FNC

San Francisco BayKeeper and Friends of Novato Creek
Comments on
Draft Final Record of Decision/Remedial Action Plan, Inboard Area Sites
Army BRAC Property, Hamilton Army Airfield
by CH2MHILL for US Army Corps of Engineers

Mr. Edward Keller
US Army Forces Command
BRAC Environmental Coordinator
1 Burma Road
Novato, CA 94949

October 15, 2001

Dear Mr. Keller,

San Francisco BayKeeper and Friends of Novato Creek appreciate the opportunity to comment on the Draft Final Record of Decision/Remedial Action Plan, Inboard Area Site, for the Wetlands Project. As the ROD/RAP decision-making process is based on the FFS information and findings, we have included references and questions originally brought up regarding the Focused Feasibility Study, in our specific comments on the ROD/RAP. We feel it is appropriate for all questions and concerns be addressed in the ROD/RAP public comment period.

San Francisco BayKeeper is a project of WaterKeepers Northern California, an 501c3 non-profit environmental group specializing in water quality advocacy throughout Northern California. Projects include water quality monitoring, regulatory oversight, illegal discharges of contaminants, and stormwater and pesticide issues.

Friends of Novato Creek is a not-for-profit, environmental advocacy group focusing local watershed issues in Novato, CA. Current projects include creek, pond, and estuary health and monitoring, endangered species habitat protection, and watershed contamination of pollutants.

Five major topics of discussion have emerged from our review of the ROD/RAP:

1. *The Remedial Alterntive 2: Institutional Controls* is being used for engineered solutions for remediation problems. A fifth category should be inserted – Cover and Fill – as an engineered solution to maintaining a 3 ft cover between toxics and receptors.
2. There is photo documentation from a recent, preliminary investigation indicating that there has been *Historic Flooding of the Hamilton Air Force Base property* and

WaterKeepers Northern California
San Francisco BayKeeper ~ DeltaKeeper ~ Petaluma RiverKeeper
Marin Contact: PO Box 50, San Geronimo, CA 94963 Ph: 415 488-9341 Fax: 415 488-0262
E-mail: Elena@sfbaykeeper.org Website: www.waterkeepers.org

adjacent parcels. This raises serious fate and transport issues regarding toxic contamination on HAFB and neighboring properties.

3. *Basewide DDT's contamination* has always been a critical issue, but in light of the Historic Flooding evidence, and channelization from the Wetlands Project Design, it has become even more of an increased concern.
4. *Groundwater issues are still not being dealt with on a basewide level.* No comprehensive monitoring program is in place, nor has a data map for all of the groundwater data gathered so far, been produced. Information presented contains contradictory statements between the ROD/RAP and the FFS regarding groundwater contamination.
5. *The Storm Drains under the airfield are still in place, and contain contaminants of concern.* This issue of concern has not been addressed in any document and directly relates to the wetlands conversion plan and final design.

Overall, the presentation of information, analysis, and conclusions in the ROD/RAP were incomplete, with no easy way for the reader to follow the decision-making process. The reader is required to find and cross reference multiple sections, as well as being referred to different, separate documents. And even then, the references provided often do not offer the corresponding data necessary for informed public participation

A. ALTERNATIVE 2: INSTITUTIONAL CONTROLS

Section ES – and throughout the document:

The use and categorization of sites under "Institutional Controls' (IC's), as presented in the ROD/RAP is inconsistent with it's own definition. It is being used not only as a non-engineered solution (i.e. legal restrictions, barriers, preventative measures), but as an engineered solution, as in "cover and fill". In this manner IC's are being used as a remediation, which is not in accord with the given definition.

The definition of Institutional Controls reads - "Non-engineered, legal measures that limit exposure to hazardous substances by restricting land and or water use," yet the following paragraphs 5 and 6 are in direct contradiction to the definition of IC's in the paragraphs above. "Institutional Controls would establish performance criteria requiring final design for wetland construction to provide for placement and monitoring of cover material in specific areas and/or restrict excavation and erosion in specified areas." This last statement indicates that the IC's are now being used for engineered, remedial solutions. The manipulation of the IC's category is not appropriate, and is stretching and blurring lines between Alternatives. ***Please correct this error and add the appropriate third category of Cover and Fill to the Alternatives in the ROD/RAP, also readjusting the current table configuration and determinations.***

1. Alternative 2- IC's should be kept to non-engineered solutions to avoid confusion.
2. A separate control Alternative should be created specifically for the "Cover and Fill" solution as it is being so widely used on the wetlands project site, and does not fit any other Alternative category. Regional Board Criteria for Cover and Foundation should be used. New Alternative 3 would become Cover and Fill, and Off site excavation and removal would become Alternative 4, and On site excavation and storage would become Alternative 5.

3. All sites that use Cover and Fill (new Alternative 3), should be re-categorized under the new definition, and should be removed from under Alternative 2 – IC's.

Re-Evaluation of Table 6-1: SELECTED REMEDIAL ALTERNATIVES

Remedial Alternatives:

Alternative 1: No Further Action
Alternative 2: Institutional Controls
Alternative 3: Cover and Fill
Alternative 4: Excavation and Off-Site Removal
Alternative 5: Excavation and On-Site Disposal

Process for re-evaluation:

Cross referencing each Wetland project site with the following documents, provided a distinctly different result from the Army's proposed Remedial Action designations in the ROD/RAP.

1. Final Feasibility Study
2. ROD/RAP Sections 2, 3, 4, and 5.
3. DTSC FFS comments, Figure E – "Predicted Long-Term Potential Scour (and Depth of Cover) into (or above) Existing Ground Surface elevation, Complete Fill Alternative."
4. Overlay of site map for BRAC parcel.
5. Data maps of toxics by site and contaminant.

Assertions:

1. A 5th Remedial Alternative needs to be added: Re-named as Alternative 3: Cover and Fill (an engineered solution). (Excavation and Off-Site disposal becomes Alternative 4, etc.)
2. Contaminated sites ALREADY under 3 feet of cover could qualify for the use of Alternative 2: Institutional Controls.
3. Contaminated sites needing any ADDITIONAL cover to comply with the 3 foot Cover criteria would require an engineered solution – Alternative 3: Cover and Fill or Alternative 4: Excavation and Off-site Removal.
4. If any contamination above criteria is found on a site, Alternative 1: No Further Action is NOT an appropriate designation.
5. There is no official documentation in the Administrative Record that demonstrates "clean fill" was used on any Interim Remedial Actions performed on the BRAC property sites. Unless documentation is produced, it must be assumed, due to basewide historic flooding and DDT's contamination, that any on-site dirt used to backfill excavations is contaminated. Therefore, sites that have undergone any Remediation work including on-site fill, must be considered contaminated at "zero - below ground surface".

Examples: Use of the above Reference documents and Assertions to re-evaluate Wetlands sites.

Example A:

PDD Spoils Pile G - Army determination of Alternative 2: Institutional Controls

- SFBK/FNC reevaluation to Alternative 3: Cover and Fill

Spoils Pile G has COC's above criteria at 1ft bgs in a 1ft scour zone. Because an additional 1ft of material would need to be added, an engineered solution must be used to achieve the 3 ft cover criteria.

Example B:

Revetment 14 - Army determination of Alternative 2: Institutional Controls

- SFBK/FNC reevaluation to Alternative 4: Excavation & Off-site Removal

COC's above criteria are beneath the concrete pad in a –2 scour zone. It is not feasible to use Alternative 3: Cover and Fill, due to the high scour area, which could undermine the concrete pad and potentially expose it's underlying contaminants. Alternative 4: Excavation and Off-site Removal is the appropriate choice.

Example C:

Building 26 – Army determination of Alternative 2: Institutional Controls

- SFBK/FNC reevaluation to Alternative 4: Excavation & Off-site Removal

COC's are 5 ft bgs in a –2 scour zone, which meets the 3ft cover criteria and qualifies for Alternative 2: IC's…**BUT the site underwent Remedial Action which used On-site fill.** This places the contamination level at the surface (0 bgs), and therefore requires an engineered solution. Being in a high scour zone, Alternative 3: Cover and Fill does not assure proper protection and compliance with the 3 ft cover criteria. The appropriate remediation choice would be Alternative 4: Excavation and Off-Site removal.

See attached SFBK/FNC Re-Evaluated Table 6-1

B. HISTORIC FLOODING

Through preliminary research of aerial photos and local residents' archives, Friends of Novato Creek and SF BayKeeper have obtained photographic evidence from past years, showing flooding of the BRAC wetlands area, and adjacent properties. These storm events include various levee breaks and overflows into San Pablo Bay, marshes and other bayfront properties. Images from a 1998 storm show one continuous body of water (looking across toward the runway) from Bel Marin Keys subdivision through the agricultural lands and beyond to the bay. Photos of the Airfield runway were obtained during flood conditions from the winter of 2000-2001, which as we know was a very dry storm season.

Although preliminary (the investigation is just beginning), this new photographic evidence brings up very serious Fate and Transport issues regarding the very real potential for widespread distribution of toxics from Hamilton to neighboring properties and waterways. ***Please conduct a Fate and Transport study taking into account the new information, and add to ROD/RAP.***

Of great concern is the storage of known contaminated Remediation Soils stored on the runway, and PDD Spoils Piles on the wetlands parcel. With what seems to be historic flooding of the lowlands and bayfront parcels, the probability that there was erosion and transportation of toxic materials is significant. This could account for the widespread contamination of CERCLA substances (i.e. DDT's as discussed in Section 2.2).

In light of this new information, a study should be undertaken to analyze and compare Remediation Soil Storage Piles and previously categorized Spoils Piles volumes from

original placement information to their current volume. This study should identify any difference in volume and perhaps confirmation test perimeters, to determine the extent of material lost, and possible fate and transport routes. ***Please conduct the aforementioned study and add to ROD/RAP.***

1. According to the USACE's Stormwater Pollution Prevention Plan, "Currently there are an estimated 90,000 to 100,000 cubic yards of soil staged in various-sized stockpiles on the former runway that have been generated during previous remediation projects under both the BRAC and GSA programs at HAAF." No specific dates are provided, yet the GSA phase I parcel was sold to New Hamilton Partnership in June 1996, therefore any remediation would have taken place prior to that date. GSA phase II parcels completed "…remediation efforts…were completed during the summer months of 1998. The lowlands areas of Hamilton have experienced repeated flooding during this time period. Soil sealers applied to these piles would not retain their effectiveness under these circumstances.

2. One example of the above problem and necessary new study, is Spoils Pile F. What was once a clearly defined pile containing hazardous substances, has become unrecognizable, so much so that it's location has been lost. Where did the material go, and how many cubic yards were displaced or dispersed? Any possible remediation of Spoils Pile F must now be contemplated on a much broader scale, and becomes more complicated due to new variables.

3. According to the FFS, a number of the interim removals that were done by IT were not completed, and contamination remains. The secondary samples were taken only of the "chemicals of interest based on the previous sampling". It seems that Chemicals of Concern were assumed, without a complete "historical" look at what each site's problems were, and could still be. ***Please conduct a review of all previous contaminants including possible re-testing of these sites for a broader spectrum for potential contaminants for use in a comprehensive groundwater study – include in ROD/RAP.***

<u>ONGOING FLOOD INVESTIGATION: TIME LINE.</u>

1910 *[Novato History Society – photo of significant floods of Novato Creek area]*
1923 *[Novato History Society – photo of significant floods of Novato Creek area]*
1925 *[Novato History Society – photo of significant floods of Novato Creek area]*
1938 *[Novato History Society – photo of significant floods of Novato Creek area]*
1955 *[Novato History Society – photo of significant floods of Novato Creek area]*
1973- *(Marin County aerial photos #1510-1-393,395,397 At least five levee breaches along HAFB, BMK 5 and north, into San Pablo Bay)*
1976 - *(Marin County aerial photos - BMK Industrial Park high water in Pacheco pond and tributaries)*
1982 *[Novato History Society – photo of significant floods of Novato Creek area]*
1983 *[Novato History Society – photo of significant floods of Novato Creek area]*
1984- (*Marin County aerial photos 3/28/84 3954-12-14, 394-13-12-14- Shows Pacheco Creek Overflowing its banks into Landfill 26 area, Ammo Hill, and beyond to BRAC parcel. Tributaries flowing through and around lowland areas are distinct and running high. Pacheco Pond is flooded and overflowing in areas.)*

1985 1 (*Marin County aerial photos 1/31/85 27-14,15 Pacheco Creek experiencing flooding to LF 26, clearly defined streams and runoff channels throughout the lowland areas.)*
2 {Friends of Novato Creek archives – significant flooding in Pacheco Pond and Levee areas}
1986 *[Novato History Society – photo of significant floods of Novato Creek area]*
1987 (*Marin County aerial photos – not yet reviewed*)
1988 (*Marin County aerial photos - not yet reviewed*)
1989 (*Marin County aerial photos – not yet reviewed*)
1998 1 *{Friends of Novato Creek archives – significant flooding in all areas, one waterbody from Bel Marin Keys Subdivision, BMK5, Pacheco Pond and Hamilton Runway. Levee areas topped and breached. FEMA claims have additional support documentation.}*
2 [Novato History Society – photo of significant floods of Novato Creek area]
2001 *{Friends of Novato Creek archives – even minor rainfall produced flooding on airfield. Pacheco Creek overtopped bank.}*

C. BASEWIDE DDT'S:

This subject should be addressed in it's own section, and not scattered throughout the ROD/RAP as incidental, separate sites. As presented, the discussion of basewide DDT's problem is disjointed and impossible for the reader follow, no less to gain an overview of the situation. Discussion, data, and analysis should be compiled and presented in one chapter in a comprehensive and understandable manner. There is no analysis of what potential Cumulative Impacts of the basewide DDT's contamination could be on various receptors; wildlife, waterways, or humans. The Foster Wheeler February 2000 report shows DDT's contamination, yet no further action on the matter has been taken. The full range and scope of pesticide monitoring and sampling is not defined in the FFS or ROD/RAP. ***Please expand the scope of discussion regarding basewide contamination of DDT's and consolidate, make the DDT's discussion understandable, and include with the supporting data and analysis in one section of the ROD/RAP.***

1. Section 2.2 – Additional Environmental Considerations, mentions wetlands DDT's contamination, and states that "Based on sample results, the DDT's appear to be limited to the surface soil (top 12 inches)." This statement is incorrect and contradicts statements made in previous pages. In a number of other RI evaluations, DDT's are shown to be in the groundwater and down to 11 feet in depth from the surface, in the case of the FSTP site. This section is misleading, contains erroneous information and should be corrected to be consistent with all presented data in the ROD/RAP. No maps or data are provided to support or indicate why the DDT's are of concern, does not show which sites are contaminated and their levels - no references are cited. ***Please demonstrate the extent of the contamination, show where it is, and justify what is being done, or not, to address the contamination.***
2. While there were multiple mentions of DDT's found in various groundwater sampling events on individual sites (see section 2 –site by site Remedial Investigation), above clean up levels, there was no attempt made to consolidate

information and determine the Cumulative Impacts of the contamination. ***Please review data, compile a data map and include a CI of DDT's in the ROD/RAP.***

3. The DDT's data map is missing from the ROD/RAP. This data map originally was shown in the Foster/Wheeler February 2000 report and draft FS May 2001. ***Please include data map to ROD/RAP.***
4. Identifying the Historic flooding of the airbase and surrounding areas, and subsequent soil erosion, has provided a likely transport mechanism for basewide DDT's contamination instead of "Mosquito Abatement activities" (a contributing factor). Considering this Historic flooding, and the "melting" and outright disappearance of spoils/soils piles, an analysis of Cumulative Impacts of DDT's on and off HAFB appears long overdue. ***Please conduct a study to determine fate and transport potentials, and CI study of DDT's on and off base – include in ROD/RAP***.
5. In the supporting documentation, there was no discussion of the effect of the base's contamination of DDT's on bird reproduction, and eggshell thinning. ***Please provide information as to what DDT's level on Hamilton that could potentially damage bird reproduction and related subjects – add to ROD/RAP.***

D. GROUNDWATER ISSUES:

Considering all the documentation of groundwater contamination in the Remedial Investigation section, a data map should be created showing contamination and extent on the wetlands parcel. Using all the groundwater data from each well should provide a comprehensive view of potential contamination problems, where issues need to be addressed, and where a comprehensive testing plan is needed. ***Please conduct study, form data map, and an understanding of Fate and Transport issues also identifying Storm Drains, geologic factors, and preferred pathways. Include in ROD/RAP.***

The Cumulative Impacts of groundwater contamination on and off HAFB should be considered a priority, before creation of the wetlands occurs. Items such as storm drains, historic flooding, and hydro-geologic effects of flooding the wetlands should be evaluated as a part of this CI study. ***Please conduct studies suggested and add to ROD/RAP***.

1. Hydro-geologic issues on the entire base, including affected adjacent parcels such as Landfill 26, Greystone homes subdivision, POL hill JP-4 contamination of the groundwater, and other potentially affected sites, need to be studied as a part of the ROD/RAP process. The hydraulic pressure of cover and fill associated with the wetlands, impact on adjacent parcels, and groundwater contamination has not been discussed anywhere in this ROD/RAP, or in the FFS. ***Please a conduct comprehensive hydro-geologic study as outlined above, and include in the ROD/RAP***.
2. The quality of storm water to be pumped into the wetlands has not been discussed. ***Please include analysis in the ROD/RAP.***
3. A statement is made on Page 2-3: "During the FFS, data was reviewed from groundwater wells located in the vicinity of the Inboard Area sites where potential scour within channels may occur during the development and maturation of the wetland. Their review concluded that groundwater does not pose a threat to surface water or aquatic receptors." This fails to take into account Cumulative Impacts and Groundwater contamination throughout the rest of the wetlands parcel. No assistance

is provided to the reader to allow an evaluation of the generalized statement. No supporting documentation or data maps are referred to or presented, and no water quality criteria is discussed. The above statement also does not address the fact that obviously, the groundwater is indeed contaminated. ***Please provide supporting information to justify the broad, general statement made above. Please conduct a new, thorough groundwater study to evaluate the current status of the groundwater for all COC's - add to ROD/RAP.***

4. Not all sites have been tested for all COC's, so there are significant data gaps in the groundwater testing. ***Please add to the comprehensive groundwater testing program requested earlier in this document, and evaluate the potential data gaps – include in ROD/RAP.***
5. Seasonal fluctuations in groundwater levels appear to not have been evaluated as to the potential for leaching contaminants more or less during the sampling times, and the potential inconsistencies produced in test results. ***Re-evaluate data and provide groundwater contour map - include in ROD/RAP.***
6. Monitoring reports for ecological receptors from 1993 and 1994 of airfields sites had contamination problems at the lab, yet were used to determine that petroleum products, VOC's, etc "…were not present in the groundwater throughout the airfield sites". This is disturbing, for such an important issue. The only subsequent testing seems to have been in 1994 and 95, and were only for metals and background levels of inorganic compounds. Complete testing of the groundwater for four consecutive quarters should be done to show that there will be no detrimental ground water discharge/impacts to San Pablo Bay. ***Please conduct the recommended monitoring and present results/discussion in a logical fashion indicating the extent of the impacts and add to ROD/RAP.***
7. Seeking justification that the groundwater beneath Hamilton Airfield is not beneficial for human use, the Exec Summary quotes a 1991 RWQCB letter to the Army stating that the "…Army need not further assess groundwater along the onshore fuel line due to the low permeability of soils." The Regional Board's Basin Plan states the beneficial uses of our waterways, and protection levels for same. It seems more to the point whether the Water Quality criteria for bays and estuaries is being met. These are the ARAR's that should form the basis for groundwater beneficial uses at the Hamilton site. ***Please include and analyze this topic in the ROD/RAP.***
8. ***Please include POL Hill JP-4 contamination and it's plumes in the BRAC parcel assessment.*** Dissolved methane has been identified in the groundwater around this parcel. ***Please indicate how these contaminates might affect the wetlands project.***
9. Please update information and testing for Landfill 23 and the surrounding areas with investigations and groundwater monitoring. ***Please include in the ROD/RAP***.
10. The Northwest Runway Area should be investigated and groundwater monitoring should be of a more permanent nature. ***Please determine and evaluate the cause of the sporadic readings of contaminants in the groundwater***.

Appendix D: Groundwater FFS

Two main problems that exist in the FFS Groundwater section. The one of primary concern is that the site specific data and the ambient data are never compared to the Fresh water criteria from the SF Bay Basin Plan, or the Saltwater criteria from the Ocean Plan.

And two, establishing ambient/background levels reliably, on such a contaminated site with the surrounding areas also being possibly contaminated, seems to be difficult at best.

It is well documented that there has been repeated flooding of the entire runway areas, landfill 26, Bel Marin Keyes marshes, Pacheco Pond and baylands areas, so the adjacent parcels might contain the same or similar background contamination levels. This may present problems for accurate determination of ambient levels, and not yield a true reading. *Note: According to the CERFA report, there was Hamilton military interest on property west of Ammo Hill - the original AFB footprint was larger than it is currently, and possibly encompassed what is now the industrial park, Pacheco Pond and parts of the adjacent wetlands.*

1. Site specific data and the ambient data were not compared to the Fresh water criteria from the SF Bay Basin Plan, or the Saltwater criteria from the Ocean Plan. Doing this comparison could dramatically change the contamination determination on the BRAC parcel. ***Please conduct the proper comparison, using State Fresh water and saltwater criteria, re-evaluate and analyze the BRAC parcel sites for compliance – add to ROD/RAP.***
2. Ambient/Background wells are located in areas of historic flooding, which flow across HAAF, and also in close proximity to reported contaminated sites. (1 is at North end of runway by possible Foley landfill, remaining 4 are on South end of revetment area –2 on either side of the runway.). The usefulness of these wells are now in question. ***Please re-assess the location of these "background/ambient" wells, and determine the suitability of their use in light of the historic flooding.***
3. The groundwater section in D-11 states that: "Pesticides and PCB's were not detected in any ground water samples in which they were analyzed for." This statement does not elaborate or give any information as to what was analyzed for or where. ***Please provide a clear discussion of where and when pesticides and PCB's were analyzed for, and evaluate the extent of data gaps.***
4. The following two citations from the ROD/RAP directly contradict the above statement from the FFS Groundwater section regarding the lack of discovery of pesticides/PCB's: 3.1.13- ROD/RAP - PVC1-4 " 5 Voc's , 1 pesticide and 12 SVOC's were detected sporadically in GW samples collected from MW- PVC 1-4 1985-1986" and 3.1.3 "FSTP -During the RI, Gasoline, UHE, BTEX, VOC's, 1 pesticide 13 metals were detected in Groundwater samples from the former monitoring well TP-MW-101 IT 99. ***Please correct the discrepancy between the ROD/RAP and the FFS groundwater statements.***
5. In groundwater wells referenced in Appendix G, cyanide levels were above water quality criteria. ***Please provide analysis and impacts add to the ROD/RAP.***

E. STORM DRAINS & PDD:

The storm drainage system underneath the BRAC parcel has not been discussed in the ROD/RAP. Fate and transport issues of toxics, known contamination of the system, and future decommissioning of the storm drain system are critical items in the creation of the wetland project. The storm drains contain sediment contaminated with many different COC's at significant numbers above allowable levels. The erosion of the runway storage piles most likely contribute to the storm drain's contamination and re-contamination of the PDD, to

which it drains. The FSTP sewer lines are also significantly contaminated and pose another toxics transport for discharges into San Pablo Bay.

Will the addition of cover/fill collapse the drainage system while it is still in use during the interim years? How is the system to be decommissioned? Will it continue to bleed toxics while underneath the covered wetland? To where, if the PDD is filled? Many questions remain to be answered about the impacts of continuing to use this system during wetlands construction, and it's impact on the final design.

Some Specific Examples:
Section 2:
Bldg 86 – 5 storm drains tested positive for PAH's and metals.
Bldg 87 – PAH's, metals and VOC's were detected in the sediment in the storm drains.
PDD – unlined portion detected significant levels of pesticides, PCB's, metals, PAH's, dioxins and furans in the sediment.
PDD lined – it seems that only two samples of the dirt in the "cracks" were tested – they contained pesticides, herbicides, and metals; PAH's were detected in the southern sample.

1. We are very concerned about the storm drain system throughout the BRAC parcel, and its possible future role as a transport for underground toxics if left in place when the wetlands are flooded. Cracked or damaged pipes can create a vacuum to produce exfiltration from the surrounding soils and groundwater. ***Please indicate how this situation will be addressed and add to ROD/RAP***.
2. The on-base JP-4 Jet fuel lines were often routed through the storm drains. ***Please discuss any remaining contamination of soils or groundwater and impacts to the groundwater. For each of the criteria developed for the wetlands project, please indicate whether remediation efforts will meet the designated criteria***.

F. WETLAND DESIGN ISSUES:

It is difficult for the reader to comprehend the wetlands design construction without a basic design graphic. It is even more difficult for the reader to extrapolate the concepts of cover and fill criteria, channelization, and erosion, without a guide map. These issues are critical to the understanding and subsequent evaluation of the information presented in the ROD/RAP, in relation to toxics and fate and transport.

1. There is no discussion of the viability and/or safety of using three feet of cover material to secure hazardous chemicals in a wetland environment. At the very least, there should be preliminary documentation presented to support the use of 3 feet of cover and fill. ***Please add the aforementioned documentation.***
2. Please discuss and provide a contingency plan if, once flooded, the cover experiences scouring and erosion. Indicate if excavation and removal of material is to be conducted, and what will the impacts be on the surrounding wetlands and water courses. There is no technical basis for delaying development of a contingency plan, especially as the contingency plan appears to be integral to the decision. ***Please provide documentation on how a contingency plan will be implemented.*** We feel it

is important to include this discussion, as it should be a part of the original decision process. ***Please provide the aforementioned documentation and plan.***

3. The pump houses were highly contaminated, and were not completely remediated. They were not excavated along the large outfall pipes – it seems logical that the remaining contamination could travel along these pipes and into the bay. If this is the area that is to be excavated for a channel, as proposed, or flooded, ***please indicate how this unremediated site will be addressed, and the impacts of potential release of remaining contaminants will be dealt with.***
4. Given the site wide contamination, the use of interim removals using "on-base borrow material" as fill is further suspect. This is of concern since the location of this fill was not indicated, nor did it say whether this fill had been tested for contaminants. ***Please identify location/s and confirm that sampling was done prior to re-use of fill materials, and include information in ROD/RAP***.

G. AGENCY INVOLVEMENT:

1. It is not clear who will be the oversight agency for the project; the State Coastal Conservancy is listed as the project sponsor, and the USACE is listed as the project manager, yet no other agencies' roles are listed. ***Please identify, clarify, and adequately explain the roles of the other governmental agencies and their official position/involvement in the wetlands project***.
2. Also, there is no mention of the other regulatory agencies involved, and whether they have satisfied their duty under the California Environmental Quality Act regarding the wetlands project documentation approval and public process. Have all State and Federal regulatory agencies reviewed and officially approved of the ROD/RAP? ***Please indicate which agencies have responded and how, and whether they have completed their appropriate legal and public process.***
3. If an agency has complied with CEQA or other mandatory processes, then it should be included in the ROD/RAP.

H. CLEAN COVER AND FILL:

The original EIR for the project took the position that there would be NO contamination remaining on site before beginning the wetlands restoration project. The assumption was made that it would be a "clean" site.

As this is obviously now NOT the case, as evidenced by the FFS and RAP/ROD, and this assumption seems completely unfeasible, ***please explain how the process can continue without an amendment or supplement to the project EIR.***

Since the agencies are already using the Regional Board's Cover Criteria for the wetlands project, it would seem appropriate to use the Foundation Criteria, as well. Any site contamination above this level would require excavation and off-site removal. ***Please evaluate feasibility of meeting Criteria for Foundation, and insert as a sub-set of Alternative 3: Cover and Fill (as presented earlier in these comments.)***

I. GENERAL COMMENTS

1. Sections 2, 3, and 4: There was no easy way for the reader to obtain complete information on each site, as presented. The reader is required to find and read three different sections to get complete information on each site, as well as being referred to the Final Feasibility Study – a separate document. *Example: Attempting to follow the information presented regarding DDT's and basewide contamination.* ***Please amend the ROD/RAP to clarify and correct the situation***.
2. The information contained in Section 2 – Remedial Investigation, is inconsistent in the type of information offered. Some sites evaluated contain specific data on soil contamination, but offers no data or comment on the groundwater samples mentioned in the same paragraph - just that samples were taken. *Example: Bldg35/39 area - "Metals were detected in the groundwater samples from the monitoring well." No levels were mentioned, nor was it placed in context for the contamination of the site*. ***Please amend the ROD/RAP to clarify and correct the situation***.
3. Information in Section 2 – RI does not always clarify what a given statement or sample level means in relation to guidance levels or potential hazard. Example: Statements like "Surface samples were tested for PCB's; PCB's were detected." No mention of the level, or how it related to further action, if any. ***Please explain the relationships and how they were determined.***
4. Section 2 – RI often does not indicate whether the "Interim remediation" achieved removal levels of contamination to below the guidance level, or if there is contamination remaining, and at what concentration. *Example: see above #3.* ***Please expand and further explain the state of each site in regard to the above comments.***
5. Section 2 – RI frequently references confirmation samples that were taken after Interim Remediation Actions that show contamination levels above what is allowed, yet does not offer any further comment on the status of the site. *Example: Building 35/39 area – "Ten confirmation samples were collected…Pesticides (DDD, DDE, and DDT), and UHE were detected above their guidance levels…The excavation was backfilled."* ***Please indicate and explain if this is the current status of the site, and how it relates to the final remediation controls and criteria.***

Section ES:

6. This section is confusing – the basic descriptions of the Alternatives jumps right to proposed remedies, with no explanations or rationale given as to how or why the designations were assigned to each site. It appears that there is information missing which is necessary for the public to comprehend the situation. ***Please evaluate the effectiveness of each alternative for each site, and provide the basis for the choice of the alternative, including compliance with the ARAR's.***
7. Fig 2-1 – Spoils pile F is not on the map. ***Please add.***
8. Fig. B-10…PDD on Navy property is not being addressed or shown as shaded all the way to its end on the maps. ***Please correct the maps and address this portion of the PPD in the ROD/RAP***.

Section 3:

9. Section 3- constantly refers to the FFS for proposed remedial action objectives for a particular site. This practice is not informative, and does not provide adequate information for the reader to evaluate the situation under discussion. Nor does it offer

reasoning and data to support any given statement within the text. ***Please add data and information in summary form from the FFS, in the appropriate sections of the ROD/RAP.***

Foley Landfill site:

10. The Foley landfill site on the BRAC parcel has not been identified, tested, or evaluated for potential contamination. This situation should be addressed through confirmation sampling of the area in question to determine any existing environmental hazards. ***Please address this situation prior to finalizing the ROD/RAP.***

North Marin Water District Pipeline:

11. North Marin Water District has recently issued a letter regarding their intent to run a pipeline from the Ammo Hill water tank through the north end of the runway, on the BRAC parcel. ***Please address this situation in the ROD/RAP.***

Administrative Record:

12. The administrative Record appears incomplete in the ROD/RAP. ***Please show all documents, and in particular, any documents with specific analytical data supporting claims that "clean fill" was used from on-site locations, and add to ROD/RAP.***

Thank you for providing the opportunity to comment on this very important and beneficial wetlands project. We hope that our comments, suggestions, and observations are helpful and offer some clarity and insight to a complex process.

Sincerely,

Elena Belsky,
Marin Investigator, San Francisco BayKeeper
elena@sfbaykeeper.org Ph: 415 488-9341

Sue Lattanzio,
Director, Friends of Novato Creek
novatocreek@aol.com Ph: 415 883-8339

CC:
Cpt. Lance Jacobsen, Pentagon, BRAC
Loretta Barsamian, Ex Officer, RWQCB #9
Tony Landis, Office of Military Facilities, DTSC.
Donn Diebert, Unit Chief, Office of Military Facilities, DTSC.
Administrator, U.S. EPA Region 9
Ray Seid, U.S. EPA Region 9
Bill Cox, Region Fisheries Director, Dept of Fish and Game
Julie Yamamoto, Department of Fish and Game
Jerry Vincent, FUDS

Miles Croom, NOAA/NMFS
Laurie Sullivan, NOAA/NMFS
Region 1 - Director, US Fish & Wildlife Service
Carmen Thomas, US Fish & Wildlife Service
Laura Valoppi, US Fish & Wildlife Service
Will Travis, Bay Conservation and Development Commission
Naomi Feger, SF Bay RWQCB
Greg Langois, State Dept of Health Svcs.
Dennis Mishek, SF Bay RWQCB
Jim McAllister, US Army Corps of Eng.
Lance McMahan, State DTSC
Scott Nicholson, SF USACE
Pat Nicholson, Project Mgr., USACE
Ann Thomas, Marin Baylands Advocates
Tom Ganesbury, Coastal Conservancy
Susan Stompe, Marin Conservation League
Steve Goldbeck, BCDC

Attachments: 2

SFBK/FNC Re-evaluated Table 6.1
Selected flood photos

San Francisco BayKeeper/Friends of Novato Creek
Selected Remedial Alternatives
Table 6-1

ARMY ALTERNATIVE	SFBK/FNC ALTERNATIVE	SITE	SCOUR/ COVER	DESCRIPTION
	Alt. 1 – No Further Action			
1	1	Revetment18/Bldg19	0 to 1	
1	1	Bldg 84/90	2 to 5	
1	1	PDD Spoils pile C	-2 to 4	
1	1	Spoils pile H	0 to 2	
1	1	Spoils pile L	3 to 4	
1	1	Tarmac E of Outparcel A-5	0 to 1	
1	1	Revetment 5	-2 to -4	
1	1	Revetment 8	-1 to 3	
1	1	Revetment 9	1 to 4	
1	1	Revetment 10	-4 to -2	
1	1	Revetment 15	0 to 1	
1	1	Revetment 17	1 to 3	
1	1	Revetment 20	-2 to 0	
1	1	Revetment 24	-3 to –2	
1	1	Revetment 27	-3 to -1	
1	1	Revetment 28	-3 to -1	

ARMY ALTERNATIVE	SFBK/FNC ALTERNATIVE	SITE	SCOUR/ COVER	DESCRIPTION
	Alternative 2: Inst. Controls			
2	Alt. 2	PDD Spoils Pile E	3 to 4	DDT's at 1 ft bgs -
2	Alt. 2	Revetments 1	0 to 1	COC's at 0ft bgs.
2	Alt. 2	2	1 to 2	COC's at 0ft bgs.
2	Alt. 2	3	1 to 2	COC's at 0ft bgs.
2	Alt. 2	4	2 to 4	COC's at 0ft bgs.
2	Alt. 2	11	2 to 4	COC's at 0.5ft bgs.
2	Alt. 2	12	3 to 4	COC's at 0.5ft bgs
	Alternative 3: Cover & Fill			
Alt. 2	Alt. 3	D	0 to 4	DDT's and COC's at 1 ft bgs -
1	Alt. 3	East Levee Gen. pad	0 to 2	On-site fill used for remediation= COC's 0 bgs.
2	Alt 3	G	1 to 3	COC's at 1 ft bgs -
2	Alt. 3	I	1 to 4	DDT's at 1 ft bgs -
2	Alt. 3	K	0 to 3	DDT's and COC's at 1 ft bgs -
2	Alt. 3	M	1 to 2	DDT's at 1 ft bgs -
2	Alt. 3	ONSFL 54" segment	0 to 2	COC's at 0.5 ft bgs – plus 20ft of cover on either side due to lateral contamination.
2	Alt. 3	Hangar segment	0 to 4	COC's at 0.5 ft bgs – plus 20ft of cover on either side due to lateral contamination.
2	Alt. 3	Northern Segment	0 to 2	COC's at 0.5 ft bgs – plus 20ft of cover on either side due to lateral contamination.
2	Alt. 3	Revetment 16	2 to 3	COC's beneath concrete pad.
2	Alt. 3	Revetment 19	0 to 2	COC's at 0ft bgs.
1	Alt. 3	Bldg 20	0 to 1	On-site fill used for remediation= COC's 0 bgs.

ARMY ALTERNATIVE	SFBK/FNC ALTERNATIVE	SITE	SCOUR/ COVER	DESCRIPTION
	Alternative 4: Excavation & Off-site Disposal			
4	4	Bldg 41 area		
4	4	Spoils Pile F		
4	4	Revetments 6 and 7		
2	Alt. 4	J	-2 to 4	DDT's and COC's at 0.5 ft bgs – scour problem.
2	Alt. 4	FSTP	0 to 1	On-site fill used for remediation=COC's 0 bgs
2	Alt. 4	Bldg 26	-2 to –1	COC's 5ft bgs but On-site fill used for remediation=COC's 0 bgs
2	Alt. 4	Bldg 35/39 area	-4 to –3	DDT's 3ft bgs – scour problem + onsite fill used.
2	Alt. 4	Bldgs 82/87/92/94 area + bldg 86	-1 to 2	COC's at 0.5ft bgs- scour problem.
2	Alt. 4	13	-1 to 0	COC's at 0ft bgs.
	Alt. 4	14	-2 to 4	COC's beneath concrete pad – in scour area.
2	Alt. 4	21	-2 to 0	COC's beneath concrete pad – in scour area.
2	Alt. 4	22	-2 to 0	COC's beneath concrete pad – in scour area.
2	Alt. 4	23	-1 to -2	COC's at 0.5ft bgs – scour area.
2	Alt. 4	25	-3 to -2	COC's beneath concrete pad – in scour area.
2	Alt. 4	26	-3 to -2	COC's beneath concrete pad – in scour area.
	Uncategorized Sites – No data.			
2	No scour/cover	*Unlined PDD	No data	COC's 0 ft bgs
2		*PDD Spoils Pile A	No data	COC's at 1ft bgs -
2		*SP - B	No data	COC's at 0 ft bgs -
2		*N	No data	DDT's & Lead at 0 ft bgs -
2		*Northwest Runway area	No data	COC's at 0 ft bgs -

*** Unable to categorize site due to incompleteness of scour/cover data map. Northern portion of BRAC parcel and Navy site in SW area are not included in Exhibit E.**