved)		Total (Linear Feet)	Total (Acres)
	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet		
Depressional Wetland or Freshwater Marsh	1,264		-1,264							
Unvegetated Drainage Ditch[1]	73	Agricultural ditches (62,396) + Remmant Sloughs (13,439)-- Total 75,835	-73	Agricultural ditches (62,396) + Remmant Sloughs (13,439)-- Total 75,835						
Tidal Slough					44.52	46,500				
Tidal Estuarine	33				1,472		33			
Upland and Levee	205		-179				26			
Total (Linear Feet)				-75,835		46,500			-29,335	
Subtotal (Acres)	1,575		-1,516		1,516		59			1,575
Total (Acres)					1,516		59			1,575

[1] The loss of unvegetated drainage ditches was allowed because of their lower ecological value compared to the high quality tidal sloughs and esturaine marsh that will replace them.

[2] 44.5 acres was derived for tidal sloughs based on 72.7 acres of unvegetated drainage ditches/75,835 linear feet = 44.acres/46,500 linear feet. Because wetland projets do not typically require linear feet measurements, the remaining acres based on linear feet could not be derived.

Table 5. Impacts (temporary losses) and Improvements to Streams by County for 22 Stream Repair and Maintenance Projects (2010)

Table 5		[1]Impacted area		Total enhancement		[2]Additional enhancement (Total minus impacted area)	
	# of projects (%)	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet
Alameda	5 (15)	0.78	545	2.53	1083	1.744	538
Contra Costa	5(15)	0.11	495	0.11	465	0.00	-30
Marin	5(15)	2.23	878	2.23	838	0	-40
Napa	1 (3)	0.04	45	0.04	45	0	0
San Francisco	0	0	0	0	0	0	0
San Mateo	1 (3)	0.03	0	0.03	0	0	0
Santa Clara	2 (6)	0.43	750	1.34	750	0.91	0
Solano	3 (9)	0.59	867	0.55	867	-0.04	0
Sonoma	0	0	0	0	0	0	0
Totals	**22**	**4.21**	**3,580**	**6.83**	**4,048**	**2.61**	**468**

Table 6a. Gains and Losses in Acres by Habitat Type for 57 Projects (2010)[1]

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11
			Total Gains		Total Improvements		Net Gain/Loss and Improvements		Migation Ratios	
Habitat Type	Number of Impacted Habitats	Lost Total	Created Total	Restored Total	Enhanced Total	Preserved Total	Net Gains (Columns 4+5, minus column 3)[2]	Additional Improvements (Columns 6+7)[3]	Net Gain/Loss Mitigation Ratios (Column 4+5)/(Column 3)[4]	Additional Improvement Mitigation Ratios (Column 6 + 7) / (Column 3)[5]
Wetlands[6]										
Estuarine	16	3.15	0.82	1,517.88	4.90	33.00	1,515.55	37.90	482.12	12.05
Vernal Pools and swales	3	0.78	0.10	0.30	0.00	1.55	-0.38	1.55	0.51	1.99
Depressional[7]	17	1,265.45	3.91	0.05	1.13	0.80	-1,261.44	1.93	0.0031	0.0015
Seeps and Springs	8	0.90	4.21	0.00	2.59	0.00	3.31	2.59	4.70	2.89
Playas	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lakes	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unknown	3	0.40	0.80	0.00	0.85	0.00	0.4	0.85	1.98	2.10
Others										
Buffer Area	1	0.00	0.00	0.00	3.40	0.00	0.00	3.40	0.00	0.00
Stream Channels[7]										
Streams and Riparian Areas	50	14.31	11.96	4.64	31.10	0.30	2.29	31.40	1.16	-2.19
Tidal Slough[8]	0	0.00	0.00	44.5	0.00	0.00	44.5	0.00	0.00	0.00
Unvegetated Drainage Ditch	1	72.70	0.00	0.00	0.00	0.00	-72.70	0.00	0.00	0.00
Total										
Subtotal for Wetlands	47	1,270.68	9.84	1,518.23	9.47	35.35	257.40	44.82	1.20	0.04
Buffer Area	1	0.00	0.00	0.00	3.40	0.00	0.00	3.40	0.00	0.00
Subtotal for Stream Channels	51	87.01	11.96	4.64	31.10	0.30	-25.91	31.40	0.19	0.36
Total[9]	99	1,357.69	21.80	1,567.37	43.97	35.65	231.13	79.62	1.17	0.06

[1] The 57 projects impacted 99 habitats

[2] Net gains are calculated by subtracting the lost total (column 3) from the total gains (column 4+column 5).

[3] Additional improvements is the sum of total improvements (enhanced total [column 6] + preserved total [column 7]).

[4] Net gain mitigation ratios are calculated by dividing the total gains (column 4+5) by the lost total (column 3).

[5] Additional improvement mitigation ratios are calculated by dividing the additional improvements (column 9) by the lossed total (column 3). When net gain has already been accounted for the loss by subtracting it from restoration and creation, the loss is not subtracted here again.

[6] Most wetland habitat impacts are reported in acres.

[7] Channels and riparian projects are normally stated in linear feet and acres.

[8] 44.5 acres was calculated for tidal sloughs in acres at Cullinan Ranch based on the following calculation: 72.7 acres of unvegetated drainage ditches/75,835 linear feet =44.5 acres/46,500 linear feet. Because wetland projects do not typically provide linear feet, the remaining acres derived from linear feet could not be calculated.

[9] The loss is high due to loss in depressional wetlands and unvegetated drainage ditches from Cullinan Ranch Project, which will be replaced by naturally evolving tidal sloughs.

Table 6b. Gains and Losses in Linear Feet by Habitat Type for Channels, Riparian Habitat, and Unvegetated Drainage Ditch Habitat										
Column 1	**Column 2**	**Column 3**	**Column 4**	**Column 5**	**Column 6**	**Column 7**	**Column 8**	**Column 9**	**Column 10**	**Column 11**
			Total Gains		**Total Improvements**		**Net Gain and Improvements**		**Mitigation Ratios**	
Stream Channels Habitat Type	**Number of Impacted Habitats**	**Lost Total**	**Created Total**	**Restored Total**	**Enhanced Total**	**Preserved Total**	**Net Gain (Columns 4+5, minus Column 3)**	**Additional Improvements (Columns 6+7)**	**Net Gain Mitigation Ratio (Column 4+5)/(Column 3)**	**Additional Improvement Mitigation Ratio (Column 6 + 7) / (Column 3)**
Streams and Riparian Areas	50	17,875.00	13,108.00	5,774.00	22,478.00	680.00	1,007.00	23,158.00	1.06	1.30
Unvegetated Drainage Ditch	1	75,835.00	0.00	0.00	0.00	0.00	-75,835.00	0.00	0.00	0.00
Tidal Sloughs	0	0.00	0.00	46,500.00	0.00	0.00	46,500.00	0.00	0.00	0.00
Total	51	93,710.00	13,108.00	52,274.00	22,478.00	680.00	-28,328.00	23,158.00	0.70	0.25

[2] Net gains are calculated by subtracting the lost total (column 3) from the total gains (column 4+column 5).
[3] Additional improvements is the sum of total improvements (enhanced total [column 6]+ preserved total [column 7]).
[4] Net gain mitigation ratios are caclulated by dividing the total gains (column 4+5) by the lossed total (column 3).
[5] Additional improvement mitigation ratios are calculated by dividing the additional improvements (column 9) by the lossed total (column 3). When net gain has already accounted for the loss by subtracting it from restoration and creation, the loss is not subtracted here again.
[6] Most wetland habitat impacts are reported in acres.
[7] Channels and riparian projects are normally stated in linear feet and acres.
[8] The loss is high due to loss in depressional wetlands and unvegetated drainage ditches from Cullinan Ranch Project, which will be replaced by naturally evolving tidal sloughs.

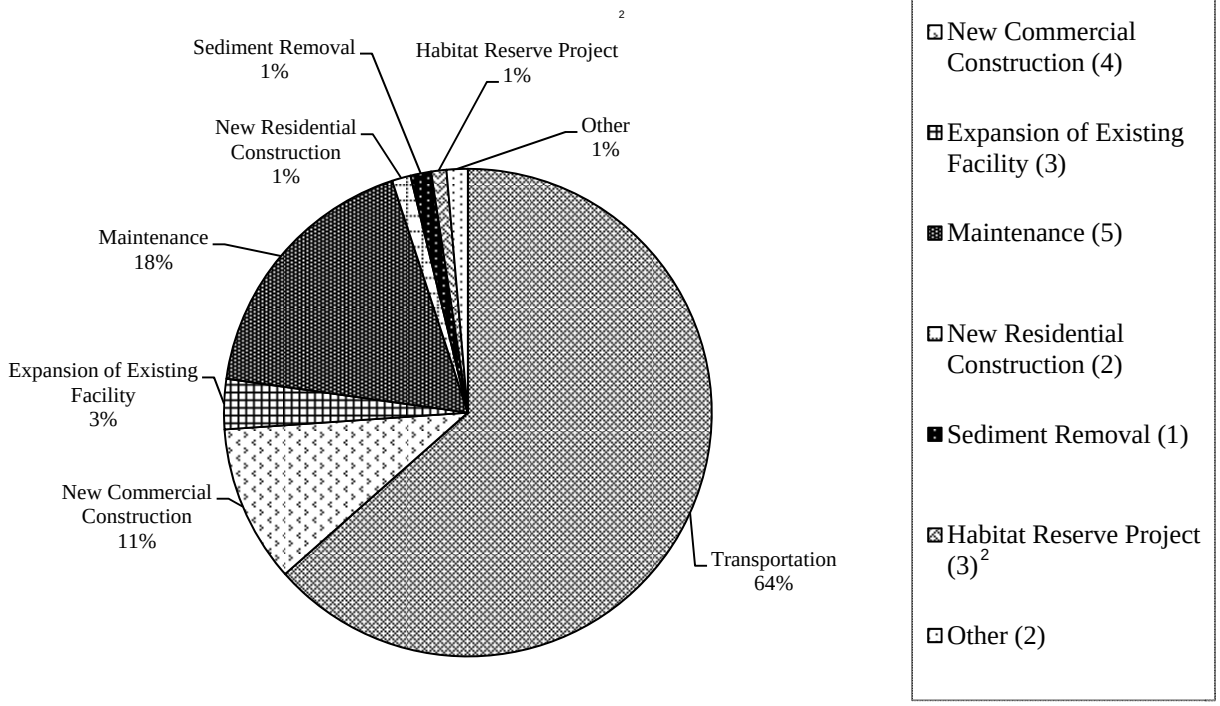
Table 7. Totals for Compensatory Mitigation, Repair and Maintenance, and Restoration for 2010 California Wetland Portal Projects

	Losses		Gains				Improvements				Buffer Area	
			Created		Restored		Enhanced		Preserved			
Project Types	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**
Compensatory Mitigation	7.31	12,500	15.30	11,108	4.79	4,984	10.96	15,230	2.65	680	3.40	0
Repair and Maintenance	4.22 (temporary)	3,580 (temporary)	0.00	0	0.00	0	6.82	4,048	0.00	0	0.00	0
Restoration	1,346.16	77,630	6.50	2,000	1,562.58	47,290	26.19	3,200	33.00	0	0.00	0
Totals	1,357.69	93,710	21.80	13,108	1,567.37	52,274	43.97	22,478	35.65	680	3.40	0

	Losses		Gains		Improvements	
Project Types	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**	**Acres**	**Linear Feet**
Compensatory Mitigation	7.31	12,500	20.09	16,092	13.61	15,910
Repair and Maintenance	4.22 (temporary)	3,580 (emporary)	0.00	0	6.82	4,048
Restoration	1,346.16	77,630	1,567.37	49,290	59.19	3,200
Totals	1,357.69	93,710	1,589.17	65,382	79.62	23,158

2010 California Wetland Portal Report Figures

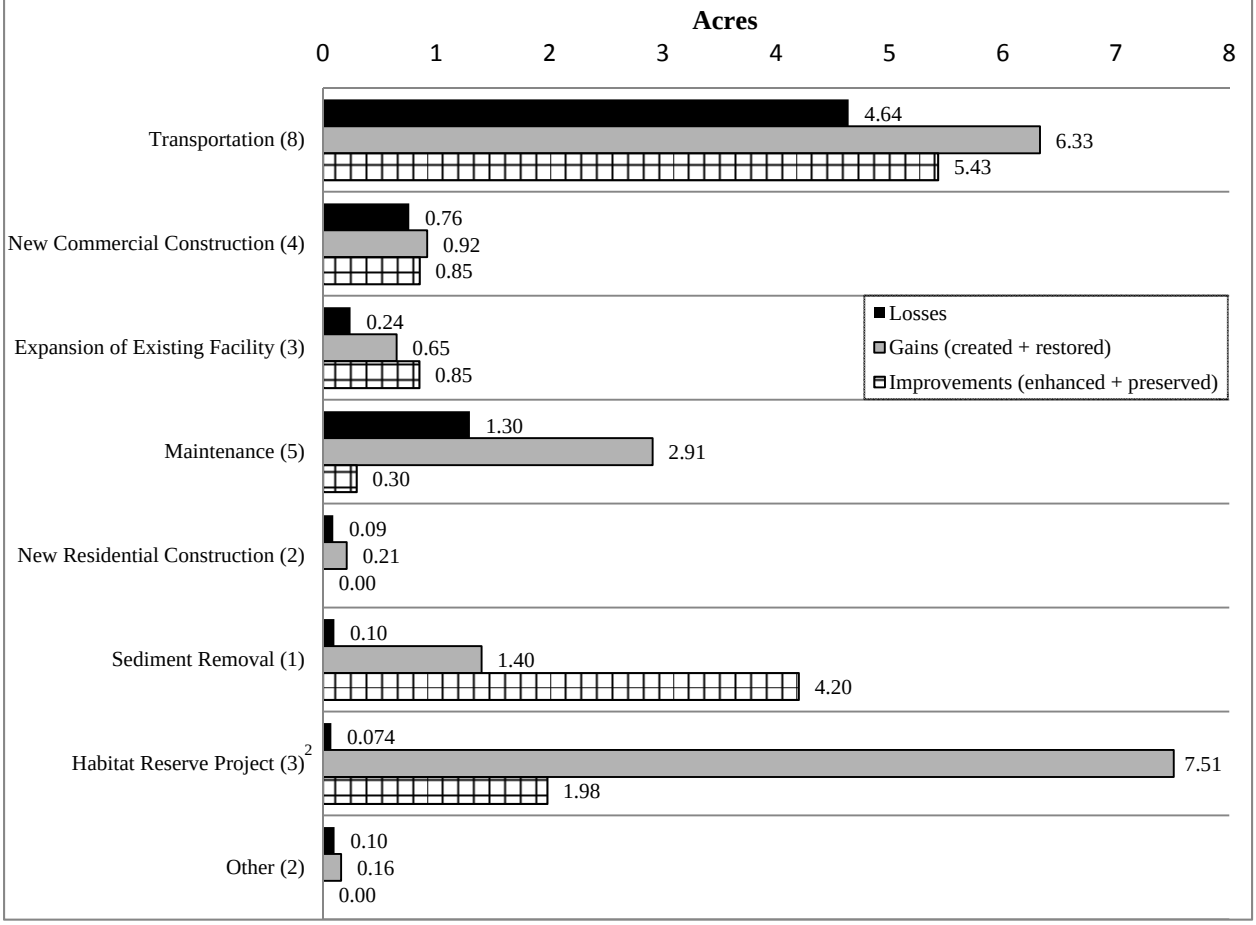
Figure 1. Compensatory Mitigation Projects by Impact Type in 2010 (Total=28)[1]



[1] Number in parentheses refers to the number of project impact types for 28 compensatory mitigation projects.

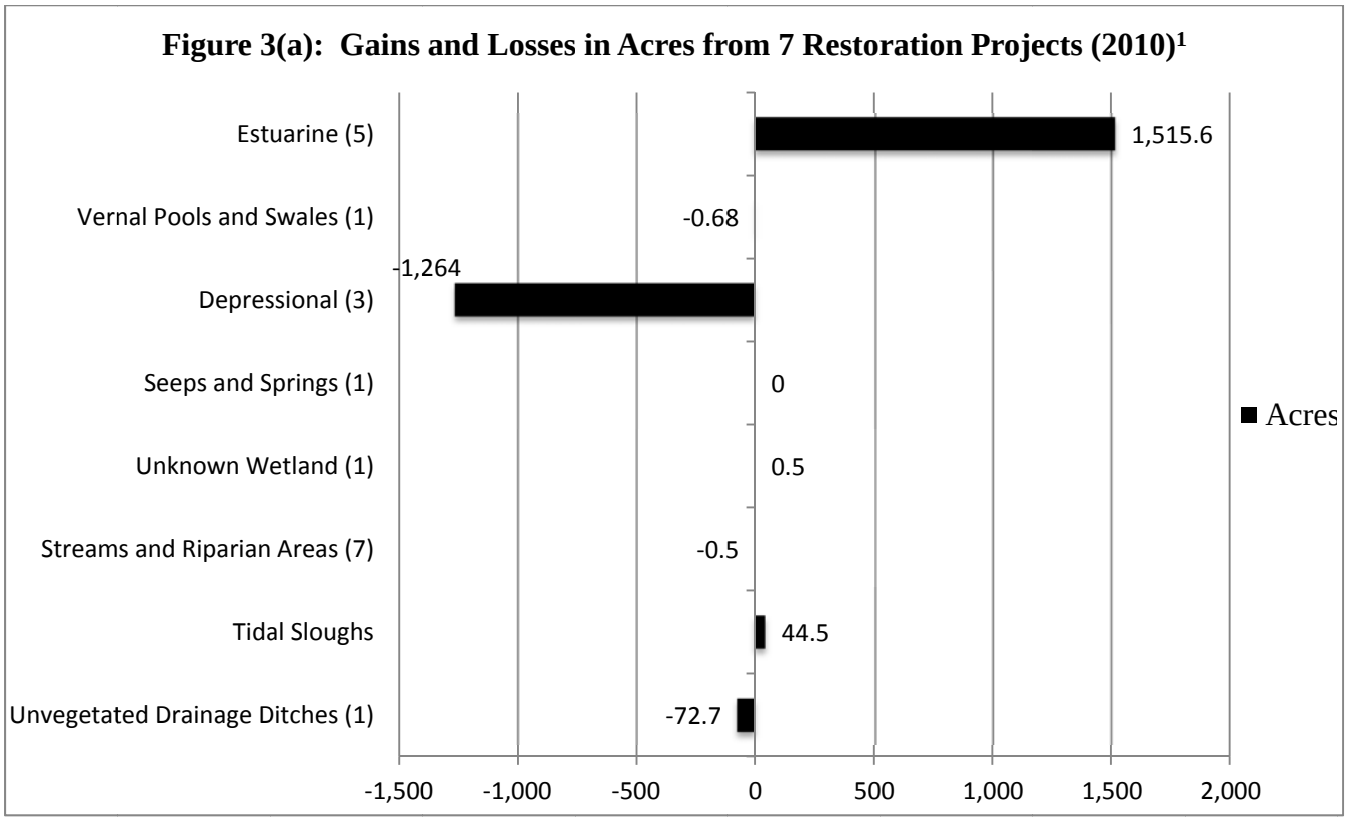
[2] In 2010, the San Francisco Public Utilities Commission and the Sonoma Land Trust developed Habitat Reserve Projects to cover for any compensatory mitigation losses.

Figure 2. Losses, Gains, and Improvements by Project Impact Type for 28 Compensatory Mitigation Projects (2010)[1]



[1] Number in parentheses refers to the number of project impact types for 28 compensatory mitigation projects.

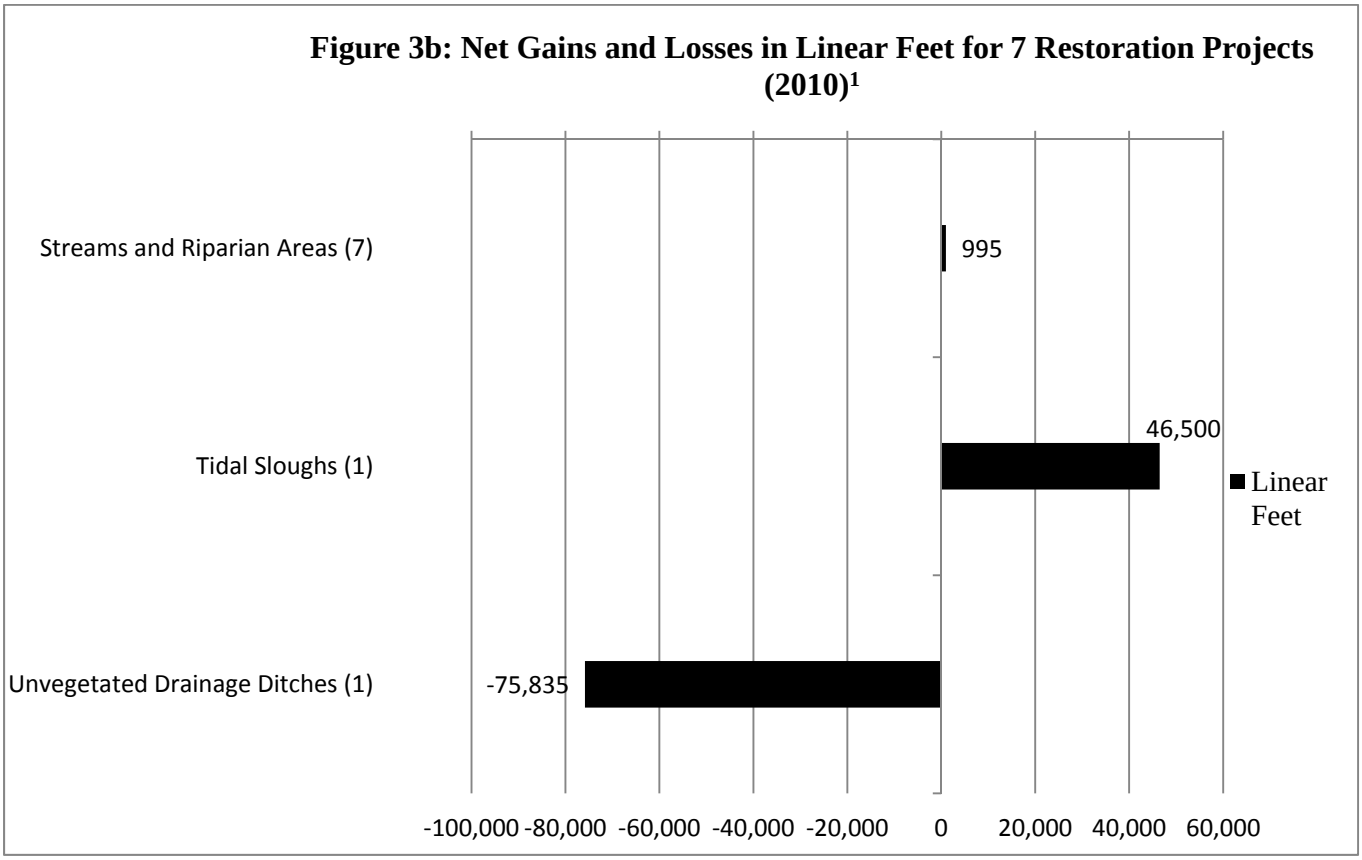
[2] In 2010, the San Francisco Public Utilities Commission and the Sonoma Land Trust developed Habitat Reserve Projects to cover compensatory mitigation losses.



[1] Numbers in parentheses indicate total number of projects.

**Note the loss of 0.68 acres of vernal pools was only temporary, and approximately 0.35 acres and a total of 1,100 linear feet of habitat will be improved for the endangered California red-legged frog (see Project #188).

Figure 3b: Net Gains and Losses in Linear Feet for 7 Restoration Projects (2010)[1]



[1] Numbers in parentheses indicate total number of projects.

Figure 4. Restoration Project Gains, Improvements, and Losses by habitat types (including Cullinan Ranch)

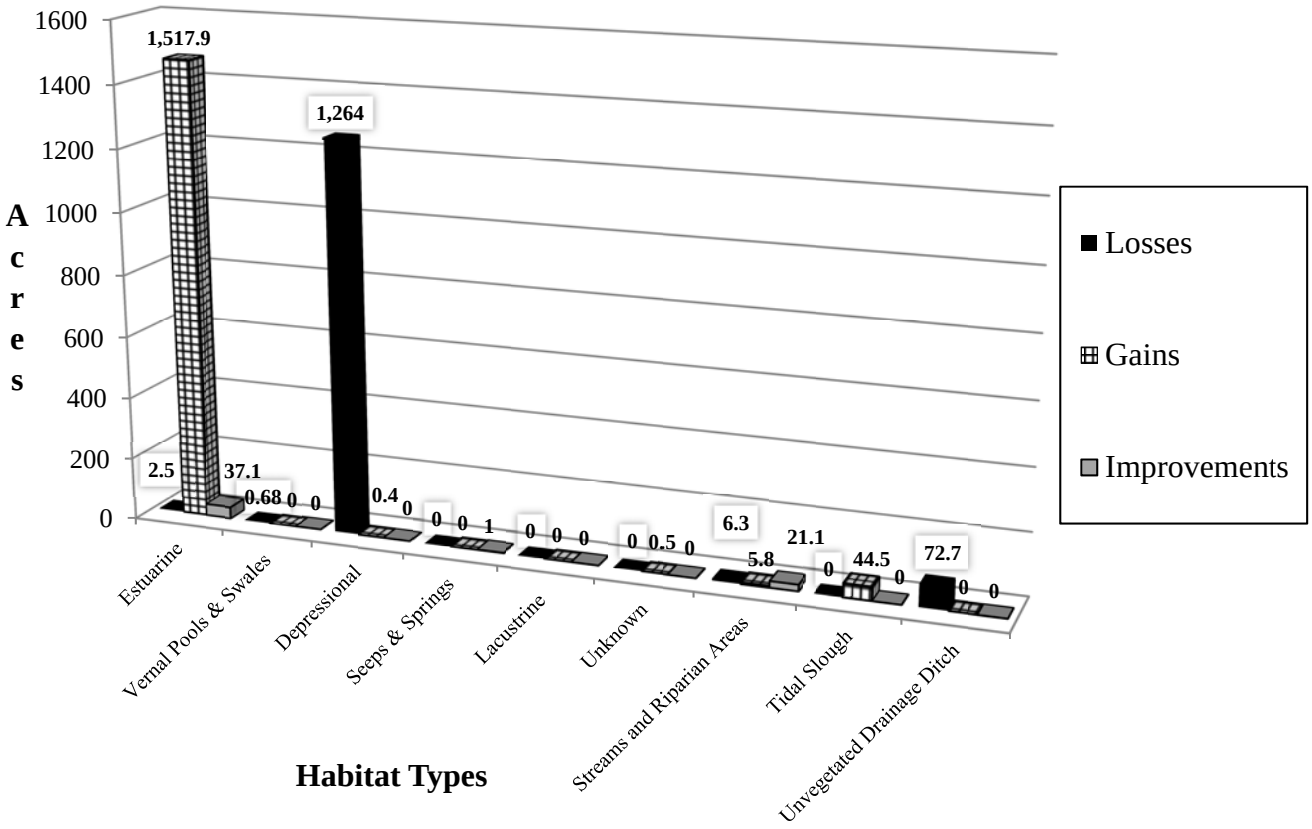
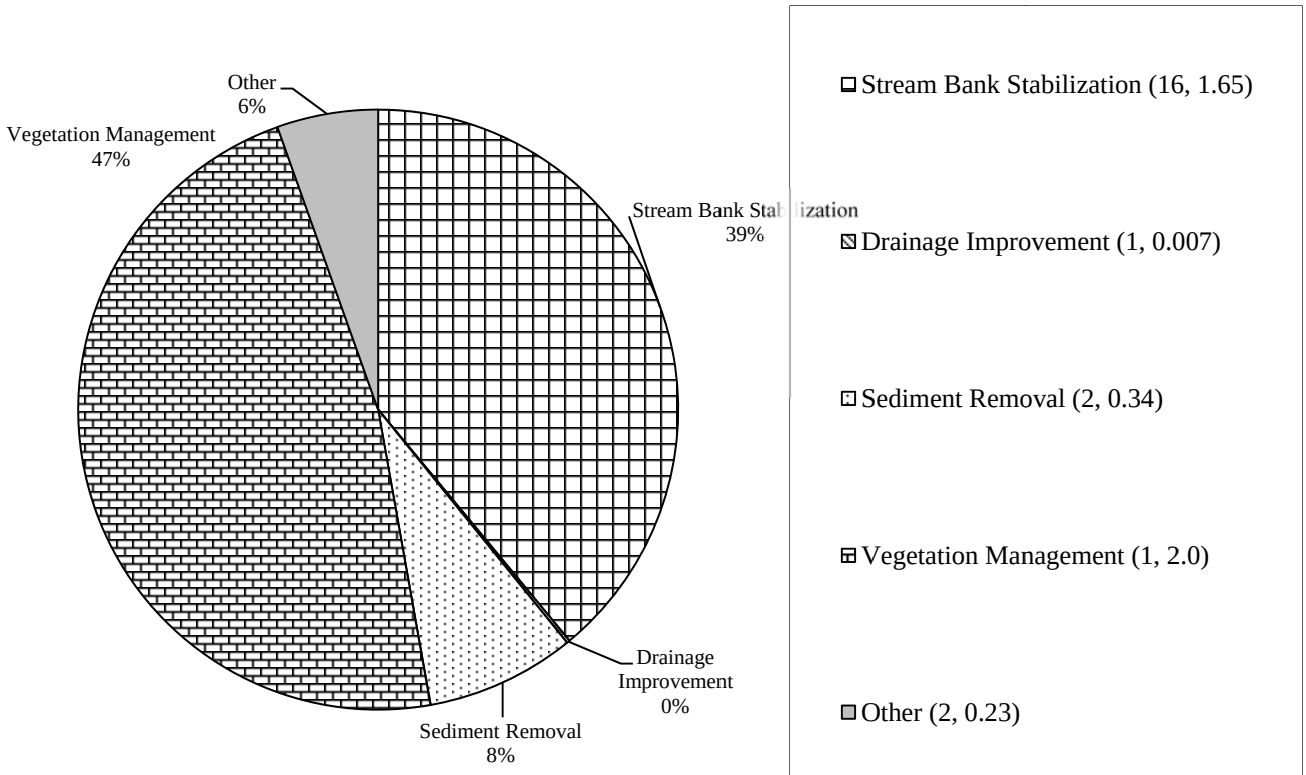
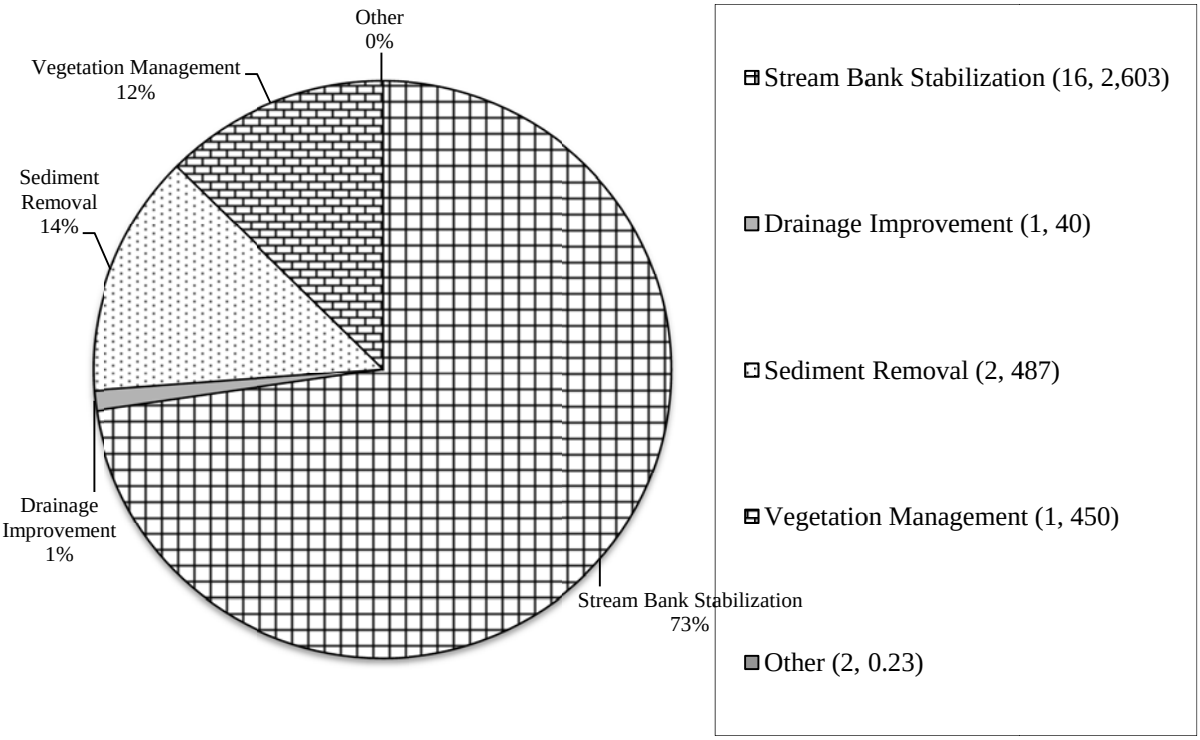


Figure 5. Project Size in Acres for 22 Repair and Maintenance Projects (2010)[1]



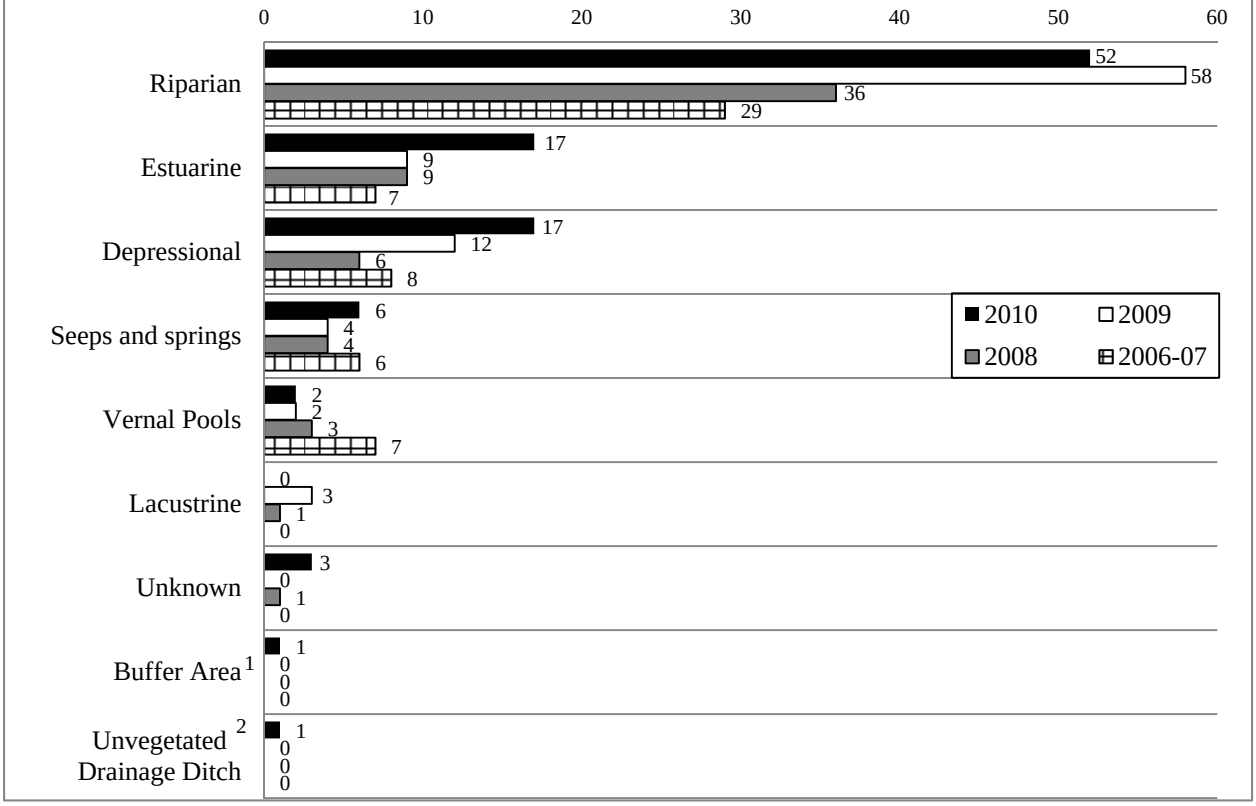
[1]Percentages indicate each project type's share of the total impacted acres.
Numbers in parentheses indicate number of projects and total impacted acres.

Figure 6. Project Size in Linear Feet for 22 Repair and Maintenance Projects (2010)[1]



[1]Percentages indicate each project type's share of the total impacted linear feet. Numbers in parentheses indicate number of projects and impacted linear feet.

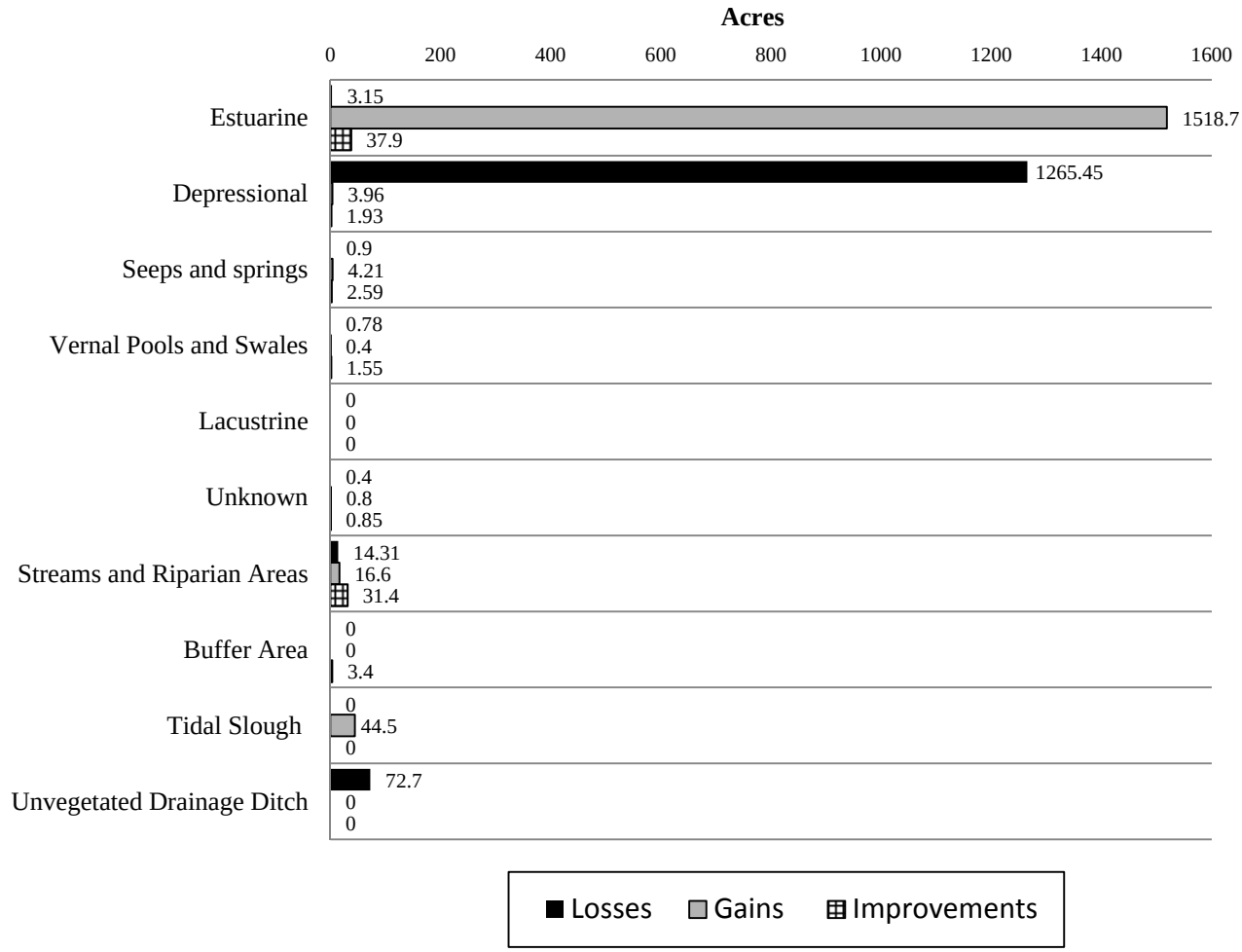
Figure 7. Number of Impacted Habitats in 2010, 2009, 2008, and 2006-07



[1]Buffer area was added in 2010 and does not include wetland or stream habitat types. Buffer areas are used to protect wetland and/or streams from potential environmental stresses.

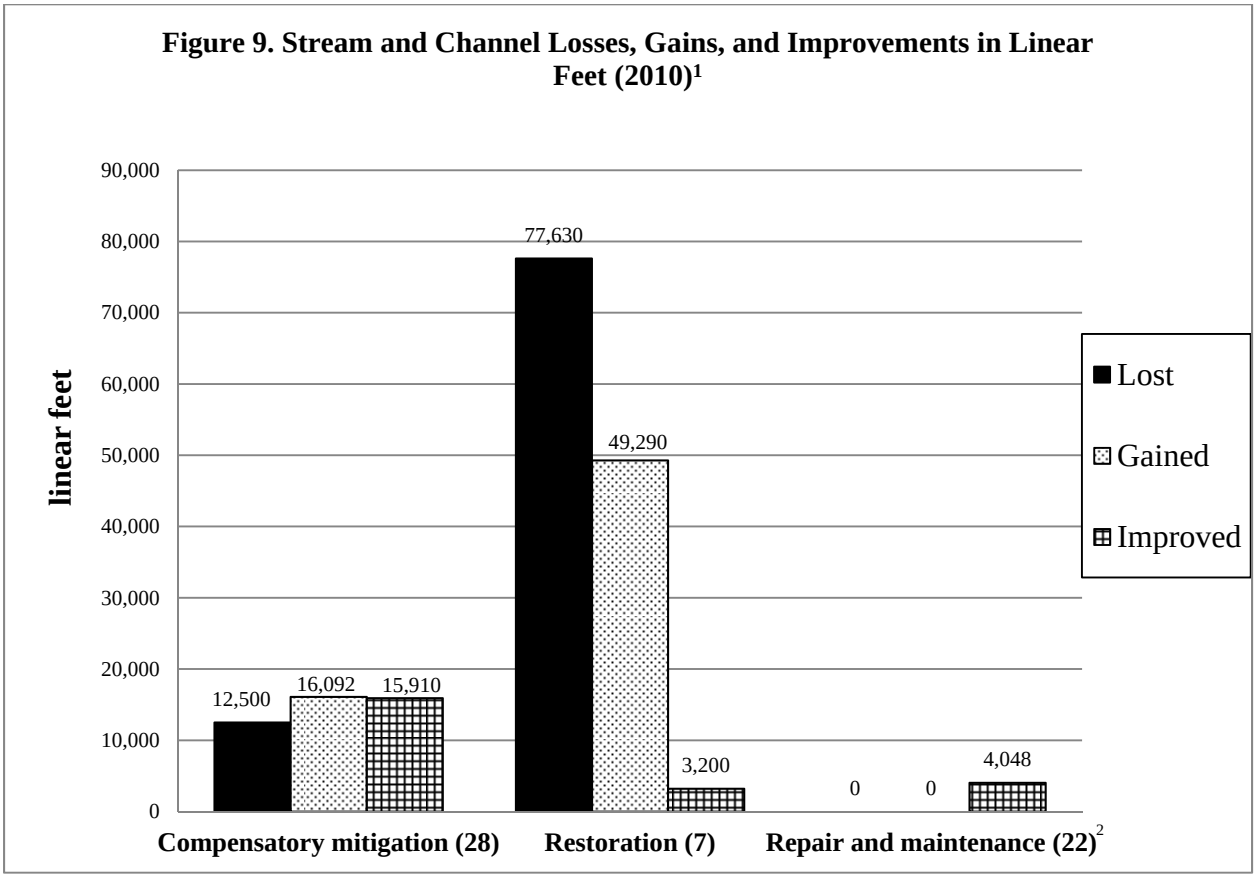
[2]Impacts were allowed to unvegetated drainage ditches due to their lower ecological function compared to the higher quality of other habitat types, such as tidal sloughs and estuarine habitat, which will be replaced at the Cullinan Ranch restoration site.

Figure 8. Losses, Gains, Improvements by Habitat Type in 2010 (Total=57 projects)



*Note that the vernal pool loss was only temporary and should be replaced by improved habitat for the California red-legged frog as discussed in Figure 3(a).

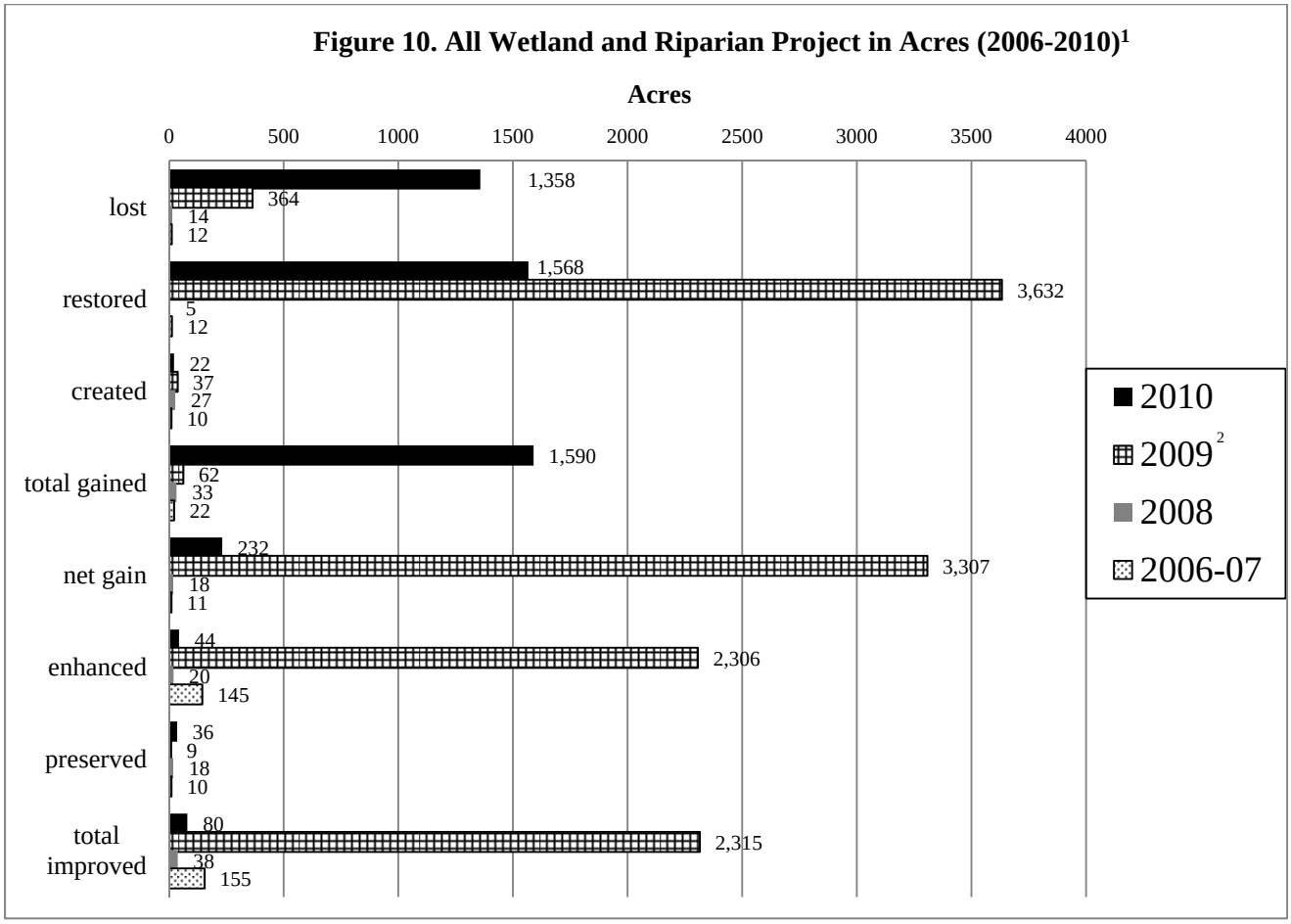
Figure 9. Stream and Channel Losses, Gains, and Improvements in Linear Feet (2010)[1]



[1]The loss of 75,835 linear feet of unvegetated drainage ditches was allowed because of their lower ecological function; these will be replaced with high functioning tidal sloughs and estuarine habitat at the Cullinan Ranch restoration site.

[2] Repair and maintenance had 3,580 linear feet of temporary losses, which are not included here because they are expected to return to the original, or better, habitat.

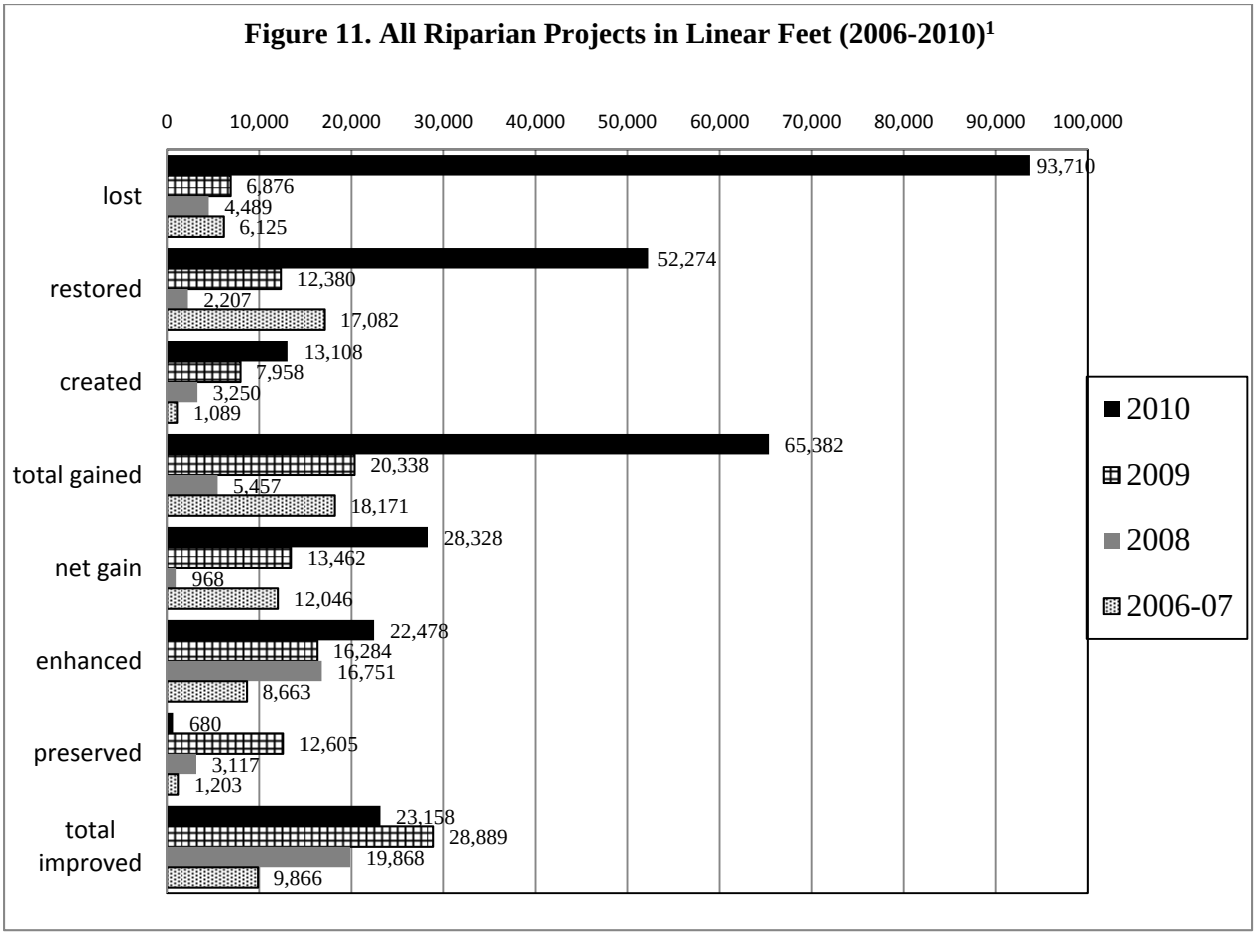
Figure 10. All Wetland and Riparian Project in Acres (2006-2010)[1]



[1] Losses in 2010 were allowed to unvegetated drainage ditches in 2010, due to their lower ecological function compared to the higher quality of other habitat types, such as tidal sloughs and estuarine habitat, which will be replaced at the Cullinan Ranch restoration site.

[2] 2009 data does include Bair Island and South Bay Salt Ponds restoration projects.

Figure 11. All Riparian Projects in Linear Feet (2006-2010)[1]



[1] 2010 losses were allowed to unvegetated drainage ditches in 2010, due to their lower ecological function compared to the higher quality of other habitat types, such as tidal sloughs and estuarine habitat, which will be replaced at the Cullinan Ranch restoration site.

APPENDICES

2010 California Wetland Projects: 28 Compensatory Mitigation Projects

															Gain					Improved				Lost		Buffer Area	
															Created		Restored			Enhanced		Preserved				totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear feet
4	**180 a**		2009	Certification	California Department of Transportation	Dumbarton Bridge Structure Rehabilitation	San Mateo and Alameda	2008-00177S	718667	Wetland Long	Compensatory Mitigation	Transportation	Estuarine-Marsh	On Site (In Kind)	0.02		0.13									
5	**180 b**		2009	Certification	California Department of Transportation	Dumbarton Bridge Structure Rehabilitation	San Mateo and Alameda	2008-00177S	718667	Wetland Long	Compensatory Mitigation	Transportation	Estuarine-Open Water	On Site (In Kind)									0.06			
6	**180 c**		2009	Certification	California Department of Transportation	Dumbarton Bridge Structure Rehabilitation	San Mateo and Alameda	2008-00177S	718667	Wetland Long	Compensatory Mitigation	Transportation	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)									0.01			
7	**182 a**	Originally Certified June 3, 2009	2010	Amended Certification	California Department of Transportation	Doyle Drive Golden Gate Bridge South Access	San Francisco	SPN-2006-30009 S	728683	Wetland Long	Compensatory Mitigation	Transportation	Seeps and Springs Wetlands	On Site (In Kind)					0.90				0.37			
8	**182 b**	Originally Certified June 3, 2009	2010	Amended Certification	California Department of Transportation	Doyle Drive Golden Gate Bridge South Access	San Francisco	SPN-2006-30009 S	728683	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Riparian Area	On Site (In Kind)	0.98	220			1.06	590						
9	**183**		2009	Certification	San Francisco Public Utilities Commission	Bay Division Pipeline Reliability Upgrade	Alameda, San Mateo	28183S	732908	Wetland Long	Compensatory Mitigation	Expansion of Existing Facility	Unknown Wetland Habitat	Off Site (In Kind)					0.85				0.15			
10	**184 a**	Goldfish Pond Site	2010	Certification	San Francisco Public Utilities Commission	Sunol Valley Water Treatment Plant Expansion and Treated Water Reservoir	Alameda		740149	Wetland Long	Compensatory Mitigation	Expansion of Existing Facility	Seeps and Springs Wetlands	Off Site (In Kind)	0.06								0.04			
11	**184 b**	Goldfish Pond Site, Portal North Sites	2010	Certification	San Francisco Public Utilities Commission	Sunol Valley Water Treatment Plant Expansion and Treated Water Reservoir	Alameda		740149	Wetland Long	Compensatory Mitigation	Expansion of Existing Facility	Streams and Rivers-Riparian Area	Off Site (In Kind)	0.04	58										
12	**185 a**		2010	Certification	California Department of Transportation	State Route 101 HOV Lanes Project	Sonoma		726190	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Channel	Mitigation Bank						30			0.07	1,155		
13	**185 b**		2010	Certification	California Department of Transportation	State Route 101 HOV Lanes Project	Sonoma		726190	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Riparian Area	Mitigation Bank									0.10	2,200		

2010 California Wetland Projects: 28 Compensatory Mitigation Projects

															Gain								Lost		Buffer Area	
															Created		Restored		Enhanced		Preserved				totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear feet
14	**185 c**		2010	Certification	California Department of Transportation	State Route 101 HOV Lanes Project	Sonoma		726190	Wetland Long	Compensatory Mitigation	Transportation	Unknown Wetland Habitat	Mitigation Bank	0.30								0.25			
15	**187 a**		2009	Certification	California Department of Transportation	State Route 116 Stage Gulch Road Curve Correction and Realignment Project	Sonoma	2003-282830 N	725448	Wetland Long	Compensatory Mitigation	Transportation	Depressional Wetlands-Marsh and Unvegetated Flats	Mitigation Bank	0.20								0.11			
16	**187 b**		2009	Certification	California Department of Transportation	State Route 116 Stage Gulch Road Curve Correction and Realignment Project	Sonoma	2003-282830 N	725448	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Channel	On Site (In Kind)	0.30	5,200	1.20	1,274					0.17	1,861		
17	**189 a**		2010	Certification	SFPP,L.P.	JP-8 Terminal and Pipeline	Solano	2009-0200218N	741352	Wetland Long	Compensatory Mitigation	New Construction Commericial	Vernal Pools and Swales	Mitigation Bank							0.15					
18	**189 b**		2010	Certification	SFPP,L.P.	JP-8 Terminal and Pipeline	Solano	2009-0200218N	741352	Wetland Long	Compensatory Mitigation	New Construction Commericial	Depressional Wetlands-Marsh and Unvegetated Flats	Mitigation Bank			0.05						0.07			
19	**190**		2010	Certification	San Francisco Municipal Transportation Authority	Muni Islais Creek Motor Coach Maintenance And Operations Facility	San Francisco	29713S	New CIWQS No. 770841 ; old CIWQS	Wetland Long	Compensatory Mitigation	New Construction Commericial	Streams and Rivers-Channel	On Site (In Kind)	0.13	570			0.10	260			0.05	210		
20	**191**		2010	Certification	City of Pittsburg	Widening of California Avenue Between Harbor Street and Carion Court	Contra Costa	2009-00161S	747395	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Riparian Area	Off Site (In Kind)					0.25	680			0.06	170		
21	**197 a**		2010	Certification	Napa County	Nemerever Vineyards	Napa	2009-00358N	745916	Wetland Long	Compensatory Mitigation	Other	Streams and Rivers-Channel	On Site (In Kind)			0.06	203								
22	**197 b**		2010	Certification	Napa County	Nemerever Vineyards	Napa	2009-00358N	745916	Wetland Long	Compensatory Mitigation	Other	Streams and Rivers-Riparian Area	On Site (In Kind)									0.10	180		
23	**198 a**		2010	Certification	California Department of Transportation	Jameson Canyon State Route 12 Widening	Napa and Solano	2008-00429N	742494	Wetland Long	Compensatory Mitigation	Transportation	Depressional Wetlands-Marsh and Unvegetated Flats	Mitigation Bank					0.40				0.40			

2010 California Wetland Projects: 28 Compensatory Mitigation Projects

															Gain					Improved					Lost		Buffer Area	
															Created		Restored			Enhanced		Preserved					totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear feet
24	**198 b**		2010	Certification	California Department of Transportation	Jameson Canyon State Route 12 Widening	Napa and Solano	2008-00429N	742494	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Channel	On Site (In Kind)						0.11	1,809				0.23	3,298		
25	**198 c**		2010	Certification	California Department of Transportation	Jameson Canyon State Route 12 Widening	Napa and Solano	2008-00429N	742494	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Riparian Area	On Site (In Kind)						0.81	5,197				1.71	1,113		
26	**199 a**	San Andreas Site Mitigation	2010	Certification	San Francisco Public Utilities Commission	Habitat Reserve Program – Peninsula Watershed	Alameda		726186, 743317, 753068	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)	1.90													
27	**199 b**	San Andreas Site Mitigation, Adobe Gulch Site	2010	Certification	San Francisco Public Utilities Commission	Habitat Reserve Program – Peninsula Watershed	Alameda		726186, 743317, 753068	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Seeps and Springs Wetlands	On Site (In Kind)	3.40					0.20								
28	**199 c**	San Andreas Site Mitigation, Adobe Gulch Site	2010	Certification	San Francisco Public Utilities Commission	Habitat Reserve Program – Peninsula Watershed	Alameda		726186, 743317, 753068	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Streams and Rivers-Riparian Area	On Site (In Kind)	0.81	2,750	0.50	1,135		0.80	1,100							
29	**200 a**	Goat Rock Site	2010	Certification	SF Public Utilites Commision	2010 Habitat Reserve Program – Alameda Watershed	Alameda		753072, 753073, 753074	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Estuarine-Open Water	On Site (In Kind)						0.30								
30	**200 b**	Goat Rock Site	2010	Certification	SF Public Utilites Commision	2010 Habitat Reserve Program – Alameda Watershed	Alameda		753072, 753073, 753074	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Seeps and Springs Wetlands	On Site (In Kind)						0.49								
31	**200 c**	Goat Rock Site	2010	Certification	SF Public Utilites Commision	2010 Habitat Reserve Program – Alameda Watershed	Alameda		753072, 753073, 753074	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Streams and Rivers-Channel	On Site (In Kind)						0.19	4,209							
32	**202 a**		2010	Certification	Fairfield	Markeley Lane Road Extension	Solano	2009-00352N	New CIWQS No. 770847; Old CIWQS	Wetland Long	Compensatory Mitigation	Transportation	Vernal Pools and Swales	Mitigation Bank	0.10		0.30					1.40			0.10			
33	**202 b**		2010	Certification	Fairfield	Markeley Lane Road Extension	Solano	2009-00352N	New CIWQS No. 770847; Old CIWQS	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Riparian Area	Mitigation Bank								0.10	50					

2010 California Wetland Projects: 28 Compensatory Mitigation Projects

															Gain					Improved					Lost		Buffer Area	
															Created		Restored			Enhanced		Preserved					totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear feet
34	**206 a**		2010	Certification	Santa Clara County Valley Water District	Calabazas Creek Flood Protection	Santa Clara	2009-00471S	745326	Wetland Long	Compensatory Mitigation	Maintenance	Streams and Rivers-Channel	On Site (Out of Kind)			0.10	192							0.04	88		
35	**206 b**		2010	Certification	Santa Clara County Valley Water District	Calabazas Creek Flood Protection	Santa Clara	2009-00471S	745326	Wetland Long	Compensatory Mitigation	Maintenance	Streams and Rivers-Riparian Area	On Site (Out of Kind)			0.50	900							0.18	300		
36	**207**		2010	Certification	Homeowner	Restoration of a Filled Creek Channel	Alameda	26998S	736423	Wetland Long	Compensatory Mitigation	Other	Estuarine-Marsh	On Site (In Kind)	0.10										0.00			
37	**211 a**		2010	Certification	[Individual]	[Individual]	Contra Costa	29355S	New CIWQS No. 770860 ; Old CIWQS	Wetland Long	Compensatory Mitigation	New Construction Residential	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)	0.01													
38	**211 b**		2010	Certification	[Individual]	[Individual]	Contra Costa	29355S	New CIWQS No. 770860 ; Old CIWQS	Wetland Long	Compensatory Mitigation	New Construction Residential	Seeps and Springs Wetlands	On Site (In Kind)											0.01			
39	**211 c**		2010	Certification	[Individual]	[Individual]	Contra Costa	29355S	New CIWQS No. 770860 ; Old CIWQS	Wetland Long	Compensatory Mitigation	New Construction Residential	Streams and Rivers-Channel	On Site (In Kind)		210									0.01	263		
40	**213**		2010	Certification	Sonoma Land Trust	Sear's Point Red-Legged Frog Habitat Enhancement	Sonoma		755706	Wetland Long	Compensatory Mitigation	Habitat Reserve Project	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)	0.90										0.07			
41	**220 a**		2010	Certification	Nova Goup, Inc	Nova Group Study Site	Napa	2007-400395N	736836	Wetland Long	Compensatory Mitigation	Sediment Removal	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)						0.50					0.10			
42	**220 b**		2010	Certification	Nova Goup, Inc	Nova Group Study Site	Napa	2007-400395N	736836	Wetland Long	Compensatory Mitigation	Sediment Removal	Streams and Rivers-Channel	On Site (In Kind)			1.10	400		0.10	1,355	0.20	630					
43	**220 c**		2010	Certification	Nova Goup, Inc	Nova Group Study Site	Napa	2007-400395N	736836	Wetland Long	Compensatory Mitigation	Sediment Removal	Streams and Rivers-Riparian Area	On Site (In Kind)			0.30	880										

2010 California Wetland Projects: 28 Compensatory Mitigation Projects

															Gain					Improved				Lost		Buffer Area	
															Created		Restored			Enhanced		Preserved				totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet	Acre	Linear Feet	Acre	Linear feet
44	**220 d**	Buffer Area Under Improvements	2010	Certification	Nova Goup, Inc	Nova Group Study Site	Napa	2007-400395N	736836	Wetland Long	Compensatory Mitigation	Sediment Removal	Buffer Area	On Site (In Kind)						3.40						3.40	
45	**223 a**		2010	Certification	California Department of Transportation	Eastbound Cordelia Truck Scales Relocation	Solano	2008-00358S	719912	Wetland Long	Compensatory Mitigation	Transportation	Depressional Wetlands-Marsh and Unvegetated Flats	Mitigation Bank								0.20		0.10			
46	**223 b**		2010	Certification	California Department of Transportation	Eastbound Cordelia Truck Scales Relocation	Solano	2008-00358S	719912	Wetland Long	Compensatory Mitigation	Transportation	Depressional Wetlands-Open Waters	Off Site (In Kind)						0.20				0.20			
47	**223 c**		2010	Certification	California Department of Transportation	Eastbound Cordelia Truck Scales Relocation	Solano	2008-00358S	719912	Wetland Long	Compensatory Mitigation	Transportation	Streams and Rivers-Riparian Area	Off Site (In Kind)	2.80	1,440								0.70	418		
48	**225**		2010	Certification	Kinder Morgan Energy Partners, L.P.	Kinder Morgan Line Section, 130 Carquinez Strait Cover	Solano	2009-00139S	749765	Wetland Long	Compensatory Mitigation	Maintenance	Estuarine-Marsh	Mitigation Bank						0.09				0.30			
49	**229 a**		2010	Certification	CPN Pipeline Company	Grizzly Island Station	Solano	2009-00402S	755705	Wetland Long	Compensatory Mitigation	Maintenance	Estuarine-Marsh	Mitigation Bank						0.18				0.06			
50	**229 b**		2010	Certification	CPN Pipeline Company	Grizzly Island Station	Solano	2009-00402S	755705	Wetland Long	Compensatory Mitigation	Maintenance	Streams and Rivers-Channel	Mitigation Bank										0.00	40		
51	**230 a**		2010	Certification	Corte Madera, Marin County	Twin Cities Police Authority Storm Drain Replacement and Bank Stabilization	Marin	2010-00111N	751080	Wetland Long	Compensatory Mitigation	Maintenance	Estuarine-Marsh	On Site (In Kind)										0.00			
52	**230 b**		2010	Certification	Corte Madera, Marin County	Twin Cities Police Authority Storm Drain Replacement and Bank Stabilization	Marin	2010-00111N	751080	Wetland Long	Compensatory Mitigation	Maintenance	Estuarine-Mudflat	On Site (In Kind)						0.03				0.03			
53	**231 a**	San Andreas Site Mitigation	2010	Certification	San Francisco Public Utilities Commision	Cystal Springs/San Andreas Transmission Upgrade	San Mateo	4001143S	746792	Wetland Long	Compensatory Mitigation	Maintenance	Depressional Wetlands-Marsh and Unvegetated Flats	Off Site (In Kind)	0.30									0.12			

2010 California Wetland Projects: 28 Compensatory Mitigation Projects

CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type	Impact Type	Habitat Type	Mitigation Type	Gain: Created Acre	Gain: Created Linear Feet	Gain: Restored Acre	Gain: Restored Linear Feet	Improved: Enhanced Acre	Improved: Enhanced Linear Feet	Improved: Preserved Acre	Improved: Preserved Linear Feet	Lost Acre	Lost Linear Feet	Buffer Area totals Acre	Buffer Area totals Linear feet
231 b	San Andreas Site Mitigation	2010	Certification	San Francisco Public Utilities Commision	Cystal Springs/San Andreas Transmission Upgrade	San Mateo	4001143S	746792	Wetland Long	Compensatory Mitigation	Maintenance	Seeps and Springs Wetlands	Off Site (In Kind)	0.01											
231 c	Adobe Gulch Wetlands Mitigation	2010	Certification	San Francisco Public Utilities Commision	Cystal Springs/San Andreas Transmission Upgrade	San Mateo	4001143S	746792	Wetland Long	Compensatory Mitigation	Maintenance	Streams and Rivers-Riparian Area	On and Off Site (In Kind)	2.00	660							0.57	1,204		
232		2010	Certification	Napa 34 Holdings, LLC	Napa Commerce Center	Napa	2007-400783N	748436	Wetland Long	Compensatory Mitigation	New Construction Commericial	Seeps and Springs Wetlands	On Site (In Kind)	0.74								0.48			
235		2010	Certification	Manager	Sweetwater Spectrum Residential Care Home	Sonoma	2010 00216N	759191	Wetland Long	Compensatory Mitigation	New Construction Residential	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)	0.20								0.08			
236		2010	Certification	Monk and Associates, Inc.	East Washington Place	Sonoma	2009-29472N	755871	Wetland Long	Compensatory Mitigation	New Construction Commericial	Depressional Wetlands-Open Waters	Mitigation Bank							0.60		0.16			
238 a		2010	Certification	City of Burlingame	Marsten Pump Station and and Outfall Phase 3	San Mateo	2010-000435	758616	Wetland Long	Compensatory Mitigation	Expansion of Existing Facility	Estuarine-Marsh	On Site (In Kind)			0.45									
238 b		2010	Certification	City of Burlingame	Marsten Pump Station and and Outfall Phase 3	San Mateo	2010-000435	758616	Wetland Long	Compensatory Mitigation	Expansion of Existing Facility	Estuarine-Open Water	On Site (In Kind)			0.10									
238 c		2010	Certification	City of Burlingame	Marsten Pump Station and and Outfall Phase 3	San Mateo	2010-000435	758616	Wetland Long	Compensatory Mitigation	Expansion of Existing Facility	Streams and Rivers-Channel	On Site (In Kind)									0.05			
Totals														15.30	11,108	4.79	4,984	10.96	15,230	2.65	680	7.31	12,500	3.40	0

2010 California Wetland Projects: 7 Restoration Projects

																Gain					Improved					Lost		Buffer Area	
																Created		Restored			Enhanced		Preserved					totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type from CW Forms	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear feet
4	160 a		2009	Certification	City of Pinole	Pinole Creek Demonstration Restoration	Contra Costa	2007-00831S	743888	Wetland Long	Non-Mitigation	Restoration	Restoration	Estuarine-Marsh	Non-Mitigation			1.20											
5	160 b		2009	Certification	City of Pinole	Pinole Creek Demonstration Restoration	Contra Costa	2007-00831S	743888	Wetland Long	Non-Mitigation	Restoration	Restoration	Streams and Rivers-Riparian Area	Non-Mitigation			0.10	250										
6	181 a		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Estuarine-Marsh	Non-Mitigation	0.20													
7	181 b		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Estuarine-Open Water	Non-Mitigation	0.50					1.60								
8	181 c		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Depressional Wetlands-Marsh and Unvegetated Flats	Non-Mitigation	0.20													
9	181 d		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Depressional Wetlands-Open Waters	Non-Mitigation	0.20													
10	181 e		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Streams and Rivers-Channel	Non-Mitigation	2.80	2,000	0.70	400			800				1.30	1,620		
11	181 f		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Streams and Rivers-Riparian Area	Non-Mitigation	2.10					19.40					4.90			

2010 California Wetland Projects: 7 Restoration Projects

																	Gain					Improved					Lost		Buffer Area	
																	Created		Restored			Enhanced		Preserved					totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type from CW Forms	Project Type	Impact Type	Habitat Type	Mitigation Type		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear feet
12	**181 g**		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Unknown Wetland Habitat	Non-Mitigation		0.50													
13	**181 h**		2009	Certification	National Park Service Golden Gate National Recreation Area and Marin County Department of Public Works	Wetland And Creek Restoration at Big Lagoon, Muir Beach	Marin	27394N	741492	Wetland Long	Non-Mitigation	Restoration	Restoration	Seeps and Springs Wetlands	Non-Mitigation							1.00							
14	**188 a**		2010	Certification	Midpeninsula Regional Open Space District	Pond DR06 repair and habitat restoration	San Mateo	2009-00456S	750084	Wetland Long	Non-Mitigation	Restoration	Restoration	Vernal Pools and Swales	Non-Mitigation											0.68			
15	**188 b**		2010	Certification	Midpeninsula Regional Open Space District	Pond DR06 repair and habitat restoration	San Mateo	2009-00456S	750084	Wetland Long	Non-Mitigation	Restoration	Restoration	Streams and Rivers-Channel	Non-Mitigation								300						
16	**188 c**		2010	Certification	Midpeninsula Regional Open Space District	Pond DR06 repair and habitat restoration	San Mateo	2009-00456S	750084	Wetland Long	Non-Mitigation	Restoration	Restoration	Streams and Rivers-Riparian Area	Non-Mitigation							0.35	800						
17	**192**		2010	Certification	Napa County Flood Control & Water Conservation District	Phase 2, Reach 3 of the Napa River Rutherford Reach Restoration	Napa	2008-00366N	735511	Wetland Long	Non-Mitigation	Restoration	Restoration	Streams and Rivers-Riparian Area	Non-Mitigation							1.34	1,300						
18	**208**	Temporary impacts during sediment removal	2010	Certification	Contra Costa County Flood Control & Water Conservation	Wildcat Creek Sedimentation Basin	Contra Costa	2005-293370S	754312	Wetland Long	Non-Mitigation	Restoration	Sediment Removal	Estuarine-Open Water	Non-Mitigation							2.50				2.50			
19	**221**		2010	Certification	Sonoma County Water Agency	Sonoma Creek Bank Repair, Glen Ellen	Sonoma	2010 00274N	756113	Wetland Long	Non-Mitigation	Restoration	Stream Bank Stabilization	Streams and Rivers-Riparian Area	Non-Mitigation				0.08	140						0.08	175		
20	**239 a**		2010	Certification	U.S. Fish and Wildlife Service	Cullinan Ranch Restoration	Napa and Solano	R2-2010-0108	753053	Wetland Long	Non-Mitigation	Restoration	Restoration	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)											1,264.00			
21	**239 b**		2010	Certification	U.S. Fish and Wildlife Service	Cullinan Ranch Restoration	Napa and Solano	R2-2010-0108	753053	Wetland Long	Non-Mitigation	Restoration	Restoration	Unvegetated Drainage Ditch	On Site (In Kind)				44.50	46,500						72.70	75,835		

2010 California Wetland Projects: 7 Restoration Projects

CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type from CW Forms	Project Type	Impact Type	Habitat Type	Mitigation Type	Gain: Created Acre	Gain: Created Linear Feet	Gain: Restored Acre	Gain: Restored Linear Feet	Improved: Enhanced Acre	Improved: Enhanced Linear Feet	Improved: Preserved Acre	Improved: Preserved Linear Feet	Lost Acre	Lost Linear Feet	Buffer Area totals Acre	Buffer Area totals Linear feet
239 c		2010	Certification	U.S. Fish and Wildlife Service	Cullinan Ranch Restoration	Napa and Solano	R2-2010-0108	753053	Wetland Long	Non-Mitigation	Restoration	Restoration	Estuarine-Open Water	On Site (In Kind)			1,516.00				33.00					
Totals															6.50	2,000	1,562.58	47,290	26.19	3,200	33.00	0	1,346.16	77,630	0.00	0

2010 California Wetland Projects: 22 Repair and Maintenance Projects

																Gain					Improved					Lost (Temporary)		Buffer Area	
																Created		Restored			Enhanced		Preserved					totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type from CW Forms	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear feet
4	**123**	Hydroseed impacted area	2009	Certification	Alameda County Public Works Agency	Arroyo Seco Creek Drainage Improvement	Alameda		731595	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	None											0.03	25		
5	**186**		2010	Certification	San Francisco Recreation and Parks Department	Former Sharp Park Rifle Range	San Mateo	08-00299S	748936	Wetland Long	Compensatory Mitigation	Repair and Maintenance	Other	Depressional Wetlands-Marsh and Unvegetated Flats	On Site (In Kind)						0.03				0.03			
6	**193**		2009	Certification	Marin Municipal Water District	Fox Hollow Culvert Remediation	Marin	2009-00267N	744781	Wetland Long	Compensatory Mitigation	Repair and Maintenance	Expansion of Existing Facility	Streams and Rivers-Riparian Area	On Site (In Kind)							135				135		
7	**196**		2010	Certification	Alameda County Public Works Agency	Aqua Caliente Creek (Zone 6 Line F) Restoration	Alameda	2010-00098S	749777	Riparian Short	Stream Bank Stabilization, Drainage Improvement	Repair and Maintenance	Restoration	Riparian Area	Non-Mitigation						0.11	350			0.11	350		
8	**201**		2010	Certification	City of Piedmont	280 Indian Road Landscaping and Drainage	Alameda	2010-00152S	750834	Riparian Short	Stream Bank Stabilization, Drainage Improvement, Vegetation Removal	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)						2.20	713			0.43	150		
9	**203**		2010	Certification	Fairfax	Peri Park Bank Stabilization and Flood Restoration	Marin	2009-00355N	747382	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)						0.03	150			0.03	150		
10	**204**		2010	Certification	Napa County Department of Public Works	Zinfandel Lane Fish Passage	Napa	2010-00137N	750748	Riparian Short	Stream Bank Stabilization, Fish Passage	Repair and Maintenance	Other	Riparian Area	On Site (In Kind)						0.04	45			0.04	45		
11	**209**		2010	Certification	Hamilton-Swift Land Use and Development Consultants	Restoration of Creek Channel and Riparian Area Located on Bainter Avenue	Santa Clara	2009-00275S	749927	Riparian Short	Stream Bank Stabilization, Drainage Improvement, Sediment/Debris Removal	Repair and Maintenance	Stream Bank Stabilization, Erosion Control	Riparian Area	On Site (In Kind)						0.97	350			0.06	350		
12	**210**		2010	Certification	East Bay Regional Park District	Redwood Park Entrance Roads Project along Redwood Creek	Alameda	2010-00123S	750107	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)						0.02	20			0.02	20		

2010 California Wetland Projects: 22 Repair and Maintenance Projects

																Gain					Improved					Lost (Temporary)			Buffer Area	
																Created		Restored			Enhanced		Preserved						totals	totals
	CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type from CW Forms	Project Type	Impact Type	Habitat Type	Mitigation Type	Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet	Acre	Linear Feet		Acre	Linear Feet		Acre	Linear feet
13	**214**		2010	Certification	Property Owner	Stream Bank Stabilization	Contra Costa	2007-00837S	755317	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)						0.02	120				0.02	120			
14	**215**		2010	Certification	Livermore Amador Valley	Livermore Amador Valley Water Management Agency Export Pipeline Facilities	Alameda	2009-00444S	749925	Wetland Long	Compensatory Mitigation	Repair and Maintenance	Expansion of Existing Facility	Estuarine-Marsh	On Site (In Kind)						0.20					0.20				
15	**217**		2010	Certification	California Department of Parks and Recreation	Heart's Desire Beach Drainage System and Burial Site Erosion-Tomales Bay State Park	Marin		722830	Riparian Short	Sediment Debris/Removal, Vegetation Management, Drainage Improvement	Repair and Maintenance	Maintenance	Riparian Area	Non-Mitigation						2.00	450				2.00	450			
16	**218**		2010	Certification	City of Concord	Hillcrest Park Bank Stabilization	Contra Costa		755920	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)						0.04	195				0.04	195			
17	**219**		2010	Certification	Marin Municipal Water District	Soulajule Spillway Outfall Repair	Marin	No: 2010-00344N	756977	Riparian Short	Drainage Improvement	Repair and Maintenance	Maintenance	Riparian Area	Non-Mitigation											0.01	40			
18	**222**		2010	Certification	Property Owner	Los Gatos Creek Bank Stabilization	Santa Clara	2008-00011S	741385	Wetland Long	Compensatory Mitigation	Repair and Maintenance	Stream Bank Stabilization	Streams and Rivers-Channel	On Site (In Kind)						0.37	400				0.37	400			
19	**224**		2010	Certification	City of Fairfield Public Works Department	Jameson Canyon Creek Sediment Removal	Solano	2009-00357N	744595	Wetland Long	Non-Mitigation	Repair and Maintenance	Sediment Removal	Streams and Rivers-Channel	Non-Mitigation						0.20	287				0.16	287			
20	**226**		2010		City of Fairfield Public Works Department	American Canyon Creek Sediment Removal	Solano	2009-00356N	744597	Wetland Long	Non-Mitigation	Repair and Maintenance	Sediment Removal	Streams and Rivers-Channel	On Site (In Kind)						0.10	200				0.18	200			
21	**227**		2010	Certification	Property Owner	Suisun Creek Bank Stabilization	Solano	2009- 00300N	749776	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)						0.25	380				0.25	380			

2010 California Wetland Projects: 22 Repair and Maintenance Projects

CW No.	Comments	Year	Water Quality Certification Type	Applicant	Project Name	County	US ACOE CERT No. or WDR No.	CIWQS Place No.	Type of Form	Project Type from CW Forms	Project Type	Impact Type	Habitat Type	Mitigation Type	Gain: Created Acre	Gain: Created Linear Feet	Gain: Restored Acre	Gain: Restored Linear Feet	Improved: Enhanced Acre	Improved: Enhanced Linear Feet	Improved: Preserved Acre	Improved: Preserved Linear Feet	Lost (Temporary) Acre	Lost (Temporary) Linear Feet	Buffer Area totals Acre	Buffer Area totals Linear feet
228		2010	Certification	Contra Costa County Flood Control and Water Conservation District	Green Valley Bank Stabilization	Contra Costa	2010-00229S	756673	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)					0.03	60			0.03	60		
233		2010	Certification	Property Owner	Bank Stabilization on Franklin Creek	Contra Costa	2010-00197S	758874	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	On Site (In Kind)					0.01	60			0.01	60		
234	Applicant has agreed to provide funding for two projects	2010	After the Fact Certification	Property Owner	Installation of Culvert on Tributary to Cerrito Creek	Contra Costa		758979	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	Non-Mitigation					0.01	30			0.01	60		
237		2010	Certification	Manager	Montezuma Restoration	Marin	2009-00404N	747383	Riparian Short	Stream Bank Stabilization	Repair and Maintenance	Stream Bank Stabilization	Riparian Area	Non-Mitigation					0.20	103			0.20	103		
Totals															0.00	0	0.00	0	6.82	4,048	0.00	0	4.22	3,580	0.00	0