

FY02 CNO Environmental Award  
Environmental Restoration-Installation  
*Mare Island Naval Shipyard*

This nomination is for Mare Island Naval Shipyard for the FY02 CNO Environmental Award for the category of Environmental Restoration-Installation. Mare Island Naval Shipyard is a BRAC III facility and operationally closed on April 1, 1996. Southwest Division, Naval Facilities Engineering Command in San Diego, California, performs caretaker, environmental, and closure operations under the direction of Captain Christopher Schanze as the Installation Commander and Commanding Officer of Southwest Division.



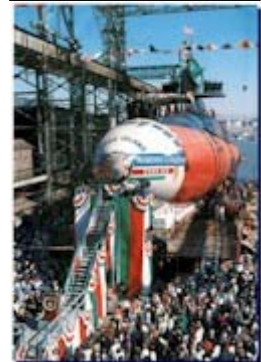
**Introduction and Background**

Mare Island was the first U.S. naval facility on the West Coast, dating back to 1854—encompassing eras of maritime evolution from sail power to nuclear propulsion. The destroyer *USS Ward* was built during World War I in a record 17½ days at Mare Island and is best known for firing the first shots of World War II for the United States. She sank a midget Japanese submarine off the entrance of Pearl Harbor during the early morning hours of December 7, 1941. During World War II, over 45,000 personnel worked on the shipyard building and servicing numerous allied warships. During its latter 40 years of service, Mare Island served as a special projects facility for the Navy’s fast attack nuclear submarine fleet and other top-secret projects. The shipyard produced 17 nuclear submarines and serviced many others. In addition to shipyard operations, ordnance manufacturing and storage was another key mission at Mare Island from 1856 to 1975.

Mare Island was also home to the first Marine Corps detachment on the West Coast and continued to maintain facilities for Marines until closure. At the time of closure listing in 1993, approximately 10,000 personnel worked at Mare Island.

Mare Island is located approximately 25 miles northeast of San Francisco on the western edge of Vallejo, California. It is approximately 3.5 miles wide and 1 mile long, comprising 5,200 acres of which nearly 2,000 acres are developed waterfront, industrial, administrative, residential and recreational areas. Remaining acreage includes wetlands and submerged lands. It sits on the eastern shores of San Pablo Bay and is adjacent to the San Pablo Bay Wildlife Refuge. The Napa River separates Mare Island from the City of Vallejo.

**Mare Island launches the nuclear submarine *USS Vallejo*, October 23, 1965**



Although within the economically diverse San Francisco Bay Area region, the City of Vallejo was essentially a shipyard town. Generation after generation worked at Mare Island. Closure had severe economic impacts on the local community. Concern about contamination at Mare Island among the community and regulatory agencies has been high. The cultural climate for public

involvement is likewise high. The Navy has maintained a Restoration Advisory Board at Mare Island since April of 1994. The RAB through its entire history has and continues to play a pivotal role in advising the Navy of community concerns, providing input, and voicing acceptance—and sometimes opposition—to remedial strategy for cleanup of the Mare Island’s many sites. The RAB conducts monthly meetings to learn and discuss a variety of restoration topics, they have attended numerous site tours, and they interface with the local community at various levels to create two-way communication with the Navy. Beyond input to the Navy, the RAB has also voiced concern and support for various projects to key stakeholders and decision-makers, including Governor Gray Davis.

The regulatory structure for the environmental restoration program is facilitated through the BRAC Cleanup Team (BCT). The BCT is composed of the US EPA, the California Department of Toxic Substances Control (DTSC), and the San Francisco Bay Regional Water Quality Control Board (RWQCB). Other agencies involved include the US Fish and Wildlife Service and the California Department of Health Services. Mare Island is a non-NPL site, however, US EPA maintains a high level of involvement in the cleanup program since they consider Mare Island to be of NPL caliber. The Navy first entered into a Federal Facility Site Remediation Agreement with DTSC and RWQCB in 1992. A revised FFSRA in 2002 is described further below.

By the beginning of 2000, Mare Island had a final reuse plan, a Final Environmental Impact Study and NEPA Record of Decision for the disposal of property, and an Economic Development Conveyance Memorandum of Agreement (EDC) with the City of Vallejo. As part of the EDC, the Navy allowed the City to sublease a significant portion of the Island. By 2000, over 50 industrial and commercial tenants established businesses at Mare Island and created about 1,500 jobs. The City of Vallejo had selected Lennar Mare Island as their master developer for most of the developed portions of Mare Island. Another industrial developer, Weston Solutions, partnered with Vallejo to pursue redevelopment of the Navy’s dredge ponds into a commercial dredge spoils disposal facility. These factors created a sense of urgency to economically revive Mare Island. However, the challenge was solving the environmental legacy of the 142 continuous years of industrial activity at the Island.

With significant political support and encouragement, Vallejo proposed a unique partnership with the Navy in April of 2000 to pursue “early transfer” of about 3,500 acres of the Island. Early transfer authority under CERCLA was provided by Congress in 1998 and was promulgated to accelerate economic redevelopment at closed military facilities. Application of this alternative disposal process at Mare Island has been a test of legitimacy for the early transfer process due to Mare Island’s numerous environmental challenges. Early transfer allows the Navy to transfer contaminated property and defer its statutorily required CERCLA covenant, thereby allowing a redevelopment entity to take control of the property and integrate cleanup with redevelopment activities. CERCLA prohibited this prior to 1998. Advantages obtained by the Navy include transferring the property many years ahead of schedule and entering into agreements to allow the transferee to complete cleanup requirements at a fixed price. Further, insurance coverage obtained by the transferee protected the Navy from cost overruns, including the discovery of unknowns.

Prior to early transfer, much environmental work had been completed at the Island. Before closing in 1996, the Navy completed a \$130 million radiological clearance program. By 2000, over 100 underground storage tank (UST) sites have been assessed, USTs removed, and site conditions documented. Hundreds of polychlorinated biphenyl (PCB) sites dot the Island. All those PCB transformers have either been removed or retrofilled, and an extensive PCB cleanup program was undertaken. The long lead-time item left was the Installation Restoration (IR) program of over 50 sites, and in 2000 the program was nearing completion of the remedial investigation phase. In addition, the Navy had conducted several removal actions, including \$20 million spent in the Munitions Response Program (MRP). Outside the early transfers, Southwest Division had successfully initiated transfer of clean parcels in 2000 and transferred about 400 acres of the Island to various parties by 2001. However, regulatory coordination and support for the Navy's cleanup programs was insufficient, and funding fluctuated. Getting to cleanup for the remainder of the Island was years away. Early transfer was the logical choice to fast-track Mare Island.

### **Program Summary**

After months of developing strategy and project details during 2000, a course was plotted to navigate through the various steps of early transfer. Two separate early transfer parcels were designated—the Eastern Early Transfer Parcel (EETP) and the Western Early Transfer Parcel (WETP). Attachment 1 is work-in-progress flow charts for both projects and shows the key milestones to achieve success for each one. The EETP includes about 700 acres of the industrial core of the former shipyard along with residential and other developed areas of the island that Lennar planned to redevelop into a new, diverse community. The 2800-acre WETP includes the Navy's former dredge ponds that Weston envisioned for a commercial dredge spoils disposal facility for the San Francisco Bay region.

By the end of 2000, Southwest Division initiated formal negotiations with Vallejo and their developers for Environmental Services Cooperative Agreements (ESCAs). Many issues required headquarters involvement, and negotiations were furious. The result was performance-based cleanup agreements that placed the maximum amount of control with the transferees and the regulators, minimizing the Navy's role through the remedy decision-making process. At the same time, Southwest Division coordinated with other Command staff to draft Finding of Suitability for Early Transfer (FOSET) reports, which are submitted for agency and public comment. These documents stimulated issues never considered within certain environmental statutes outside of CERCLA and generated high-level involvement at every BCT agency. Throughout 2001, negotiations were occurring on several fronts from technical, financial and legal issues woven into the ESCAs to regulatory negotiations involving senior leadership to develop consent agreements and orders to facilitate the early transfers.

In 2002, Southwest Division successfully completed the transfer process for both projects after over 2 years of partnering with the City of Vallejo, the California State Lands Commission, Lennar Mare Island, Weston Solutions, the BCT, the RAB, and various other stakeholders. Numerous obstacles developed on the way to transfer requiring high levels of coordination, negotiation, and action to overcome them. Challenges included regulatory prohibitions that conflicted with early transfer principles to State statutory restrictions and procedural

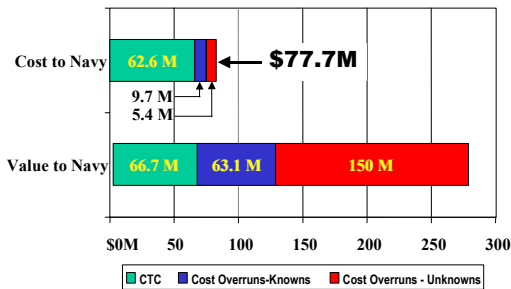
requirements for accepting contaminated property to election year politics impacting the Governor’s approval. Details for each are provided below.

Eastern Early Transfer Parcel (main industrial core)

In April of 2001, the Navy signed the first Mare Island ESCA with the City of Vallejo valued at \$78 million in anticipation of the EETP conveyance of about 700 acres of Mare Island’s industrial and waterfront core areas. Lennar would become the recipient of the parcel from the City and redevelop this property into a new planned community. The City and Lennar privately negotiated a mirrored cleanup agreement that would pass the terms and conditions of the ESCA

onto Lennar and their environmental contractor, CH2MHill. The Navy provided \$37.5 million as initial funding so environmental cleanup could continue while early transfer approvals were being finalized. Cost benefits can be summarized in the chart below comparing the Navy’s cost compared to the overall benefits of the ESCA. Environmental insurance covering the transferee played a key role in demonstrating the value of the ESCA, and the Navy required being named as an additional insured party to enable our legal authority over certain policy benefits. The ESCA became a critical document in the FOSET to demonstrate the Navy’s financial commitment to this project, which is one of four major requirements of the FOSET.

**EETP Comparison of Cost versus Value**



Southwest Division finalized the EETP FOSET in July of 2001 after extensive comments from agencies and other stakeholders during two public comment periods. Many comments expressed concern with uncertainties of early transfer for such a large environmentally challenged facility. Supplemental negotiations and agreements resulted including a Consent Agreement between DTSC and the transferee to establish a regulatory framework to oversee the transferee’s cleanups, a Consent Agreement between US EPA, the Navy and the transferee to address PCBs under the Toxic Substances Control Act, RWQCB Board Orders to address petroleum under the State UST program, and RCRA permit modifications to address remaining corrective action work on the transferring parcel as well as what is left with the Navy.

Governor Davis approved the CERCLA Covenant Deferral Request for the EETP in December 2001. Deeds were executed in March of 2002 following approval of a separate agreement between the State and transferees called the Property Settlement Agreement. This agreement memorialized property claims held by the State over reversionary lands that surround Mare Island. This additional agreement also required senior leadership involvement up to the Lieutenant Governor, who sits as



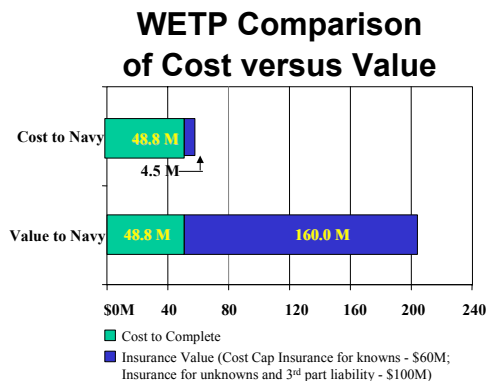
**From left to right: Vallejo City Manager David Martinez, Mayor Anthony Intintoli, Jr., and Navy BRAC Environmental Coordinator Jerry Dunaway display the first payment under the EETP ESCA. 4/26/01**

the chairman of the State Lands Commission. A ceremony hosted by the City and Lennar was held on Mare Island on April 19, 2002 signifying the historic transfer of the heart of the shipyard from military use to private sector use and was attended by dignitaries from all stakeholders.

Since completion of the EETP conveyance, cleanups have progressed to decision documents already in two areas of the EETP. The Navy's role for this work includes providing the final CERCLA covenant as each part of the EETP is remediated. The process is working well and is demonstrating the effectiveness of early transfer authority. Coordination between the various cleanup parties is a new challenge, yet all parties and the community are seeing the project as a win-win-win result.

Western Early Transfer Parcel (dredge ponds, wetlands, and submerged reversionary lands)

In September 2001, Navy and the City of Vallejo again entered into another ESCA valued at \$55 million over six years. This funding agreement is a critical mechanism to enable early transfer of the WETP, which is entirely State reversionary land. Although Vallejo was not the direct recipient of the property, their role in the cleanup was critical to the redevelopment of the dredge ponds, and leasing terms between the State and the City were also memorialized in the Property Settlement Agreement discussed above. The City likewise negotiated a mirrored cleanup agreement with Weston, who is using in-house resources for the cleanup as well as the planned dredge ponds redevelopment.



Southwest Division finalized the WETP FOSET in February 2002 after another set of extensive comments from various stakeholders. Of key importance for this conveyance was the State's need for assurances that property they accept is without significant liability risks. With the advanced award of the ESCA, Weston was able to perform cleanup tasks and minimize those risks in a meaningful, well-documented manner. Another Consent Agreement between DTSC and Weston was negotiated for the WETP and addressed specific conditions to allow the State's acceptance of the property.

Further complicating this transfer in 2002 was the gubernatorial elections in November. The final milestone was Governor Davis's approval of the Covenant Deferral Request. He and his staff scrutinized this project due to the State's direct involvement as the property recipient. Southwest Division and the City/Weston team responded to various inquiries, and by mid-year, all required documents were placed in escrow. Upon Davis's approval of the Covenant Deferral Request on September 19, the conveyance was executed and recorded on September 20, 2002. A ceremony hosted by the City and Weston was held on Mare Island on November 21, 2002 signifying the historic reversion of State land after over 140 years of military use.

Once consummated, this early transfer conveyed this parcel years ahead of schedule and allows Weston to begin an ambitious redevelopment plan for the former Navy dredge ponds. That redevelopment project is envisioned to provide a much-needed upland disposal site in support of

San Francisco Bay area dredging projects starting with the Oakland harbor dredging project. Use of the dredge ponds for commercial projects will generate revenue for the City to be used for infrastructure redevelopment of Mare Island and will provide a cost effective disposal alternative for major dredging projects in the San Francisco Bay area. As part of the terms of the WETP ESCA, the Navy will share in revenues generated from the commercial operations to offset cleanup costs on the Island to the tune of an estimated \$9 million over 20 years.

The hazardous waste landfill area is particularly challenging. Because of the uncertain liabilities associated with this area, the State would not accept it through an early transfer. However, redevelopment of the dredge ponds hinges on cleanup of this landfill area since they are adjacent to each other. In lieu of an early transfer, Southwest Division and Weston negotiated a unique cleanup strategy to incorporate a fast-track cleanup within the WETP ESCA. This area includes a 40-acre hazardous waste landfill, a fuel disposal area, lead battery storage areas, and a former sanitary and industrial wastewater treatment plant. The Navy maintains its lead agency role and will be directly involved in the cleanup and remedy selection at this area. Consistent with the terms of the ESCA, the Navy enjoys the benefit of a fixed price cost for this cleanup and risk avoidance through insurance coverage. The Navy and Weston already have put in place plans for a remedy to be constructed by 2005.

Both early transfer projects required an immense amount of resources by the Navy to see them through. However, Southwest Division also recognized that we could not ignore ongoing work in areas not considered for early transfer. This work had to continue and in many cases had direct benefits to the overall redevelopment of Mare Island. As mentioned earlier, Southwest Division successfully cleaned and transferred 400 acres of property to various entities from 2000 to 2002. The Mare Island team at Southwest Division managed both efforts simultaneously. Below are highlights of critical environmental restoration projects that occurred during the early transfer frenzy.

#### FFSRA

During the early transfer process, the Navy, DTSC and RWQCB negotiated a revised FFSRA and executed it in July 2002. Issues raised during the process demonstrated that the 1992 FFSRA was insufficient and needed updating. This new FFSRA specifically provides for early transfer and specifies short-term and long-term responsibilities for cleanup, including actions to be taken in the event a redevelopment entity fails to perform their cleanup. As a key component to the FFSRA, the parties were required to approve of the Navy's schedule for all remaining work on the Island outside the early transfer parcels. The Navy had lacked an effective and approved schedule to manage remaining cleanup work since 1998. The new FFSRA effectively lays out a framework for performance by the Navy and regulatory agencies to get to site closure and the transfer of remaining parcels.

#### Munitions Response Program

During the early transfer strategy sessions and negotiations, most MRP sites were not considered. The Navy had just completed several significant removal actions at MRP sites across the Island (concentrated in the former Naval Ammunition Depot at the south end of the Island). However, regulatory uncertainty and insurance terms were not favorable for early transfer consideration. As the Navy continued on with MRP work, a series of newspaper articles in May

of 2001 raised serious concerns and allegations about the thoroughness of work performed. Much damage control was required. Support was coordinated with Naval Ordnance Safety and Security Activity (NOSSA) and Travis Explosives Ordnance Disposal (EOD). Southwest Division responded with letters to the editor, a focused public meeting to educate the community with NOSSA and EOD participation, publication of a status fact sheet, and coordination within the BCT and RAB to gain support and validation for work performed. Southwest Division effectively responded to concerns from multiple levels within the Navy and was able to counter all allegations of improper work.

Southwest Division is continuing to make great progress with the MRP as it now constitutes a majority of the remaining cleanup work left with the Navy. Southwest Division has scheduled three significant removal actions for FY03. Two removal actions will close sites adjacent to early transfer parcels, as completion of these sites was agreed to be a priority to avoid impacts to redevelopment activities. A third action will allow resumption of operations at the ordnance detonation range to dispose of munitions discovered during previous and future removal actions.

#### Elementary school

Mare Island has maintained a use agreement with the Vallejo Unified School District to develop and operate an elementary school on the base since 1951. This originally served the children of sailors and marines on Mare Island, but since closure the school district has used it to supplement other district elementary schools. Cleanup of former fuel storage facilities on and adjacent to this site has been a delicate and highly scrutinized effort. Final cleanup efforts occurred during summer break in 2001 after close coordination with district administrators, staff, and parents. During evaluation of the cleanup effort in 2002, newspaper articles again attempted to raise allegations of contamination at the elementary school due to unrelated environmental concerns at an adjacent early transfer parcel. Southwest Division anticipated that increased redevelopment activities would add pressure and complexities to remaining Navy work. These articles were published in September within five months of the EETP conveyance. Southwest Division again responded with a coordinated effort involving the BCT and the school district resulting in a focused public meeting, development of an expedited sampling plan to allay agency concerns, and publication of a fact sheet. All indications are that transfer of the school will meet the current FY04 scheduled transfer date.

#### Program Management

Southwest Division developed and integrated management support from local leadership to senior Navy Secretariat and DOD leadership throughout the entire early transfer process. The early transfers could not have been accomplished otherwise. As the largest early transfers to date in all of DOD, many points and terms required inter-agency coordination and action. Likewise, the high level of senior leadership involvement at the various stakeholder levels required senior management involvement. With the level of details encompassed in these early transfers, leadership was likewise required at the working level to accomplish milestones. This truly was a team effort beyond Southwest Division.

#### Technical Merit

Technical talents and efforts to support these two projects were remarkable. Beginning with the ESCAs, detailed technical negotiations on site conditions established the basis for the ESCA

costs. The initial task of conveying characterization data to transferees was an incredible effort. Tremendous contractor support and staff dedication to managing negotiations of both projects paid off and provides the financial benefits to the Navy. At the same time, continuation of the Navy's ongoing environmental restoration activities was executed efficiently by Southwest Division and was likewise challenged on many fronts.

### **Orientation to Mission**

Mare Island can be considered one of the Navy's toughest BRAC sites given its long history and industrious military mission. The installation's current goal promulgated in BRAC legislation is the completion of cleanup and the conveyance of all property in a timely manner. In 1999, the Navy had not yet transferred any property at Mare Island. With these early transfers and the other non-early transfer conveyances, Southwest Division has transferred about 4,000 acres of this 5,200-acre facility in just the past two years.

### **Transferability**

Many eyes inside and outside of DOD have paid close attention to developments at Mare Island. The early transfer initiatives were carefully monitored by regulatory agencies, and some activist groups were skeptical of potential outcomes. Mare Island has been the topic of many national conferences on brownfields. Southwest Division staff has eagerly shared experiences and lessons among other DOD entities considering early transfers, and documents such as the ESCAs and FOSETs are being applied as templates across the country. At the same time, Mare Island is also a key player in the development of munitions technologies and cleanup strategies since munitions response actions have been initiated as early as 1995. In 1999, Mare Island coordinated with the Command's Pacific Division to conduct an innovative munitions detection and validation competition among industry experts in the underwater environment in 1999.

### **Community Interaction**

Without any doubt, the Mare Island RAB has served as the community's voice of concern, and ultimately support, for the early transfers as well as all other restoration actions at Mare Island. Pages of comments and questions were raised after each publication of FOSETs. After many months of research and education by RAB members, tremendous support came in the form of letters to regulatory agencies from the RAB as well as a letter urging Governor Davis to approve the WETP Covenant Deferral Request during 2002. The monthly RAB meetings are the primary forums for communication of thoughts and criticisms with the Navy, transferees conducting cleanups, and regulatory agencies. In late 2002, the community members once again coordinated to write a letter to the editor of the local paper to attempt to educate them and the community on the successes and events of 2002. The Vallejo Times-Herald published it on December 2, 2002.

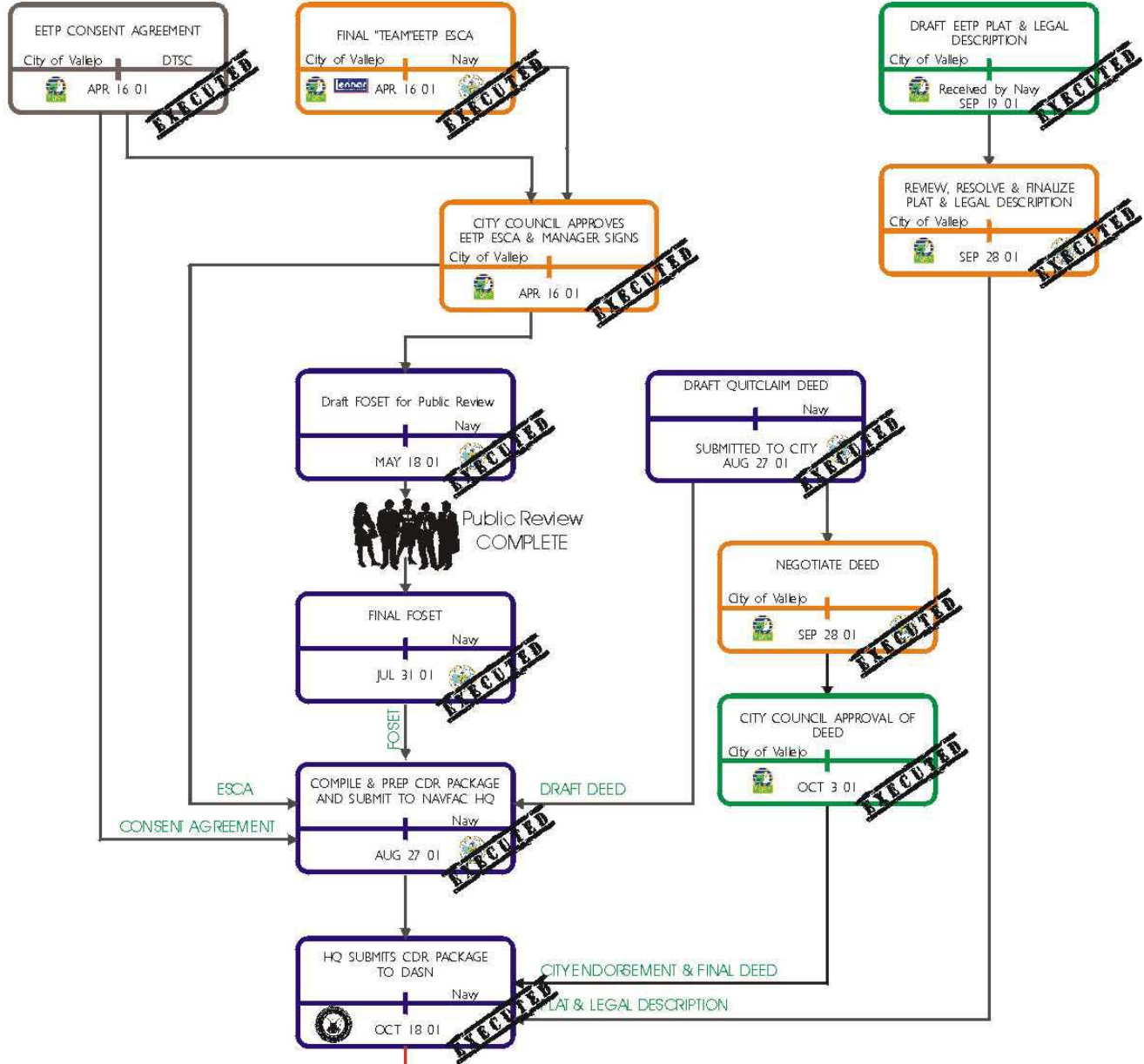
### **Program Breadth**

The complexity of environmental conditions at Mare Island required innovation to attempt any type of expedited cleanup strategy. Early transfer was a logical choice. Along with the other projects underway in the Mare Island program and the climate in which it exists, an installation's environmental restoration program does not get much more complicated than this. These past two years' successes in the Mare Island program are the basis for this nomination.



**Attachment 1 – Work-in-Progress Flow Charts for the EETP and WETP**

**EASTERN EARLY TRANSFER PARCEL PERT CHART**



**LEGEND**

- NAVY RESPONSIBILITY
- CITY OF VALLEJO RESPONSIBILITY
- NAVY - CITY RESPONSIBILITY
- DTSC - CITY RESPONSIBILITY
- THE CRITICAL PATH**

**POTENTIAL SHARK**  
REPRESENTS ACTIONS OUT OF THE NAVY'S CONTROL, OR A VERY AGGRESSIVE COMPLETION SCHEDULE



**DASN HOLIDAY (OCT 17 01)**



FBI/RA may delay DTSC's concurrence to Governor Must be in "chop chain" by NOV 15 01



GOV DAVIS (Dec 28 01)



Convey  
Mar 26 02



# WESTERN EARLY TRANSFER PARCEL PERT CHART

