CITY OF PACIFICA
OPEN SPACE & PARKLAND ADVISORY COMMITTEE

January 20, 2016
6:00 – 7:30 P.M.
Police Department Conference Room
2075 Coast Highway

CALL TO ORDER:

ADMINISTRATIVE BUSINESS:

Approval of Order of Agenda

Approval of Minutes of December 16, 2015 (distributed to OSPAC with Agenda)

COMMUNICATIONS:

Oral Communications:
This portion of the agenda is available to the public to address the Committee on any issue within the subject matter jurisdiction of the Committee that is not on the agenda

CONSIDERATION ITEMS:

1. **Presentation on the proposed Pacifica Quarry Mitigation Bank**
   Recommendation: Provide feedback on the information provided by the project representative.

DISCUSSION ITEMS:

2. **Article in the Pacifica Tribune to promote trail of the month**

INFORMATIONAL ITEMS:

3. **Update by GGNRA/GGNPC**

COMMITTEE COMMUNICATIONS:

STAFF COMMUNICATIONS:

ITEMS FOR FUTURE AGENDAS (tentative):

- **2016 –Pedro Point Trail and route update**
- **Information on Sanchez Adobe Master Plan implementation efforts**
- **GGNRA dog regulations**
- **Preservation Award**

ADJOURNMENT:

THE CITY OF PACIFICA WILL PROVIDE SPECIAL ASSISTANCE FOR DISABLED CITIZENS UPON AT LEAST 24 HOUR ADVANCE NOTICE TO THE CITY MANAGER'S OFFICE (738-7301). IF YOU NEED SIGN LANGUAGE ASSISTANCE OR WRITTEN MATERIAL PRINTED IN A LARGER FONT OR TAPED, ADVANCED NOTICE IS NECESSARY. ALL MEETING ROOMS ARE ACCESSIBLE TO THE DISABLED.

CITY OF PACIFICA
AGENDA MEMO

DATE: January 13, 2016

TO: Open Space & Parkland Advisory Committee

FROM: Tina Wehrmeister, Planning Director

SUBJECT: **Agenda Item No. 1: Presentation on the proposed Pacifica Quarry Mitigation Bank**

As the Open Space & Parkland Advisory Committee (OSPAC) is aware, the Pacifica Quarry owner is preparing to submit a development proposal for the quarry site. As of the date of this memo, applications have not been submitted to the City for reclamation or development of the site. The owner is currently in the process of gathering community input.

The consideration item before the OSPAC is a Mitigation Bank that would be located at the quarry and preserved with a conservation easement. A detailed description with photos and diagrams has been prepared by the project representative and is attached to this memo.

The recommended action is for the OSPAC to receive the information, including a presentation at the January 20th committee meeting, and provide feedback.

Attachment: Pacifica Quarry Mitigation Bank Description

Pacifica Quarry Mitigation Bank

Project Description

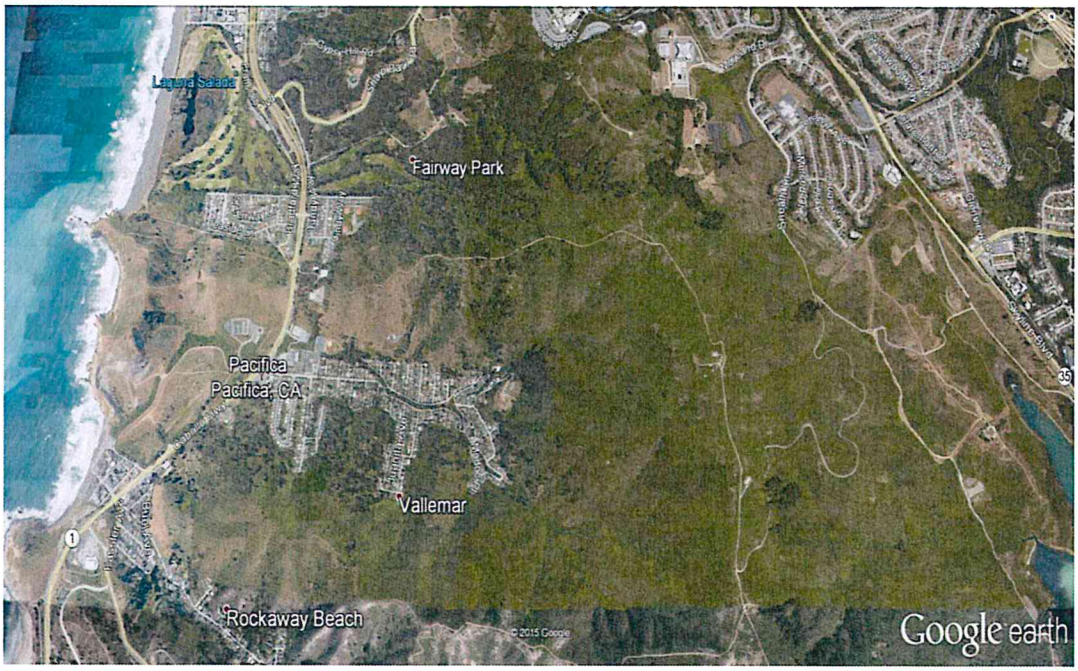
A presentation to the Pacifica Open Space Committee

January 2016

Summary

Open space is a defining part of Pacifica's character. The proposed Pacifica Quarry Mitigation Bank will contribute to that character in many important ways:

1. The bank will provide a key link in regional open space, connecting the coast to inland. As shown in View 1, the bank will connect to Mori Point and Laguna Salada/Sharp Park in the north and Sweeney Ridge to the east, creating a relatively continuous corridor of open space and habitat stretching from the Coast Ranges to the Pacific.



View 1. Central Pacifica, showing Mori Point, Laguna Salada and Sharp Park in the north, Sweeney Ridge in the center and east, the Fairway Park and Vallemar neighborhoods in the west-center and Rockaway Beach on the southwest. The Pacifica Quarry mitigation bank is in the left-center of this view, just to the left of the "Pacifica" title, and forms an important link from the ocean to the uplands.

2. The bank will restore a highly degraded landscape, which has become a stepping stone for pampas grass invasion of other open space lands. The Pacifica Quarry used the Calera Creek floodplain as a dumping ground for quarry waste, debris and other materials. The City re-routed Calera Creek and restored a functioning riparian system but in doing so, graded the bank site flat and encouraged the growth and spread of pampas grass (**Figure 1**). Restoration will both eliminate pampas grass and restore native-dominated riparian, wetland and upland habitats. The bank site is one of the very few locations on the central coast that can provide this opportunity. A restored floodplain here also helps Pacifica accommodate sea level rise, sequesters carbon to offset global warming and reduces local flood risk.

3. Mitigation banks are permanently preserved open space and cannot be developed in other uses. One of the first requirements of bank establishment is dedication of a strict conservation easement over the bank lands. That easement must be held by either a public agency or a qualified land trust. Funds from the sale of bank credits are dedicated to a non-wasting endowment that provides for full maintenance and management in perpetuity.

Mining and other uses over the past hundred years have damaged the bank site and left it dominated by non-native and invasive species. The bank will restore the riparian, wetland and upland habitats that once occurred on-site. The bank will also will provide suitable habitat for the California Red-legged frog (CRLF) and the San Francisco Garter Snake (SFGS) and for a wide variety of other wildlife.

The following provides our initial analysis of the site conditions and a very draft proposal for the character of the landscapes to be included within the bank. Mitigation banks require several years to become certified and the bank may change during that time frame. However, this initial period is important in seeking comments on this initial draft and its contents.

Even at this early stage, our proposal has benefitted immensely from comments and suggestions. Dr. Glen Holstein, Ron Maykel, Phyllis Faber, and others have been very helpful; their suggestions are acknowledged but any errors are the authors.

I. Site Conditions

A. History

Prior to the advent of European settlers, the Bank site was a part of the Calera Creek estuary which connected the Creek to the Pacific Ocean. Based on the earliest US Coast and Geodetic Survey maps, the Bank site was low-lying creek and overflow lands, probably dominated by willow riparian woodlands and mesic (wet) grasslands, which were primarily creeping wild rye (*Leymus triticoides*) and a variety of rushes and sedges. There may have been high ground present as old riparian flood deposits. These mostly sandy hillocks would have included drier grasslands, wax myrtles (*Myrica californica*) and possibly coast live oaks (*Quercus agrifolia*) on the north-facing slopes.

The Quarry was mined from the earliest settlement of California by Europeans and perhaps earlier. The property itself was gradually transformed from a low coastal hillock of limestone and related materials to an open pit. The Bank site housed the buildings, settling ponds, quarry roads, etc. associated with the Quarry operation. Upon the closure of the quarry in the early 1980s, the Quarry property was intermittently used for a variety of events, including an annual rodeo (Holman 2002). These and the prior mining disturbances led Holman & Associates to conclude in a 2003 DEIR that "There doesn't appear to be a square meter of unaltered surface south of the creek."

In 1996 the City of Pacifica received permits to construct a wastewater treatment and recycling facility north of the Quarry property. These permits allowed the City to relocate Calera Creek, which had been a man-made ditch running through the center of the bank site, to a separate 17.21-acre parcel running between the Quarry and the bank site. As a part of these permits, the City graded the bank site and adjoining lands and filled "the old channelized creek [and] 7+ acres of previously damaged and scattered wetlands on site" (Coastal Commission Development Permit 1-95-40).

A 2000 aerial photograph (View 2) shows that the grading and disturbance area is similar to the area of disturbance in 1997. This disturbance very likely exacerbated the spread of pampas grass on-site, as noted above.

View 2. Aerial photograph of the bank site, circa 2000. Calera Creek has been restored to a riparian woodland flanking the bank site on the west; Highway One is on the east.

Development proposals have been relatively constant over the past two decades. Three large-scale development projects were proposed for the Quarry property during that time frame; these included a variety of uses but focused on commercial and residential components. Two of these proposals were subject to voter referenda (required by a City ordinance for any residential development on-site) but both failed due to lack of support and financing issues. The most recent, from 2006, included 355 homes, a hotel of 350 units and various other elements.

B. Current Habitats

The Bank site is today predominately grassland dominated by non-native and invasive species. In addition to upland habitat, the site contains a sprinkling of wetlands and a perimeter ditch that includes valuable habitat.

The grasslands are dominated by non-native annual grasses and forbs with an abundance of invasive species. Pampas grass (*Cortaderia selloana,* invasive) is particularly abundant as noted above and forms the dominant feature of the bank site. Coyote bush (*Braccharis pilularis,* native), soft chess (*Bromus hordeaceus,* non-native), and purple needle grass (*Stipa pulchra,* native) are also common in the grasslands.

Arroyo willow (*Salix lasiolepis,* native) wetlands occur in patches near the Highway and are dominated by arroyo willow and redosier dogwood (*Cornus sericea,* native). There are also scattered small basins dominated by marsh plants in the southern half of the Bank site; these are dominated by cattail (*Typha latifolia,* native) and chairmaker's bulrush (*Schoenoplectus americanus,* native). The ditch along Highway 1 has a thick canopy comprised of arroyo willow, Monterey cypress (*Hesperocyparis macrocarpa,* native), and the invasive lollypop tree. The understory includes English ivy (*Hedera helix,* invasive), horsetail (*Equisetum arvense,* native), stinging nettle (*Urtica dioica,* native) and other wetland species.

View 3: Proposed Bank site looking east from the quarry.

C. Important Species

California red-legged frogs (CRLF) have a well-documented presence on the Pacifica Quarry property. They have been observed and recorded within the Calera Creek riparian corridor, the ditch along Highway 1, in the Quarry pond located west of the Bank site, and one was found in the uplands within the Bank site. CRLF are also known to inhabit many of the adjacent and nearby open spaces including Mori Point, Sharp Park, and Sweeny Ridge.

Prior to August 1989, two small ponds on the Quarry property were occupied by SFGS (Reported by Swaim 2007 with an attribute to Dr. Sam McGinnis). In 1989 these ponds were illegally filled and much of the adjoining uplands were bulldozed. Since then, there have been no confirmed SFGS observations on the property. Currently Mori Pont, Sharp Park and Sweeney Ridge are known to host populations of the species.

II. Proposed Mitigation Bank

A. Habitats

The Bank site will mimic a native riparian wetland floodplain and include the following habitats (from wettest to driest). Habitat types are based on the descriptions found in local reference sites (see views), *A Flora of the San Bruno Mountains* (McClintock et al 1990), and *A Flora of Pescadero Marsh, San Mateo County* (Anderson and Morgan, 1996).

Deep and shallow water: The aquatic zone will be primarily shallow water, about 2 ft deep at a mean water level condition. Deeper pockets will be restored to provide refugia for fish during low water levels.

Freshwater Marsh: Just above the aquatic zone and often inundated to a depth of 1 ft by high water, the marsh will be a mix of perennial marsh dominated by tules and cattails and seasonal marsh, dominated by sedges and rushes.

Central Coast Riparian Scrub: This is relatively thick low woodland, dominated by arroyo willow; this is the dominant association on the edges of Calera Creek.

Valley Wild Rye Grassland: On slightly higher floodplain soils, creeping wild rye (*Leymus triticoides*) forms a somewhat monotypic stand but is well-suited to occasional inundation and providing stable soil conditions.

Coastal Terrace Prairie: On the low hillocks in the floodplain, moist grassland dominated by grasses such as Pacific reed grass (*Calamagrostis nutkaensis*) will be planted. This will likely transition to a needlegrass grassland on the south-facing slopes, dominated by purple needle grass (*Nasella pulchra*); this species was seeded or planted on the edge of the bank site in the past and has done very well.

Coast Live Oak Woodland: The tops of the hillocks will be planted with coast live oaks and wax myrtles as well as typical understory species.

See the attached perspective for a preliminary restoration plan; View 4 shows an example from one of the reference sites. Water will be drawn from Calera Creek via twin culverts to create a central, broad channel flowing through the site. The channel will have deep and shallow water habitats that are relatively broad and bordered or interspersed with marsh and upland habitats.

View 4. Pismo Marsh in the southern central coast, an example of the marsh interior.

B. Vegetation

Non-native vegetation will be removed from the site and an intensive management plant implemented to prevent the reestablishment of invasive species. Native species will be planted or seeded throughout the Bank site. Wetland and riparian habitats at Mori Point and along the Calera Creek corridor have been used as reference sites to determine appropriate species composition. The Flora noted above have also been used.

The deep and shallow waters areas will remain free of vegetation. Patches of perennial marsh will be planted in open, sunny areas that have adequate water circulation to ensure mosquito control is not required. These will be dominated by tules and chairmakers bulrush. Seasonal marsh will occur as a thin strip along the banks of the shallow water or in open areas and will be dominated by slough sedge (*Carex obnupta*), Santa Barbara sedge (*Carex barbarae*), Baltic rush (*Juncus balticus*) and related species. Willows will be planted alongside the seasonal marsh and the main channel to create riparian woodlands that will shade the shallow and deep-water habitats to keep these open. This is a pattern noticeable along Calera Creek now, in locations where CRLF appear to do well. Upland from the willow woodlands will be the mesic grassland dominated by creeping wild rye. Further upland will be woodlands dominated by wax myrtle, dogwood and an occasional coast live oak.

C. Species

The Bank site will be designed to host populations of CRLF and SFGS. CRLF already occur on the Quarry property and are highly likely to utilize the bank site for breeding and foraging. SFGS have not been recorded on the Quarry Property since 1989, but they are known to occur on adjacent lands and are considered a highly mobile species. As the population of SFGS recovers at Mori Point, SFGS may migrate south to the Bank site.

D. Public Access

A public access trail will be built along the Bank's north, west and south boundaries (all except the Highway side) and will parallel the CCMP Trail for a good part of that route. There will be no trail along the Bank's eastern boundary due to the proximity to Highway 1.

The trail will be unpaved and similar to the trails found at Mori Point (View 5).

View 5. Public access trail at Mori Point; trail along the bank edge will be similar. Bank would be to the left in this view.

The trail is proposed to include an overlook platform on the south edge that provides views into the bank site and educational information about the sites history and the animals found within the bank site.

E. Reference Sites

Numerous reference sites have been assessed to date for this plan, including Mori Point and Calera Creek locally. Regionally, Pescadero Marsh and Pismo Marsh have been sampled to provide for additional information.

As well, Zentner and Zentner has built a number of floodplain wetlands similar to that proposed here over the past almost 30 years.

View 6 shows a current aerial photo of the American Canyon Creek floodplain wetland in American Canyon, Napa County. This wetland is directly adjacent to the tidal marshes of the Napa River and was constructed in 2007.

View 6. American Canyon creek floodplain wetlands. Creek is flowing from right (east) to let (west) across center of view. Restored floodplain wetlands lie above (north) of the creek.

View 7 shows a current areal of a section of the Green Valley creek floodplain restoration project. This was constructed in 2004 and consists of a broad floodplain restored adjacent to Green Valley creek.

View 7. The uppermost reach of the restored Green Valley creek. The "natural" creek flows in from the top (north) of the view (the creek had been channelized by local farmers). Hennessey creek joins Green Valley creek in the view center. The restored floodplain covers the lower (southwestern) portion of the view and is dominated by creeping wild rye.

III. Bank Values

A. Connectivity

The Bank site is physically connected and adjacent to large areas of land classified as other open space, parks and accessible open space, and/or vacant/undeveloped.

Regionally, the Bank site is the westernmost extension of a vast amount of open space that includes (from west to east) Calera Creek and the bank site, the Sweeney Ridge lands of the GGNRA, and then the entire range of the Coast Mountains and adjoining open lands from Pacifica south to Monterey. Similarly, to the north, the Bank site connects through preserved open space to the GGNRA's Mori Point, then Sharp Park and Laguna Salada, which connect to the open space of Milagra Ridge. Of course, to the west, the bank site connects through Calera Creek to the ocean.

Locally, east of the Bank site is Highway 1 and several isolated commercial properties. Beyond these and directly adjacent to the highway (and, therefore, the bank site) are private open lands. These are coastal hillsides with a diverse mix of grasslands, shrublands and woodlands. The open lands trend to the southeast where it merges with Sweeney Ridge, a 1,200-acre open space area owned and managed by the GGNRA. The open space continues east and north, eventually connecting with other open space to the east and south and the Sharp Park lands to the north (see below for more detail).

North of the Bank is open space owned by the City of Pacifica. This includes a 5.1-acre parcel that the City has deeded to CalTrans. Cal Trans has stated that this parcel will be preserved as open space as mitigation for potential impacts for future CalTrans projects. This open space connects Calera Creek, known to host CRLF, with the GGNRA's Mori Point to the north, which hosts CRLF and SFGS. Mori Point also contains perennial and seasonal wetlands as well as a diversity of adjoining upland habitats. The low saddle between the bank site and Mori Point provides a clear and unobstructed corridor for wildlife to move between the two. In 1989 and 1990 a study observed SFGS near and on this ridge (Barry 2006). Additionally, Swain Biological trapped a coast garter snake at the bottom and later at the top of the ridge during surveys for SFGS in 2007. These observations combined with the highly mobile nature of SFGS imply movement of the species between the two areas (Swain 2007).

Directly north of Mori Point lies Sharp Park, a 410-acre open space that contains coastal wetlands, coastal scrub, forest, and grassland habitats as well as a golf course. Laguna Salada and Horsestable Pond, located in the western part of the park, are wetlands that support CRLF and SFGS. Sharp Park extends from the Pacific Ocean to the east where it then connects with the Sweeny Ridge lands owned by GGNRA as noted above.

In short, the creation of the Bank will help expand and increase the connectivity of the existing open spaces in the area.

B. Mitigation Banks

The following is taken directly from the US EPA's mitigation banking factsheet with minor editing for readability.

A mitigation bank is a wetland, stream, or other resource area that has been restored, established, enhanced, or preserved for the purpose of providing compensation for unavoidable impacts to other resources, as permitted under Section 404 of the Federal Clean Water Act (CWA), Sections 7 or 10 of the Federal Endangered Species Act (ESA) or a similar state or local wetland regulation. A mitigation bank can be created when a government agency, corporation, nonprofit organization, or other entity undertakes these activities under a formal agreement with a regulatory agency. Mitigation banks have four distinct components:

- The bank site: the physical acreage restored, established, enhanced, or preserved;
- The bank instrument: the formal agreement between the bank owners and regulators establishing liability, performance standards, management and monitoring requirements, and the terms of bank credit approval;
- The Interagency Review Team (IRT): the interagency team that provides regulatory review, approval, and oversight of the bank; and
- The service area: the geographic area in which permitted impacts can be compensated for at a given bank.

The value of a bank is defined in "compensatory mitigation credits." A bank's instrument identifies the number of credits available for sale and requires the use of ecological assessment techniques to certify that those credits provide the required ecological functions. Mitigation banks are a form of "third-party" compensatory mitigation, in which the responsibility for compensatory mitigation implementation and success is assumed by a party other than the permittee.

Guidance from U.S. Fish and Wildlife Service (FWS) in 1983 supported the establishment of the first banks, most of which were sites of advanced consolidated compensatory mitigation for impacts planned by state Departments of Transportation or other state agencies. The subsequent expansion of mitigation banking was catalyzed by the release of several important reports that challenged the effectiveness of compensatory mitigation practices under the Section 404 program, particularly on-site and single-project off-site compensatory mitigation. EPA, the Corps, and FWS, the primary federal agencies responsible for implementing the federal Section 404 and ESA programs, began to view banking as a way of addressing these shortcomings of mitigation policy and in response issued interim Banking Guidance in 1993. Mitigation banking programs were well-positioned to address many of these issues by providing for easier monitoring, long-term stewardship, and unambiguous transfer of liability for assuring mitigation success from the permittee to the banker. The promise of regulatory simplification for permit applicants that use a bank to satisfy permit conditions has also spurred activity in mitigation banking. In addition, language supporting the development of banking was included in the White House Office of Environmental

Policy's 1993 Federal Wetlands Plan as well as in the Intermodal Surface Transportation Equity Act of 1993.

In November 1995, EPA, the Corps, FWS, National Oceanic and Atmospheric Administration's National Marine Fisheries Service, and U.S. Department of Agriculture's Natural Resources Conservation Service released the final Federal Guidance on the Establishment, Use, and Operation of Mitigation Banks. The guidance gave state agencies, local governments, and the private sector the regulatory certainty and procedural framework they needed to move forward on seeking approval to operate mitigation banks. Following its issuance, banks proliferated across the country and became a mainstream compensatory mitigation option. Since 1998, conferences have been held annually devoted to sharing and encouraging advances in mitigation banking policy and practice.

In response to comprehensive and independent critiques of the effectiveness of compensatory mitigation at offsetting impacts to wetlands and other aquatic resources under Section 404, EPA, the Corps, and the Departments of Agriculture, Commerce, Interior, and Transportation released the National Wetlands Mitigation Action Plan on December 26, 2002. The Plan includes 17 action items designed to improve the ecological performance and results of all forms of compensatory mitigation, including banking. Approximately half of these 17 action items have been implemented while the remaining items are currently under development.

In 2004, the Society of Wetland Scientists released a position paper describing mitigation banking as a sound mechanism which can improve compensatory mitigation success and contribute to the goal of no net loss of wetlands and other aquatic resources. The Water Resources Development Act (WRDA) of 2007 identifies mitigation banking as the preferred mechanism for offsetting unavoidable wetland impacts associated with Corps Civil Works projects. Section 2036 of the Act states that "In carrying out a water resources project that involves wetlands mitigation and that has impacts that occur within the service area of a mitigation bank, the Secretary [of the Army], where appropriate, shall first consider the use of the mitigation bank if the bank contains sufficient available credits to offset the impact."

In 2008, EPA and the Corps issued revised regulations governing compensatory mitigation. These regulations established equivalent and effective standards for all three compensatory mitigation mechanisms: mitigation banks, in-lieu fee mitigation, and permittee-responsible mitigation. Since mitigation banking is the most reliable form of compensatory mitigation, these regulations establish a preference for the use of banks when appropriate credits are available.

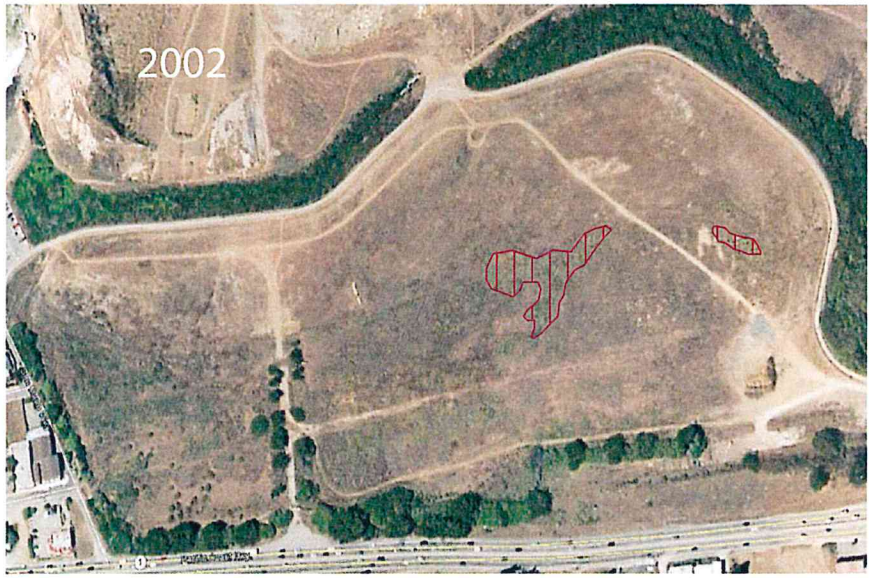
In 1992 there were only 46 banks permitted, almost all of which were publicly-sponsored single-user banks, in which entities such as state agencies or large corporations stockpile wetland credits for their own later use. The first entrepreneurial banks to sell credits to any permittee were developed between 1991 and 1994. By the end of 2001, the Environmental Law Institute (ELI) had identified approximately 219 approved wetland mitigation banks nationwide, more than 130 of which were entrepreneurial banks, and 22 of which had sold out of credits. This represented a 376% increase in the number of banks over 10 years, nearly all of which occurred following the release of the 1995 Banking Guidance. An estimated

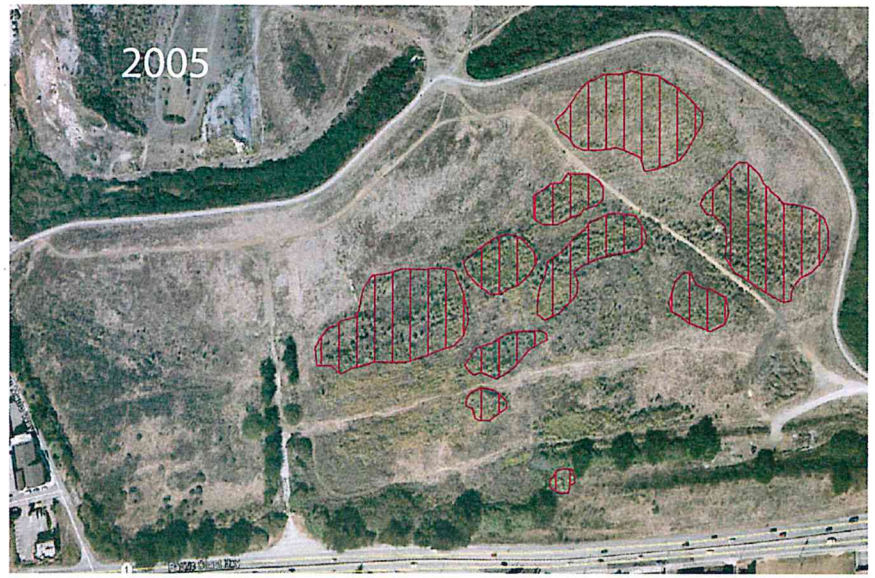
139,000 acres were included in the 219 approved banks that provide a combination of wetland restoration, creation, enhancement, and/or preservation. ELI also identified an additional 95 banks under review with approval pending as of December 2001. The 95 banks under review at that time included an additional 8,000 acres. ELI also listed 40 approved "umbrella banks" (i.e., banks developing multiple compensation sites under a single instrument) with approximately 26,848 acres of mitigation wetlands approved at 308 individual sites. A 2005 inventory by the Corps' Institute for Water Resources estimates a total of 450 approved mitigation banks (59 of which have sold out of credits) and an additional 198 banks in the proposal stage. Since this survey counted umbrella banks as a single bank, the number of bank sites is likely considerably larger than this estimate. As of August, 2013, there were over 1,800 bank sites loaded into the RIBITS (Regulatory In-lieu fee and Bank Information Tracking System) database.

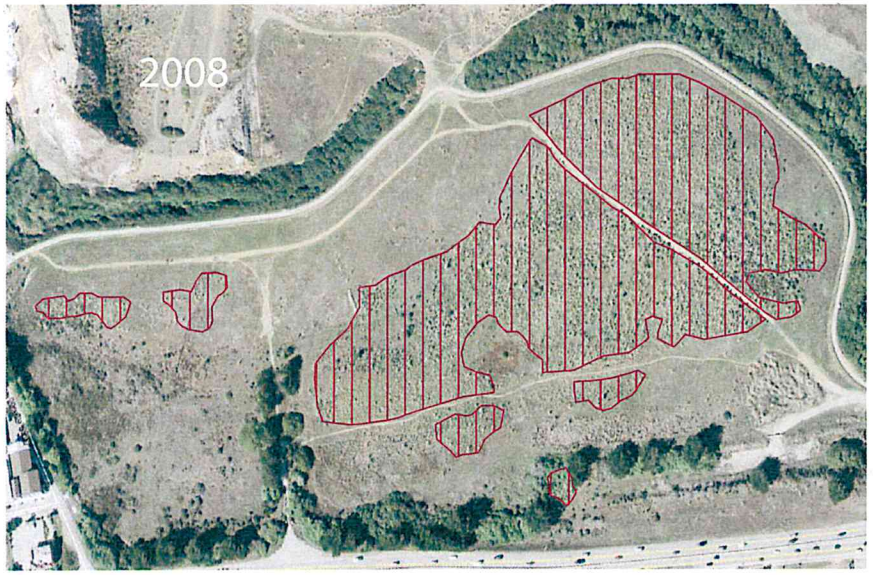
Mitigation banking has a number of advantages over traditional permittee-responsible compensatory mitigation because of the ability of mitigation banking programs to:

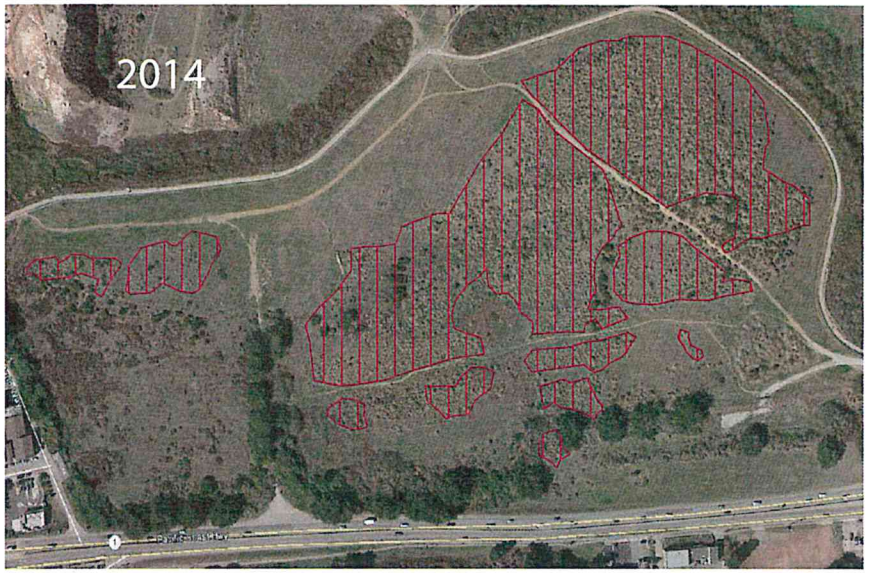
- Reduce uncertainty over whether the compensatory mitigation will be successful in offsetting project impacts;
- Assemble and apply extensive financial resources, planning, and scientific expertise not always available to many permittee-responsible compensatory mitigation proposals;
- Reduce permit processing times and provide more cost-effective compensatory mitigation opportunities; and
- Enable the efficient use of limited agency resources in the review and compliance monitoring of compensatory mitigation projects because of consolidation.

In its 2001 critique of compensatory mitigation, the National Research Council (NRC) concluded that third-party compensatory mitigation such as mitigation banks offer advantages over permittee-responsible mitigation in the fulfillment of regulatory goals. One such advantage identified by NRC is the consensus-driven, interagency review process used to approve banks. The 2008 Corps/EPA compensatory mitigation regulations codify the consensus-based interagency review team approach endorsed by the NRC. NRC also noted that banks are more likely than traditional compensatory mitigation to achieve desired long-term outcomes and to create mitigation sites that are protected in perpetuity by organizations dedicated to resource conservation.









ZENTNER and ZENTNER
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FIGURE 4
PAMPAS
GRASS MAPPING

REVISIONS:	BY:

PACIFICA QUARRY
PACIFICA, SAN MATEO COUNTY

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NOT TO SCALE

SOURCE:
GOOGLE EARTH

FILE: D:\Graphics\PROJECTS\1000-1100\1023 Pacifica Quarry\Adobe

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