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NAS KEY WEST  
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MINUTES SUMMARY FROM RESTORATION ADVISORY BOARD MEETING ON 30 JULY  
2014 NAS KEY WEST FL  
7/30/2014  
TETRA TECH

# NAS KEY WEST RESTORATION ADVISORY BOARD

## 30 JULY 2014 MEETING SUMMARY

**LOCATION:** Florida Keys Eco-Discovery Center, Key West, FL

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### ADVISORY BOARD MEMBERS

Ron Demes	NAS Key West	305-293-2886
Tracie Vaught	FDEP	850-245-8998
Shauna Stotler-Hardy	Tetra Tech, Inc.	803-641-4944
Amy Twitty	CH2M HILL	850-232-0320
Brian Syme	NAVFAC SE	904 542-6151
Chip Palm	NAS Key West	305-797-4461
Ed Barham	NAS Key West PWD Environmental	305-293-2911
Mimi Stafford	RAB Community Member	305-296-5947
Mark Songer	RAB Community Member	305-394-3807
Mike Petro	RAB Community Member	305-896-7100
Bob Eadie	RAB Community Member	305-809-5610
John Dola-Heitlinger	RAB Community Member	305-292-1208
Margaret Romaro	RAB Community Member	

### OTHER PARTICIPANTS

Edward Russell	FDEP	305-289-7072
Damon DeYoung	Battelle	619-574-4825
Stephen Rosansky	Battelle	813-474-2943
Sarah Reed	NAVFAC SE	904-542-6290
Todd Haverkost	Resolution Consultants	901-372-7962
Mike Ervine	Resolution Consultants	410-920-9071
Libby Claggett	Tetra Tech, Inc.	904-636-6125
Ashley Monnier	NAS Key West Community Plans and Liaison Officer	
Greg Preston	BRAC PMO East	
David Criswell	BRAC	843-963-4991
Jim Scholl	Key West City Manager	
Robert Haverty	Key West Resident	305-307-4001
Dottie Harden	Key West Resident	772-216-5933
Nichole Anderson	Key West Resident	305-292-2974
Rey Chevalier	OIC Navy Munitions Command	305-293-2839
Jim Bouquet	Key West City Engineer	305-809-3962
Doug Bradshaw	City of Key West	305-089-3792
Shelby Kruger	Key West Resident	
Clayton Lopez	City Commissioner, District 6	305-797-3584
Ray Blazevec	Key West Resident	305-296-6649
Capt. Steve McAlearney	CO NAS Key West	305-293-2866
Trice Denny	NAS Key West PAO	305-293-2027
Oliver Kofoid	New Town Key West	305-797-1087
Donnie Elimina	Key West Resident	305-481-4500
Adam Linhardt	Key West Citizen Reporter	305-292-7777
Nicholas Anderson	Key West Resident	

### WELCOME AND INTRODUCTIONS

Ron Demes brought the meeting to order at 6:00 PM. It was requested that everyone please sign in because the Navy uses the information to send announcements to keep the public informed. Ron asked that the presenters be allowed to give their presentation without interruption. RAB members will be invited to ask their questions followed by questions from the general audience. Ron asked the attendees to state their name and association before asking each question for the minutes. Ron informed the

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audience that the meeting and questions will be noted in the RAB meeting summary to improve the quality of the meeting minutes and ensure that all questions answered. If it is not possible to answer a question during the meeting, answers will be researched and provided at a later date.

The RAB members introduced themselves. A Nicholas Anderson, a Key West resident, requested the Pledge of Allegiance be recited, but the request was declined. RAB attendees included Ed Barham, Environmental Director at the installation; Brian Syme, Navy Remediation Project Manager; Ron Demes, Executive Director and Business Manager for the Naval Air Station; Tracie Vaught, Florida Department of Environmental Protection (FDEP); Mimi Stafford, RAB Member, Mike Petro, RAB Member, Mark Songer, RAB Member; Bob Eadie, RAB Member, John Dola-Heitlinger, RAB Member, Shauna Stotler-Hardy, Tetra Tech, Inc., Chip Palmer, NAS Key West, and Amy Twitty, Project Manager with CH2M HILL.

### **REVIEW OF LAST MEETING**

Ron Demes told attendees that the RAB minutes from last year's meeting (July 2013) are available in the front of the room. Ron asked if there were any corrections to the minutes, and no corrections were noted.

### **PUBLIC WEBSITE, SHAUNA STOTLER-HARDY, TETRA TECH, INC.**

The public website was designed to provide the public access to environmental site information, RAB information, the Naval Air Station (NAS) Key West Administrative Record, and links to other websites. All links are in blue text. The Key West Installation Restoration (IR) Program website is available at <http://go.usa.gov/KSDJ>, and the Naval Facilities Engineering Command (NAVFAC) Base Realignment and Closure (BRAC) website is available at <http://www.bracpmo.navy.mil>.

The pages on the NAS Key West IR Program website include the home page, which includes the background and installation information. Under the Site Description tab, one can find descriptions for the sites at NAS Key West and Boca Chica Key. The descriptions include BRAC sites along with Environmental Restoration, Navy (ER,N) sites, underground storage tank (UST) sites, and MRP sites. The Community Outreach tab includes all of the RAB information, while the Administrative Record tab provides links to documents that are available for the public to view.

A computer was provided for live viewing of the NAS Key West public website by meeting participants.

There were no questions regarding the presentation.

### **FIVE YEAR REVIEW UPDATE, STEVE ROSANSKI, BATTELLE**

The Five Year Review is required by law under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) when hazardous substances remain on site exceeding levels that permit unrestricted use and unlimited exposure. It is also a requirement in the NAS Key West Hazardous Waste Permit under the Resource Conservation and Recovery Act (RCRA). The review provides an opportunity to evaluate remedy performance and protection of human health and the environment.

The review is comprised of a summarize the site history, an evaluation of action levels, performance of site inspections, conducting site interviews, identifying current issues and concerns, determine protectiveness, and providing recommendations and follow-up actions.

The 2014 review will be the third review (previous reviews in 2004 and 2009). There are six sites regulated under CERCLA (non-Boca Chica sites) that include Area of Concern B and IR Sites 1, 3, 7, 8, and 21 and six sites regulated under RCRA (Boca Chica sites) that include Solid Waste Management Units (SWMUs) 1, 2, 3, 5, 7, and 9.

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The schedule for the Five Year Review is to submit the internal draft to the Navy by August 2014, submit the draft to the FDEP by September 2014, submit the draft-final to the public by December 2014, and submit the final document by January 2015.

There were no questions regarding the presentation.

### **AIRFIELD RESTORATION AND ASSOCIATED SWMUs, ED BARHAM, NAS KEY WEST PUBLIC WORKS DEPARTMENT (PDW) ENVIRONMENTAL**

The purpose of the restoration of the Airfield Clean Zones and stormwater drainage systems at NAS Key West was to restore and maintain safe flying conditions at Boca Chica Field. This included the elimination of woody vegetation impact clear zones, restoring and upgrading the stormwater drainage system, meeting permanent airfield waivers issued in 2004, converting wetlands while not creating uploads, maintaining future vegetation, and implementing the project to use an Adaptive Management Approach.

The timeline for the project began in August 2004 with the Environmental Impact Statement (EIS) Notice of Intent followed by endangered species consultation (May 2007), the final EIS (May 2007), the United States Army Corps of Engineers (USACE) permit application submittal (November 2009), the issuance of the USACE permit (July 2011), the construction start (October 2011), and ending with construction complete anticipated in September 2014.

SWMU 1 was an open disposal and burning area for general refuse and waste associated with maintenance activities from 1942 through the mid-1960s. The list of possible wastes included waste oil, hydraulic fluid, paint thinner, and solvents. Annual Performance Monitoring (APM) of various media continues at SWMU 1.

SWMU 2 consists of the former location of Building 915 and its surrounding area, which was used for storage and mixing of pesticides. Dichlorodiphenyltrichloroethane (DDT) mixing operations were conducted at this location from the mid-1940s to the early 1970s. APM of various media continues at SWMU 2.

SWMU 3 was a former firefighting training area. The site contained aircraft and vehicles that were ignited with JP-5 fuel, waste oil, or hydraulic fluid for use in firefighting training. There were also two unlined circular pits where combustible liquids were ignited. Contaminants were left in place, and the current remedy is land use controls (LUCs).

SWMU 9, the Jet Engine Test Cell associated with Building A-969, was used for the testing of recently repaired jet engines beginning in 1969. The jet engines were fueled from a bermed fuel tank containing JP-5 fuel from 1987 through 1995. The latest investigations, conducted between 2010 and 2013, further defined the contamination and confirmed that natural breakdown is still occurring at the site. The site is under evaluation for No Further Action (NFA) status. The recommendations were to collect additional data from the new monitoring wells and then proceed to long-term monitoring (LTM) for the site.

Traditional construction methods were used outside of the SWMUs. Inside of the SWMUs, tree removal was performed by hand with no heavy equipment used. Before, during, and after photos were presented.

Ron introduced Captain Steve McAlearney, CO NAS Key West.

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### **Questions, Answers, and Comments:**

**Q: Bob Eadie, RAB Member.** Is the stormwater going into the wetlands?

**A: Ed Barham, NAS Key West.** Yes, it is. There are stormwater retention ponds on the airfield. The water is going through the ditches to the wetlands. The water quality is going through healthy outlets instead of the mangroves.

**Q: Mark Sonder, RAB Member.** Will there be following up to the native species?

**A: Ed Barham, NAS Key West.** Yes, the state requires achieving success and that is by survival of the native wetland plants. There were be monitoring and if success is not achieved, a plan will be put in place for achievement. Endangered species will also be monitored and the habitat is useful. Current surveys show the rabbits are moving back into habitats.

**Q: Bob Eadie, RAB Member.** When will encroachment of the mangroves start again?

**A: Ed Barham, NAS Key West.** This will require constant monitoring. Some elevations were raised a few inches with the intent to grow grasses instead of trees. This will require long-term maintenance. Once the grasses get good cover, it will prohibit the trees from growing.

**Q: Nicholas Anderson, Key West Resident.** Is the clearance zone at least 300 by 500 feet?

**A: Ed Barham, NAS Key West.** There are clear zones in Navy document based of FAA documentation. All clear zones are established and have been in place since the 1970s.

**Q: Nicholas Anderson, Key West Resident.** So, they exceed statutory clear zones?

**A: Ed Barham, NAS Key West.** No, they are Navy required clear zones.

**Q: Adam Lamhardt.** Is there any way to know how many marsh rabbits are at the air station now and how many where there before?

**A: Ed Barham, NAS Key West.** We threw out a number years ago, but I do not know how accurate that number was. There is about 1/3 to 1/2 of a population of marsh rabbits at the airfield. The population is stable to increasing. During Hurricane Wilma, a study was performed with the Fish and Wildlife and radio collars were put on the rabbits in order to find them after the hurricane. Unfortunately, most of the rabbits were found done. Since the storm, the surveys have shown the population is doing great.

**Q: Tracie Vaught, FDEP:** Did the markers keep the rabbits from being able to survive when the storm came through?

**A: Ed Barham, NAS Key West.** No, the collars were very small and did not have an impact in their mortality.

**Q: Nicholas Anderson, Key West Resident:** Are you keeping an ongoing track of other evasive items like iguanas and raccoons.

**A: Ed Barham, NAS Key West.** We have them on the base, and the iguana population is increasing. All of these animals are being monitored.

**Q: Nicholas Anderson, Key West Resident:** Is that information currently available?

**A: Ed Barham, NAS Key West.** It is in reports like the Five Year Review.

### **MRP UPDATE, TODD HAVERKOST, RESOLUTION CONSULTANTS**

The Fleming Key Dredge Spoil Area is an approximately 42-acre site created prior to World War II from dredging, and a 27-acre portion of the site was last used as an upland placement area for dredge spoils during the 2003/2004 dredging of the Federal Channel and Truman Harbor. Two munitions items were discovered during the dredging activities and included a 7.2-inch Hedgehog rocket and a 76 mm artillery shell. The Naval Ordnance Safety and Security Activity (NOSSA) performed a Technical Assistance in

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2009 where expended munition casings (small arms, 20 mm, and .50 caliber) and numerous metallic items were observed.

A Preliminary Assessment was completed in 2010, a Limited Site Inspection was performed in 2012, and an Instrument-Aided Visual Survey indicated surface findings of 20 mm expended casings and small arms casings, a 75 mm diameter unknown item, and metallic debris (e.g., manhole, gas cylinder, magazine, fencing, etc.). Subsurface findings (screened with a handheld magnetometer) include the presence of shallow subsurface metallic items.

An Expanded Site Inspection was completed in 20013 and included vegetation removal. The Geophysical Survey identified spatial distribution and the intensity of metal response across the site and used a specialized advanced classification tool to infer ordnance type and size at respective locations.

Expanded Site Inspection findings include surface findings of munitions and explosives of concern (MEC), material potential presenting an explosive hazard (MPPEH), and munition debris. Fourteen 100-foot by 100-foot grids were surveyed with 1981 anomalies identified. Advanced classification was performed on 548 anomalies; 427 were metallic debris/clutter.

The path forward for Fleming Key includes confirmation sampling in late 2014 and/or early 2015 with excavation of approximately 400 anomalies. The final Engineer Evaluation/Cost Analysis (EE/CA) was submitted in March 2014. The public notice was published on March 28, 2014. The public comment period ended on April 30, 2014, with no comments. The Action Memorandum was submitted to the FDEP for review. The removal activities are tentatively scheduled to begin in late 2014.

At the Boca Chica MRP Site, there was a munitions discovery in October 2012. A contractor was excavating ditches to improve airfield drainage when small arms ammunition was encountered. The NAS Key West ESO identified MPPEH in one of the ditches and the sediment stockpile. As a result, two new MRP sites were identified: A-22 Drainage Ditch and A950 Spoils Pile.

Removal Actions at the A22 Drainage Ditch included dewatering, mapping and digging, mechanical excavation, and screening for small arms. Actions at the A950 Spoils Pile included mapping and digging, mechanical excavation, and screening. MEC/MPPEH items were recovered. The items were placed in temporary storage. Work on the stockpiled material is tentatively scheduled to being in late 2014.

The Planning Process included document submittals of the Final Engineering Evaluation/Cost Analysis in March 2014; the public notice published on March 28, 2014; and the end of the public comment period on April 30, 2014. There were no comments received during the public comment period.

The Action Memorandum has been submitted for FDEP review. Work Plans are currently in Navy review. Theses Work Plans include the Removal Action Work Plan, Sampling and Analysis Plans, Explosives Safety Submission, and the Accident Prevention Plan.

### **Questions, Answers, and Comments:**

**Q: John Dola-Heitlinger, RAB Member.** When you said you were looking for small arms, are most of the expended casings or live ammunition?

**A: Mike Ervine, Resolution Consultants.** We have seen both.

**Q: Mimi Stafford, RAB Member.** Is the sorting mixed?

**A: Todd Haverkost, Resolution Consultants.** We do not know. Until we remove the soil and exposure what is there, we are not sure.

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**Q: Mark Sonder, RAB Member.** On the Fleming Key, since that came from the dredge of the harbor, will that be a consideration next time dredging occurs?

**A: Mike Ervine, Resolution Consultants.** Yes, follow up maintenance dredging will require consulting with MEC people.

**Q: Bob Eadie, RAB Member.** Is the primary concern the explosives or the pollution with regard to these sites?

**A: Todd Haverkost, Resolution Consultants.** It is a combination of both. The main concern is explosive hazards to the workers, and secondary, over time, as the items rust, there will be leaching into the environment.

**Q: Bob Eadie, RAB Member.** Are there any firing ranges left?

**A: Ron Demes, NAS Key West.** Yes, there are.

**Q: Bob Eadie, RAB Member.** Are appropriate safe guards to lead in place?

**A: Ron Demes, NAS Key West.** Yes, there are.

**Q: Bob Eadie, RAB Member.** Were the Hawk Missiles solid or liquid fuel?

**A: Ron Demes, NAS Key West.** They were solid.

Ron Demes acknowledged that Margaret Romero and Commissioner Clayton Lopez, City Commission District 6, were in attendance.

**Q: Nicholas Anderson, Key West Resident:** Did you survey Buildings 1019 and 1006 for small arms ammunition debris?

**A: Mike Ervine, Resolution Consultants.** No, we have not; they are outside the scope of the areas of investigation.

**Q. Lucille Gage, Community Member:** In finding all of the debris, why can't you liquid glass it so that it is solid and you can put cement on it?

**A: Mike Ervine, Resolution Consultants.** It is a very expensive process.

### **DEFENSE REUTILIZATION MARKETING OFFICE (DRMO), AMY TWITTY, CH2M HILL**

The project consists of two former DRMO land slivers adjacent to the City-owned portion of the former DRMO on Truman Annex. The land slivers were retained by the Navy during the BRAC in 2002. The DRMO was formerly used as a storage facility for new and used military equipment. The southern DRMO sliver is approximately 600 feet long by 25 feet wide, and the northern DRMO sliver is approximately 200 feet long by 30 feet.

According to the Base Master Plan, the north DRMO sliver is zoned for commercial/industrial use, and the south DRMO sliver is zoned for residential land use (military housing nearby). Soil samples were collected at both slivers in November 2010 and June 2011 and analyzed for arsenic, lead, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). Samples from the north DRMO sliver exceeded the Residential standards, but were less than Industrial standards. Samples at south DRMO sliver exceeded both Residential and Industrial standards in some locations.

A soil removal action was conducted in September to October 2012. Approximately 823 tons (49 truckloads) of contaminated soil were removed from the north and south DRMO slivers and transported to CEMEX Environmental Services in Miami for thermal treatment and recycling. Confirmation samples collected at the walls of the excavations in 2012 indicate some residual soil

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contamination exists. Further soil sampling was conducted in August 2013 and March 2014 in an effort to delineate residual contamination.

Due to soil action level exceedances, additional sampling is planned adjacent to and beneath the road to Fort Zachary Taylor. The FDEP has asked for groundwater sampling in the highest soil concentration areas to assess whether the groundwater has been impacted by site contaminants. The Uniform Federal Policy Sampling and Analysis Plan and Work Plan are currently being revised for the additional work. Field work is anticipated to occur in late summer 2014. Additional remedial action is warranted. A final Completion Report will be prepared to document the final remedial action at the site.

### **Questions, Answers, and Comments:**

**Q: John Dola-Heitlinger, RAB Member.** You said they dug out the soil on the slivers and took it to Miami. Did they recycle it?

**A: Amy Twitty, CH2M HILL.** Yes, they did.

**Q: John Dola-Heitlinger, RAB Member.** I assume they cannot do that here?

**A: Amy Twitty, CH2M HILL.** No they cannot.

**Q: John Dola-Heitlinger, RAB Member.** What did this whole project cost so far?

**A: Brian Syme, NAVFAC SE.** Close to \$1mm this far to address both slivers. The highest cost is the excavation and treatment.

**Q: Mimi Stafford, RAB Member.** I wondered about the lead

**A: Amy Twitty, CH2M HILL.** The site is an approved facility by the state to recycle those contaminants.

**Q: Mimi Stafford, RAB Member:** Is the ultimate goal to be able to include this area and open it up.

**A. Amy Twitty, CH2M HILL.** It is open now. We are trying to get it down to residential criteria for unrestricted use.

### **BRAC SITES UPDATE, AMY TWITTY (CH2M HILL) AND DAVID CRISWELL (BRAC PMO)**

Amy introduced David Criswell and Greg Preston from BRAC PMO.

The Truman Annex sites include DRMO, the City-owned portion of Parcel K, and Parcel E.

The DRMO site was transferred from the Navy to the City of Key West in ~~2004~~2002. Subsequent to the transfer, the Navy discovered additional soil contaminated. The Navy conducted a number of soil removals from 1999 to 2009. The DRMO soil was cleaned up to allow unrestricted use (meets FDEP Residential use criteria).

The Navy submitted a Site Rehabilitation Completion Report (SRCR) to the FDEP that recommended NFA without LUCs. The FDEP requested groundwater sampling for iron in at least two locations at the site; the anticipated sampling date is September 2014. The Navy will need to modify the deed to reflect the unrestricted use (no LUCs in soil and possibly groundwater). The estimated completion date is in early 2015.

Parcel K was transferred from Navy to City of Key West in 2002. In April 2009, the City took soil samples, and the results exceeded FDEP soil criteria. The City contacted the Navy, and the Navy conducted additional soil sampling. Lead, PCBs, and petroleum constituents exceed FDEP criteria. The Navy delineated the soil contamination and worked with the FDEP on the soil cleanup levels. The site is now acceptable for recreational use.

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The Navy conducted soil removal in January and February 2012. The FDEP requested groundwater sampling in the highest lead area and along the site perimeter. The groundwater sampling occurred in August 2013, and lead concentrations were within acceptable levels for unrestricted use.

The Navy submitted the SRCR to the FDEP in April 2014, which recommended NFA with LUCs. Currently, the site use as residential is prohibited, but is acceptable for recreational use as a proposed park. It is anticipated the FDEP will issue a Site Rehabilitation Completion Order (SRCO) in August 2014. The Navy will need to modify the deed to allow for recreational (park) use; the current deed only allows for industrial use. The City is planning on redeveloping the site as a park.

Parcel E is at the Truman Annex and consists of several site including Building 102 – Former Torpedo Overhaul and Storehouse, Building 103 – Former Central Power Plant, Building 104 – Former Battery Overhaul and Storage, Building 136 – Former Shipfitters/Plate and Mold Shop, and Building 189 – Former Liquor Store (No Further Action; 2001).

Parcel E was transferred to City of Key West in 2002 and consisted of existing Building 103, former Buildings 102 and 104, former Building 136 and Building 189. Building 189 received an SRCO from the FDEP in 2001. The Quitclaim Deed, November 2002, states Parcel E property is "non-residential use only". Per the 2002 deed, soil and groundwater use are restricted. The Decision Document for the 10 BRAC sites states in Appendix A (Page A-4) that Parcel E could be used for a recreational use.

The Navy will modify Truman Annex deed once the following are complete:

- FDEP submits Site Rehabilitation Completion Order for DRMO parcel (including Building 136) – October 2014
- FDEP submits City owned portion of Parcel K Site Rehabilitation Completion Order – August 2014
- Deed modification, approximately early 2015

The City of Key West will submit a Construction Management Plan for the LUC areas at Truman Annex for review by Navy and FDEP.

### **Questions, Answers, and Comments:**

**Q: John Dola-Heitlinger, RAB Member.** Iron is considered a contaminant?

**A: Amy Twitty, CH2M HILL.** It is considered a secondary contaminant, but still requires cleanup.

**A: Tracie Vaught, FDEP.** Plus, there is a known source and it is not natural occurring?

**Q: Robert Haverty.** Talking about deeds, can the Navy take the property back any time they want?

**A: Ron Demes, NAS Key West.** No, they cannot.

**A: Greg Preston, BRAC PMO EAST.** For the property in question, there are no reversion rights.

**Q: Lucille Gage, Community Member.** Why doesn't the city just build a parking garage there since that is what we need?

**A: Ron Demes, NAS Key West.** Thank you for the question. That is the perfect question for the City Commission League. There are height restrictions, and this is outside the scope of this meeting.

**Q. Oliver Kofoid, Key West Resident.** From what we are looking at, the City is getting closer to getting this property to develop a park.

**A: Ron Demes, NAS Key West.** I would say a lot closer. The Navy Captain has concurred with the [deed-development plan \(??\)](#) and now the City is moving forward and it is in the hands of the BRAC office to facilitate the deed restrictions to get the highest and best use of the property.

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### POTENTIAL TOPICS

Ron stated there were a lot more people in attendance than normal, and it was a little hard to hear. Ron will investigate how to make the meeting better regarding hearing each other and recording the minutes. Ron also said he will take into consideration Nicholas's request for stating the Pledge of Allegiance at future meeting.

Mimi Stafford, RAB Co-Chair, stated this was the best turn out they have had, and it is very rewarding to see the interested in the base and the work~~ing~~ being performed. Ron said this program was started in 1984.

Ron Demes requested potential topics from the RAB and the community members. Items that will be discussed include the MRP program, DRMO slivers and cleanup, and BRAC sites and community impact.

John Dola-Heitlinger stated he would like a handout a summary sheet showing how much has been spent since 1984 by year and total. This has been a massive commitment by the federal and state governments.

Ron Demes said when the program was started, there was more study than cleanup. Now the group is in an interim removal action, and sites are being cleaned up. John Dola-Heitlinger stated he would like to know what was spent in study and what in cleanup.

Other potential topics include stormwater runoff and how it is being addressed (Bob Eadie), IR 1 and iguana problem (Mark Sonder).

### **Questions, Answers, and Comments:**

**Q: Robert Haverty.** I haven't heard anything addressed about the single wall pipeline that was supposed to be a double walled pipeline that could have problems. There were two boats on it during Hurricane Wilma.

**A: Ron Demes, NAS Key West.** Is this the pipeline going to Boca Chica? Yes. This is under the authority of the Office of Pipeline Safety and is inspected.

**Q: Nicholas Anderson, Key West Resident.** Is there any planned use of the land by Boca Chica Road and Geiger Key Road?

**A: Ron Demes, NAS Key West:** The disposition is that it is where it needs to be. It is a buffer property to ensure encroachment is not an issue.

**Q: Nicholas Anderson, Key West Resident.** All of those properties are surrounded by residential homes.

**A: Ron Demes, NAS Key West:** We know where those houses are.

### MEETING ADJOURNMENT

Ron Demes thanked everyone for coming to the meeting. The meeting was adjourned at 7:43 PM.



# NAS KEY WEST

## Environmental Installation Restoration Program Public Website

**July 2014 RAB  
Key West, FL**

Shauna Stotler-Hardy  
Tetra Tech, Inc.





# Public Website

- Designed to provide the public access:
  - Environmental site information
  - Restoration Advisory Board Information
  - NAS Key West Administrative Record
  - Links to other websites

Key West IRP Website is available at:

<http://go.usa.gov/KSDJ>

NAVFAC BRAC website is available at:

<http://www.bracpmo.navy.mil>



# Homepage



Environmental

Enter Query



Employees



Client



View Map



ABOUT US

PRODUCTS AND SERVICES

Environmental > Products and Services > ENV Restoration > Installation Map > NAVFAC Atlantic > NAVFAC Southeast > **Naval Air Station Key West**

Naval Air Station Pensacola

Naval Air Station Key West

Naval Air Station Whiting  
Field

Naval Construction  
Battalion Center Gulfport

Naval Air Station Key  
West

Site Descriptions

Community Outreach

Administrative Records

Naval Air Station Corpus  
Christi

Naval Station Mayport



## Background

Naval Air Station Key West's national security mission supports operational and readiness requirements for Department of Defense, Department of Homeland Security, National Guard units, federal agencies, and allied forces.

## Installation Information

NAS Key West has perfect flying weather year round and unparalleled aerial ranges that offer aircrew training within minutes after takeoff.

The station is equipped with a sophisticated Tactical Combat Training System (TCTS), similar to the one depicted in the popular movie "Top Gun," which tracks and records aerial maneuvers. In addition, NAS Key West is the host facility for numerous tenant activities, including Joint Interagency Task Force South, U.S. Coast Guard, and U.S. Army Special Forces Underwater Training School to name a few.

The best Sailors, Soldiers, Airmen, Marines and Coast Guardsmen in the world are to be found at NAS Key West and its tenant commands. Each of them work diligently daily to ensure that we are responsible stewards of our human, fiscal,

# Site Description Tab



Environmental

Enter Query



Employees



Client



View Map



ABOUT US

PRODUCTS AND SERVICES

Environmental > Products and Services > ENV Restoration > Installation Map > NAVFAC Atlantic > NAVFAC Southeast > Naval Air Station Key West > **Site Descriptions**

## Site Descriptions

Key West (ER,N) Sites

Key West (UST) Sites

Key West (MRP) Sites

Boca Chica Key (ER,N) Sites

Boca Chica Key (UST) Sites

Boca Chica Key (MRP) Sites

Community Outreach

Administrative Records

## Site Descriptions

### Key West

- Environmental Restoration, Navy (ER,N) Sites
- Base Realignment and Closure (BRAC) Sites
- Underground Storage Tank (UST) Sites
- Munitions Response Program (MRP) Sites

### Boca Chica Key

- Environmental Restoration, Navy (ER,N) Sites
- Underground Storage Tank (UST) Sites
- Munitions Response Program (MRP) Sites

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# Site Description Tab



Environmental

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Employees



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ABOUT US

PRODUCTS AND SERVICES

Environmental > Products and Services > ENV Restoration > Installation Map > NAVFAC Atlantic > NAVFAC Southeast > Naval Air Station Key West > Site Descriptions > **Key West (ER,N) Sites**

## Key West (ER,N) Sites

Key West (UST) Sites

Key West (MRP) Sites

Boca Chica Key (ER,N) Sites

Boca Chica Key (UST) Sites

Boca Chica Key (MRP) Sites

## Key West (ER,N) Sites

Click on a map image to view a larger version. (SUGGESTION: Maximize your browser window before clicking)

### IR 1 - Truman Annex Refuse Disposal Area



OCULUS ID: DOD\_9\_1050: IR 1, the Truman Annex Refuse Disposal Area, was used for general refuse disposal and open burning from 1952 until the mid- 1960s. General refuse, waste paint thinners, and solvents may have been disposed at the site. Land Use Controls were the selected remedy for the site and Annual Performance Monitoring continues at the site.

### IR 3 – Truman Annex DDT Mixing Area



OCULUS ID: DOD\_9\_1052: The Truman Annex DDT Mixing Area is located at the former site of NAS Building 265. The site covers one quarter of an acre and is located approximately 1,100 feet inland from the coastline in an area that is restricted to vehicular and pedestrian traffic. From the 1940s to the early 1970s, the location was used as a DDT mixing area. Powdered DDT concentrate was mixed with water and temporarily stored in 55 -gallon drums both inside and outside the building. Discharges at the site were from accidental spills. Land Use Controls were the selected remedy for the site.

# Community Outreach Tab



Environmental



Employees



Client



View Map



ABOUT US

PRODUCTS AND SERVICES

Environmental > Products and Services > ENV Restoration > Installation Map > NAVFAC Atlantic > NAVFAC Southeast > Naval Air Station Key West > **Community Outreach**

Site Descriptions

**Community Outreach**

Administrative Records

## Community Outreach

### Restoration Advisory Board (RAB)

The purpose of the RAB is to promote community awareness and to obtain constructive community review and comment on environmental restoration actions to facilitate the overall cleanup of Installation Restoration (IR) Program sites. The RAB is designed to disseminate information about the IR Program and to ensure opinions about environmental restoration reflect the diverse interests within the community. The RAB mission is to establish a forum with the community, regulators and NAS Key West for the input and exchange of information in an open and interactive dialogue concerning the installation's environmental restoration program. NAS Key West's RAB was established in 1995.

The NAS has developed a Community Relations Plan (CRP) which outlines the community involvement program. The RAB supplements the community involvement effort. A copy of the CRP is available at the information repository located at the Monroe County Public Library, Fleming Street in Key West.

### RAB Structure

- Joint Leadership
- Navy and Community Co-Chair
- Community Member Elected
- Members Serve 2-year terms, must reside in or serve Monroe County, Florida
- Six Subcommittees (Membership, Public Information, Project, Planning, Rules and Education)

# Administrative Record Tab



Environmental



Employees



Client



View Map



ABOUT US

PRODUCTS AND SERVICES

Environmental > Products and Services > ENV Restoration > Installation Map > NAVFAC Atlantic > NAVFAC Southeast > Naval Air Station Key West > **Administrative Records**

Site Descriptions

Community Outreach

**Administrative Records**

## Administrative Records

[Click here to access the Administrative Record File \(ARF\)](#)

Note: Some internet browsers do not include Department of Defense (DoD) digital security certificates, which may result in a security warning recommending that the user not proceed. Though there is no harm from proceeding, to avoid such security alerts first download the DoD Root CA Certificates by following the instructions at the following web site:

<http://dodpki.c3pki.chamb.disa.mil/rootca.html>

ARF documents may contain sensitive information. If a document has sensitive information, when the title is clicked, Point of Contact information appears in lieu of the actual document.

To learn more about the Administrative Record File, click here [Environmental Restoration Program Home](#)

For additional information, to review documents, make comments or express concerns please contact:

Public Affairs Office  
P.O. Box 9001  
Key West, Florida 33040  
305-293-2027

All members of the public may review the NAS Key West Administrative Record at the Monroe County Public Library located at 700 Fleming Street, Key West FL 33040.

# Administrative Record Tab



Environmental

Enter Query

Employees Client View Map

[Home](#) [ABOUT US](#) [PRODUCTS AND SERVICES](#)

Environmental > Products and Services > ENV Restoration > Admin Records Files - Search

### Admin Record Search

From Date:

To Date:



666 records in 0.70 seconds

Record Number	Type	Site(s)	Date	Doc Sizes	Title	Author Affiliation
001461	CORRESPONDENCE	UXO 000001	2014/04/18	107 KB	LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION APPROVAL OF THE FINAL MUNITIONS RESPONSE PROGRAM EXPANDED SITE INSPECTION REPORT FOR THE FLEMING KEY DREDGE SPOIL AREA NAS KEY WEST FL	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
001465	CORRESPONDENCE	BASEWIDE	2014/04/18	111 KB	LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION APPROVAL OF THE FINAL ENGINEERING EVALUTION/COST ANALYSIS FOR THE NON - TIME CRITICAL REMOVAL ACTION FOR A-950 SPOILS PILE AND A22 DRAINAGE DITCH AT BOCA CHICA AIRFIELD NAS KEY WEST FL	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
001464	PUBLIC NOTICE	BASEWIDE	2014/03/30	153 KB	PUBLIC NOTICE OF NAVY INVITATION FOR PUBLIC COMMENT ON THE ENGINEERING EVALUATION/COST ANALYSIS FOR MUNITIONS RESPONSE PROGRAM NON-TIME CRITICAL REMOVAL ACTION FOR A950 SPOILS PILE AND A22 DRAINAGE DITCH WITH CERTIFICATION OF PUBLICATION NAS KEY WEST FL	NAVFAC SOUTHEAST



**THE WEBSITE IS AVAILABLE  
FOR VIEWING LIVE IN THE  
BACK OF THE ROOM**





# Five-Year Review Update

**July 2014 RAB  
Key West, FL**

**Stephen Rosansky, P.E, PMP  
Battelle**





# Why Perform a Five Year Review?

- **Required by law (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA]) when hazardous substances remain on site above levels that permit unrestricted use and unlimited exposure**
- **Required by the NAS Key West Hazardous Waste Permit under the Resource Conservation and Recovery Act (RCRA)**
- **Provides an opportunity to evaluate remedy performance and protection of human health and the environment**





# What Comprises the Review?

- **Summarize site history**
- **Evaluate action levels (Are they appropriate?)**
- **Perform site inspections**
- **Conduct site interviews**
- **Identify current issues and concerns**
- **Determine protectiveness**
- **Provide recommendations and follow-up actions**





# The 2014 Review

- **Third review (previous reviews 2004 and 2009)**
- **Six sites regulated under CERCLA (non-Boca Chica sites)**
  - **Area of Concern B**
  - **Installation Restoration (IR) sites 1, 3, 7, 8, and 21**
- **Six sites regulated under RCRA (Boca Chica sites)**
  - **Solid Waste Management Units (SWMUs) 1, 2, 3, 5, 7, and 9**





# Schedule

- **Internal Draft (Navy) – August 2014**
- **Draft (FDEP) – September 2014**
- **Draft Final (Public) – December 2014**
- **Final – January 2015**





QUESTIONS?





**Airfield Restoration  
&  
Associated Solid Waste Management Units  
(SWMUs)**

**July 2014 RAB  
Key West, FL**

**Edward Barham**

**NASKW**

**Stephen Rosansky, P.E, PMP**

**Battelle**





# NAS Key West Mission Statement

We Exist to Support Operational and Readiness Requirements for Department of Defense, Department of Homeland Security, National Guard, Federal Agencies and Allied Forces





# Boca Chica Field

**Department of Defense's Crown Jewel  
for Training  
Tactical Aviation Squadrons**





# Restoration of Airfield Clear Zones and Stormwater Drainage Systems at NAS Key West, Florida





# What an Airport should look like





# Overgrowth of Vegetation





# Restoration of Airfield Clear Zones and Stormwater Drainage Systems at NAS Key West, Florida

- **Restore and maintain safe flying conditions at Boca Chica Field:**
  - **Eliminate woody vegetation impacting clear zones**
  - **Stormwater drainage system restoration/upgrade**
  - **Wetlands conversion, uplands not being created**





# Restoration of Airfield Clear Zones and Stormwater Drainage Systems at NAS Key West, Florida

- **Timeline**

- **Aug 2004** Environmental Impact Statement Initiated
- **Mar 2007** Endangered Species Consultations Initiated
- **May 2007** Final Environmental Impact Statement
- **Nov 2009** Environmental Permit Applications Submitted
- **Jun 2011** Endangered Species Consultations Complete
- **Jul 2011** Environmental Permits Issued
- **Oct 2011** Construction started
- **Sep 2014** Construction Complete



# SWMU Site Locations





# SWMU Site Descriptions

**SWMU 1 WAS AN OPEN DISPOSAL AND BURNING AREA FOR GENERAL REFUSE AND WASTE** associated with maintenance activities from 1942 through the mid-1960s. The list of possible wastes included waste oil, hydraulic fluid, paint thinner, and solvents. Annual Performance Monitoring of various media continues at SWMU 1.

**SWMU 2 WAS A DDT MIXING AREA**, DDT mixing operations were conducted at this location from the mid-1940s to the early 1970s. Annual Performance Monitoring of various media continues at SWMU 2.

**SWMU 3 WAS A FORMER FIRE-FIGHTING TRAINING AREA**. The site contained aircraft and vehicles that were ignited with JP-5 fuel, waste oil, or hydraulic fluid for use in fire-fighting training. There were also two unlined circular pits where combustible liquids were ignited. Contaminants were left in place and the current remedy is Land Use Controls.

**SWMU 9 WAS A JET ENGINE TEST CELL**, used for the testing of recently repaired jet engines beginning in 1969. The jet engines were fueled from a bermed fuel tank containing JP-5 fuel from 1987 through 1995. The site is under evaluation for No Further Action (NFA) status. Recommendations were to collect additional data from the new monitoring wells and then proceed to long-term monitoring for the site.





# Outside the Boundary of a SWMU





# Inside the Boundary of a SWMU





# Before Restoration





# During Restoration





# After Restoration





# Before Restoration





# During Restoration





# After Restoration





**Questions?**





# **NAS Key West Munitions Response Program (MRP) Update**

**July 2014 RAB Meeting  
Key West, Florida**

**Todd Haverkost, PG  
Michael Ervine, PE  
Resolution Consultants**





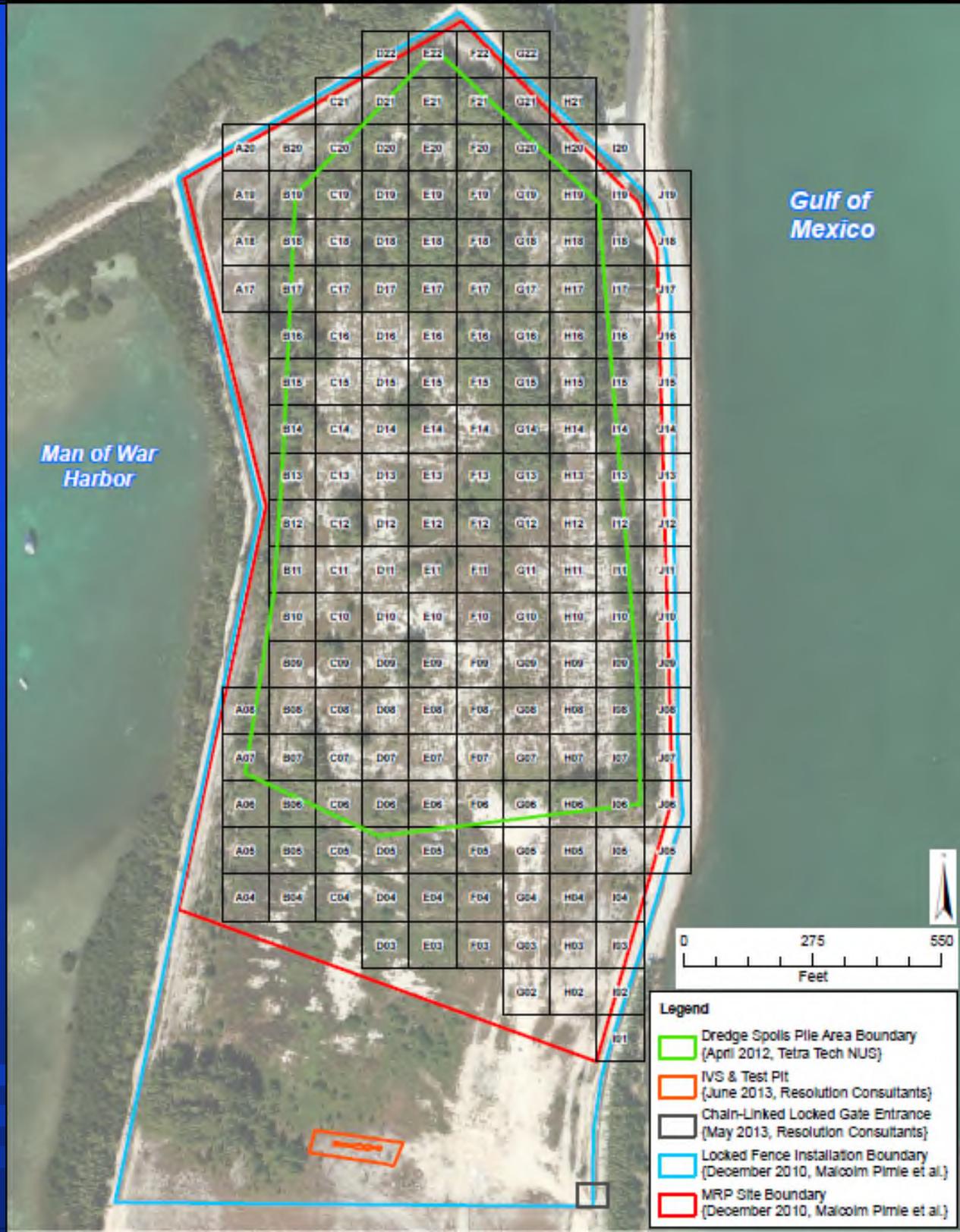
# Fleming Key Dredge Spoils Area

- Dredge spoil area is a 42 acre site created prior to WWII
- The focus is a 27 acre portion of the site was last used in 2003/2004 during dredging of the Federal Channel and Truman Harbor
- Two munitions items were discovered during the dredging activities
  - 7.2 inch Hedgehog (WWII era anti-submarine munition)
  - 76 mm artillery shell
- Naval Ordnance Safety and Security Activity (NOSSA) performed a Technical Assistance Visit in 2009 that led to site inclusion in the MRP





# Fleming Key Dredge Spoils Area





# MRP Investigation Activities to Date

- Preliminary Assessment Completed in 2010
- Limited Site Inspection Performed in 2012
  - Instrument-Aided Visual-Survey

## Surface Findings:

- 20 mm expended casings, small arms casings
- 75 mm diameter unknown item
- Metallic debris (e.g., manhole, gas cylinder, magazine, fencing, etc.)

## Subsurface Findings:

- Site was screened with a handheld magnetometer indicating the presence of shallow subsurface metallic items





# MRP Investigation Activities to Date

- Expanded Site Inspection Completed in 2013
  - Vegetation Removal
  - Geophysical Survey
    - Step 1: Identify Spatial Distribution and Intensity of Metal Responses Across the Site with Geophysics
    - Step 2: Use a Specialized Advanced Classification Geophysical Tool to Infer Ordnance Type and Size at Representative Locations





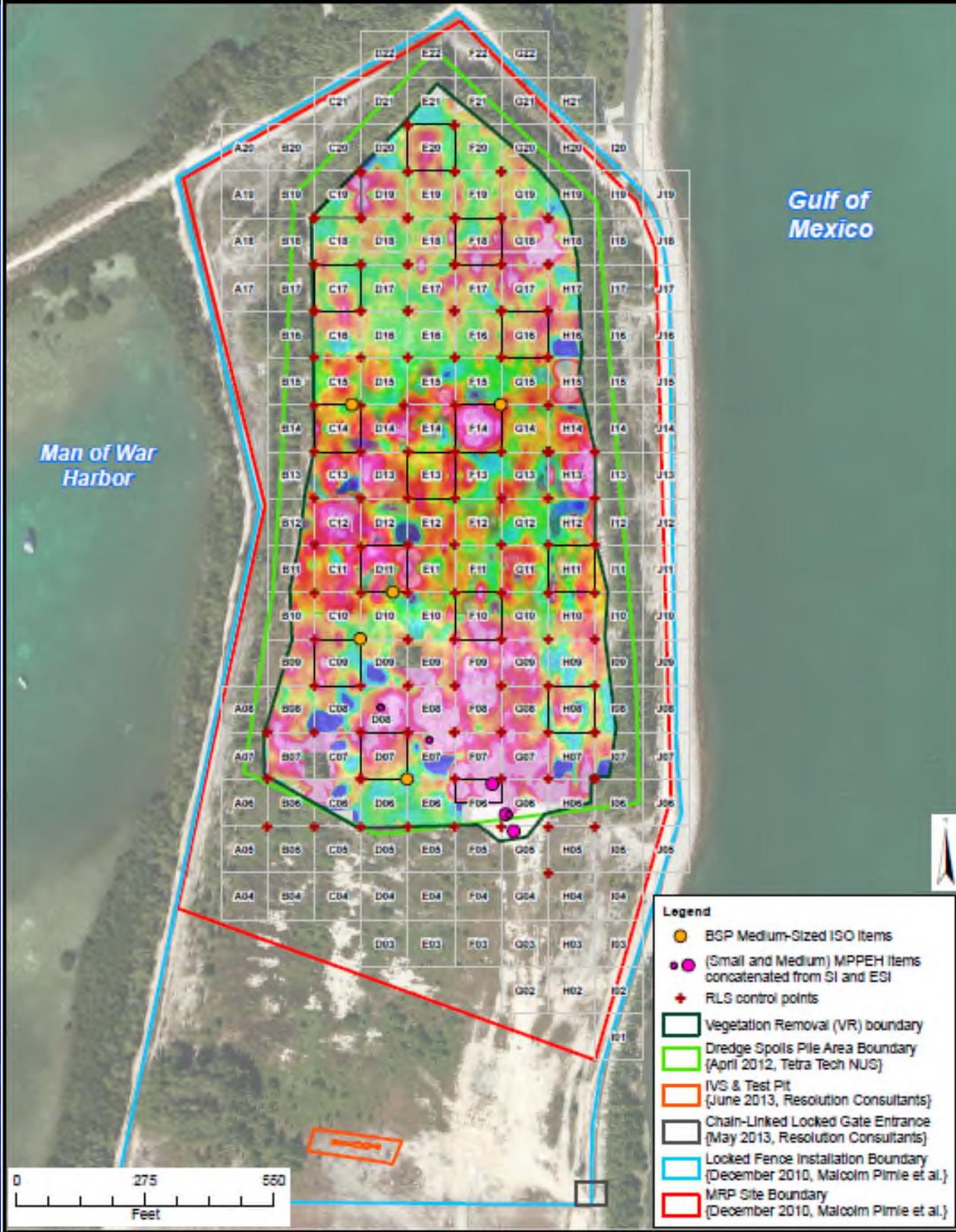
# Surface Findings

- Munitions and Explosives of Concern (MEC): (1) 37mm HE projectile
- Material Potentially Presenting an Explosive Hazard (MPPEH): (1) 105mm HEAT, (2) spherical items
- Munitions Debris: 50cal expended, 20 mm expended





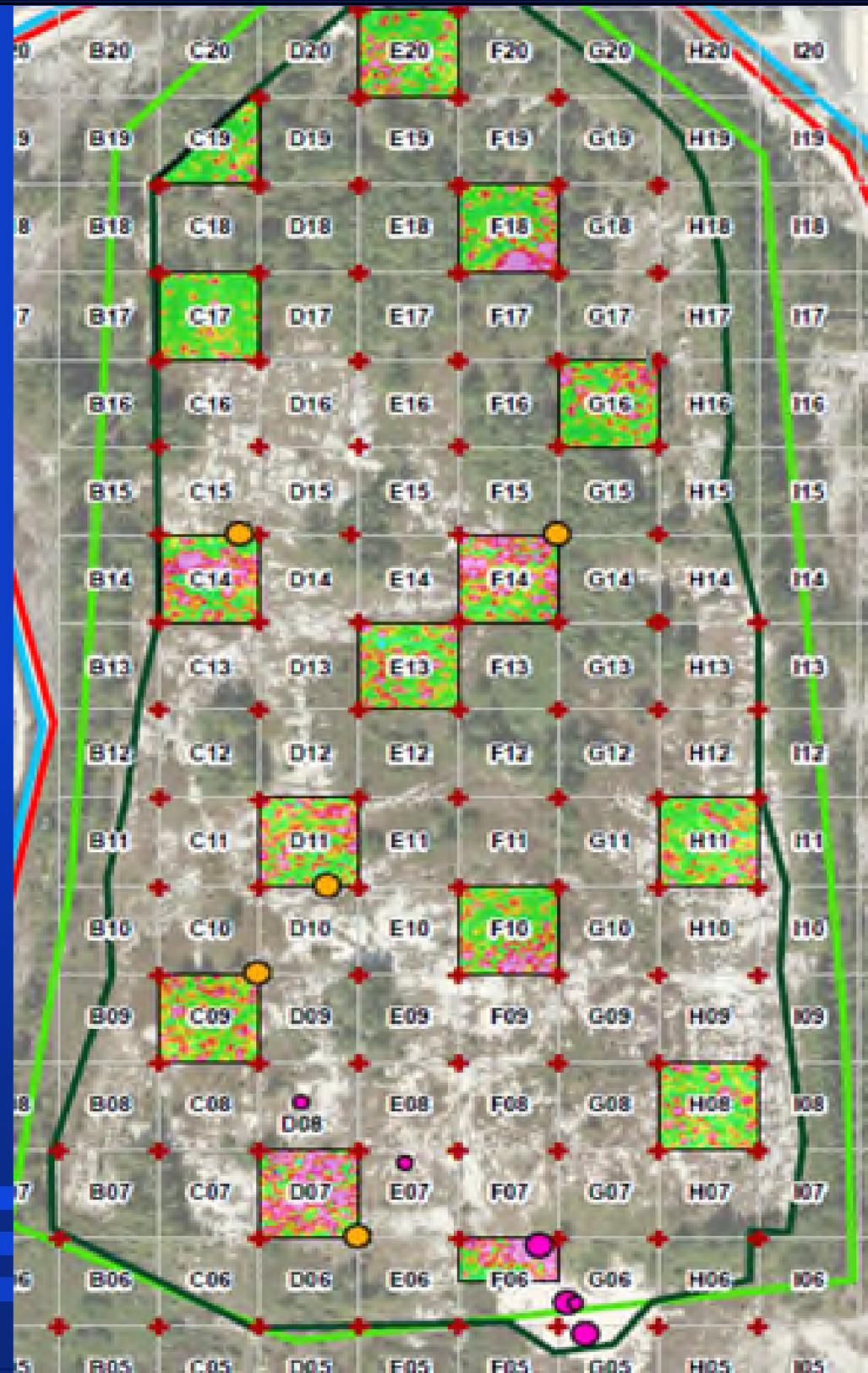
# Initial Characterization of Subsurface Metal Distribution





# Subsurface Metal Distribution Refinement

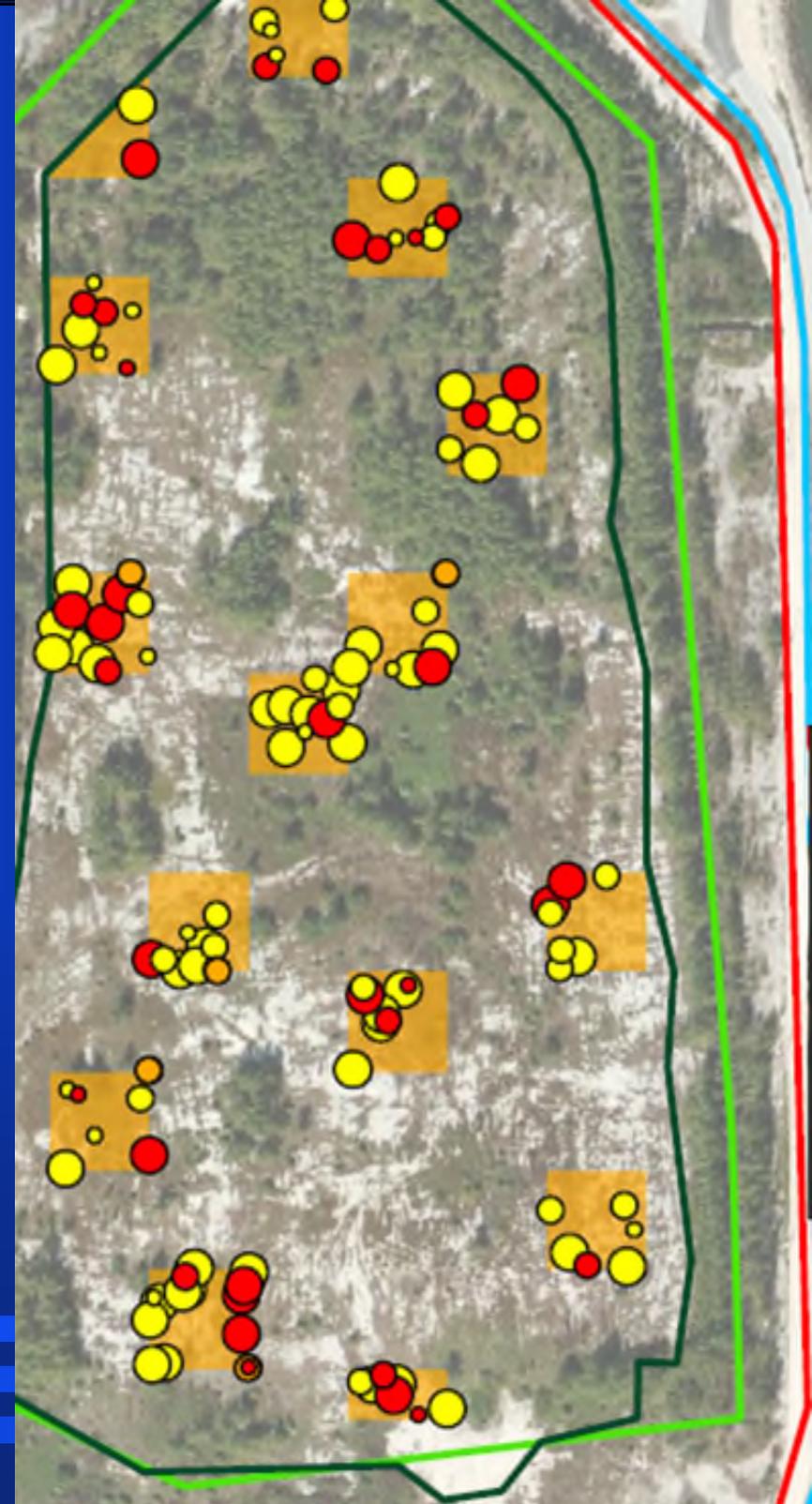
- Fourteen 100x100 foot grids surveyed
- 1981 anomalies identified





## Advanced Classification Results

- Classified 548 anomalies
  - 427 were metallic debris/clutter
  - Material Potentially Presenting an Explosive Hazard (MPPEH)
    - 39 high confidence matches
    - Matches ranged in size from 20mm to 105mm/5in
    - 82 non-definitive matches





## Next Step at Fleming Key

- Confirmatory Sampling (~ late 2014 & 2015)
  - Proposed Excavation of Approximately 400 Anomalies:
    - All visible or partially visible surface items
    - All of the high confidence and non-definitive matches
    - Percentage of debris items and unclassified anomalies for quality control
  - Sampling for munitions constituents





## Boca Chica Field MRP Sites

- Munitions Discovery – October 2012
  - Contractor was excavating ditches to improve airfield drainage, small arms ammunition encountered
  - NASKW ESO identified MPPEH in one of the ditches and the sediment stockpile
    - Response by EODMU Mayport - Demolition
    - 1 live, 1 inert, both 5-in AR warheads
- Two New MRP Sites Identified as a Result:
  - A22 Drainage Ditch
  - A950 Spoils Pile



# Boca Chica Field MRP Sites





# A950 Spoils Pile and A22 Drainage Ditch



**A950 Spoils Pile**



**A22 Drainage Ditch**



# REMOVAL ACTIVITIES

- A22 Drainage Ditch
  - Dewater, mag & dig, mechanical excavation, screening for small arms
- A950 Spoils Pile
  - Mag & dig, mechanical excavation, screening
- Recovered MEC/MPPEH Items
  - Place items in Temporary Storage Magazine
  - Arrange Demolition Operations
- Munitions Constituent Sampling to Characterize Stockpiled Material
- Work Tentatively Scheduled to Begin Late-2014





# PLANNING PROCESS

- Planning Document Submittals
  - Final Engineering Evaluation/Cost Analysis (Mar 2014)
    - Public Notice Published March 28th
    - Public Comment Ended April 30<sup>th</sup> with no Comments Received
  - Action Memorandum Submitted for FDEP Review
  - Plans Currently in Navy Review
    - Removal Action Work Plan
    - Sampling and Analysis Plans
    - Explosives Safety Submission
    - Accident Prevention Plan





Questions?





# Defense Reutilization Marketing Office (DRMO) Slivers

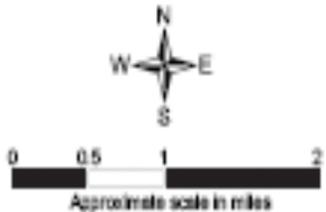
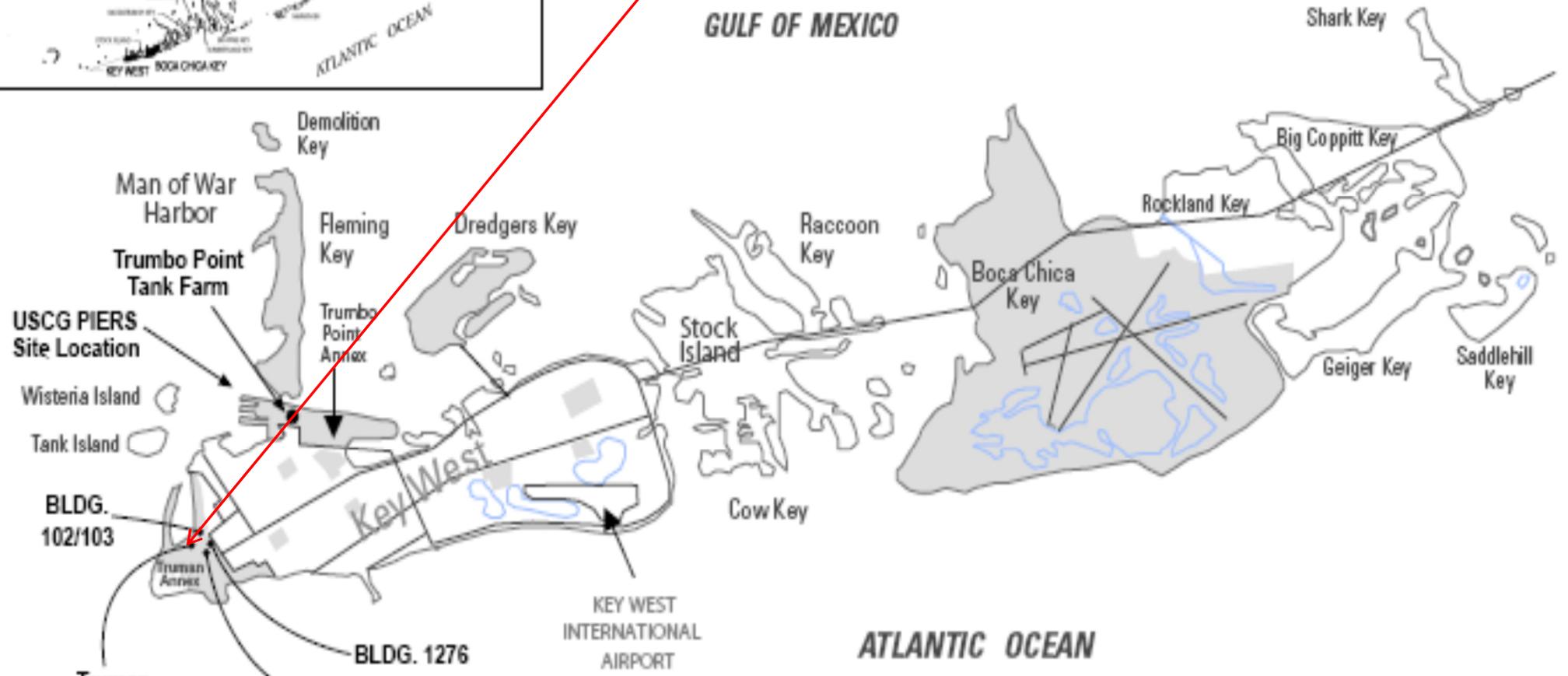
Site Investigation/  
Non-Time Critical Removal Action

Amy Twitty, P.G./CH2M HILL

July 2014



# Truman Annex DRMO



DRMO Slivers  
NAS Key West  
**Key West, Florida**  
Site Location Map  
Trumbo Point Tank Farm  
NAS Key West  
Key West, Florida



# Site Location





# Site Background

- The project consists of two former DRMO land slivers adjacent to the City-owned portion of the former DRMO on Truman Annex.
- The land slivers were retained by the Navy during the Base Realignment and Closure (BRAC) in 2002.
- The DRMO was formerly used as a storage facility for new and used military equipment.
- The southern DRMO sliver is approximately 600 feet long by 25 feet wide; the north DRMO sliver is approximately 200 feet long by 30 feet.





# 1999 DRMO

Feb 24, 1999

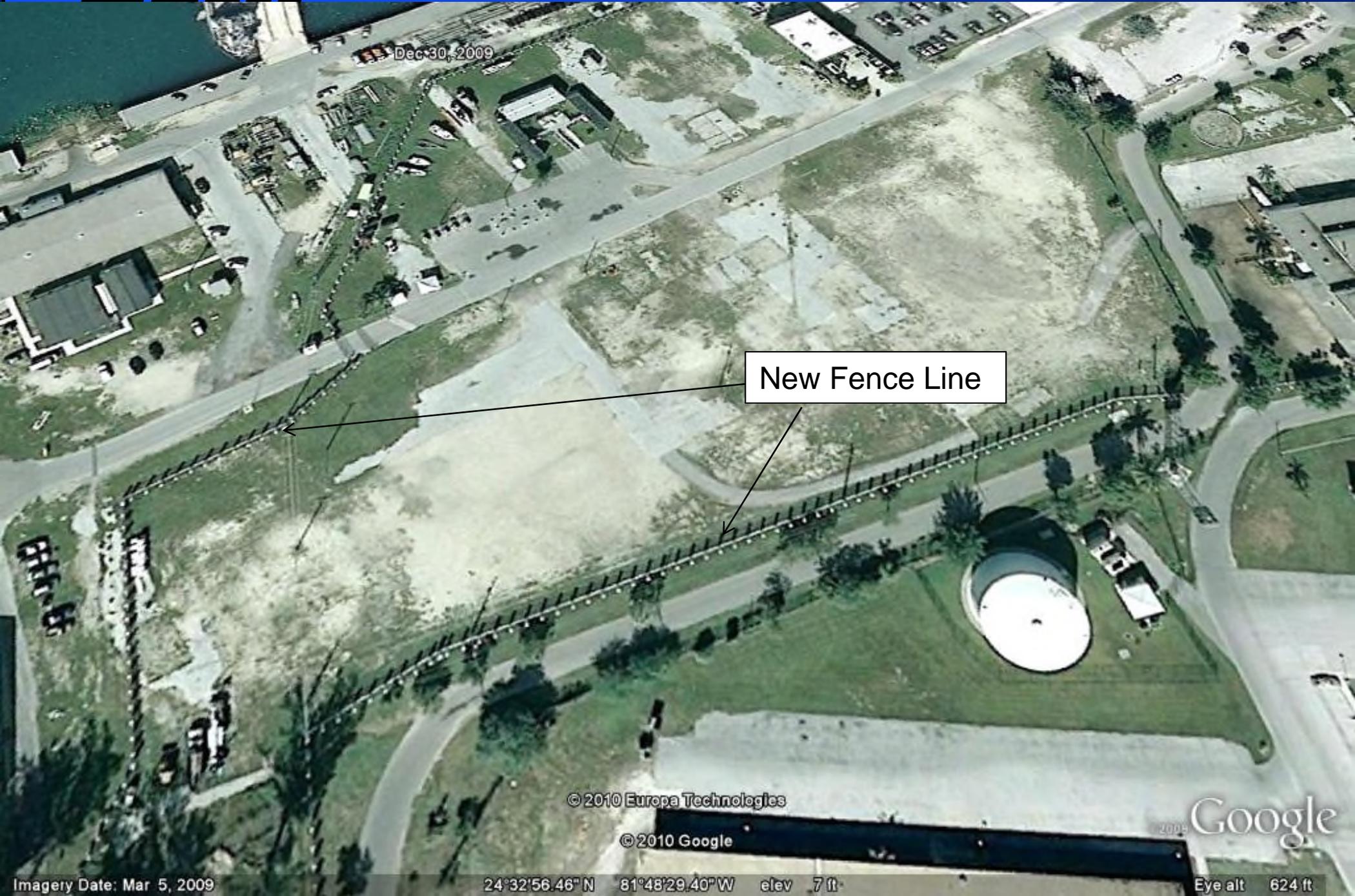
Old Fence Line

© 2010 Europa Technologies  
Image U.S. Geological Survey  
© 2010 Google

© 2009 Google



# 2009 DRMO



Dec 30, 2009

New Fence Line

© 2010 Europa Technologies

© 2010 Google

2009 Google





# DRMO Slivers

- According to the base master plan, the north DRMO sliver is zoned for commercial/industrial use and the south DRMO sliver is zoned for residential land use (military housing nearby)
- Soil samples were collected at both slivers in November 2010 and June 2011 and analyzed for arsenic, lead, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs)
- Samples from the north DRMO sliver exceeded the Residential standards but were below Industrial standards; Samples at south DRMO sliver exceeded both Residential and Industrial standards in some locations





# Remedial Action

- **Soil removal action was conducted in September – October 2012**
- **Approximately 823 tons (49 truck loads) of contaminated soil were removed from the north and south DRMO slivers and transported to CEMEX Environmental Services in Miami for thermal treatment and recycling**
- **Confirmation samples collected at the walls of the excavations in 2012 indicate some residual soil contamination exists**
- **Further soil sampling was conducted in August 2013 and March 2014 in an effort to delineate residual contamination**



# Two Foot Dig – North Sliver



# Night Work – South Sliver



# Confirmation Sample Results North Sliver

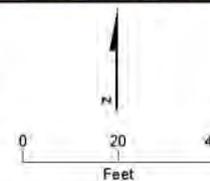


- Legend**
- Soil Boring (No Exceedance) 0.5 ft Excavation (1,327 square feet)
  - Soil Boring (Exceeds BTV) 2 ft Excavation (1,301 square feet)

Analyte	SCREENING STANDARDS			
	Residential SCTL	Residential 3X SCTL	BTV (Background UCL) 0 - 0.5 feet	BTV (Background UCL) 0.5 - 2 feet
BEQ	0.1	0.3	0.35	0.093

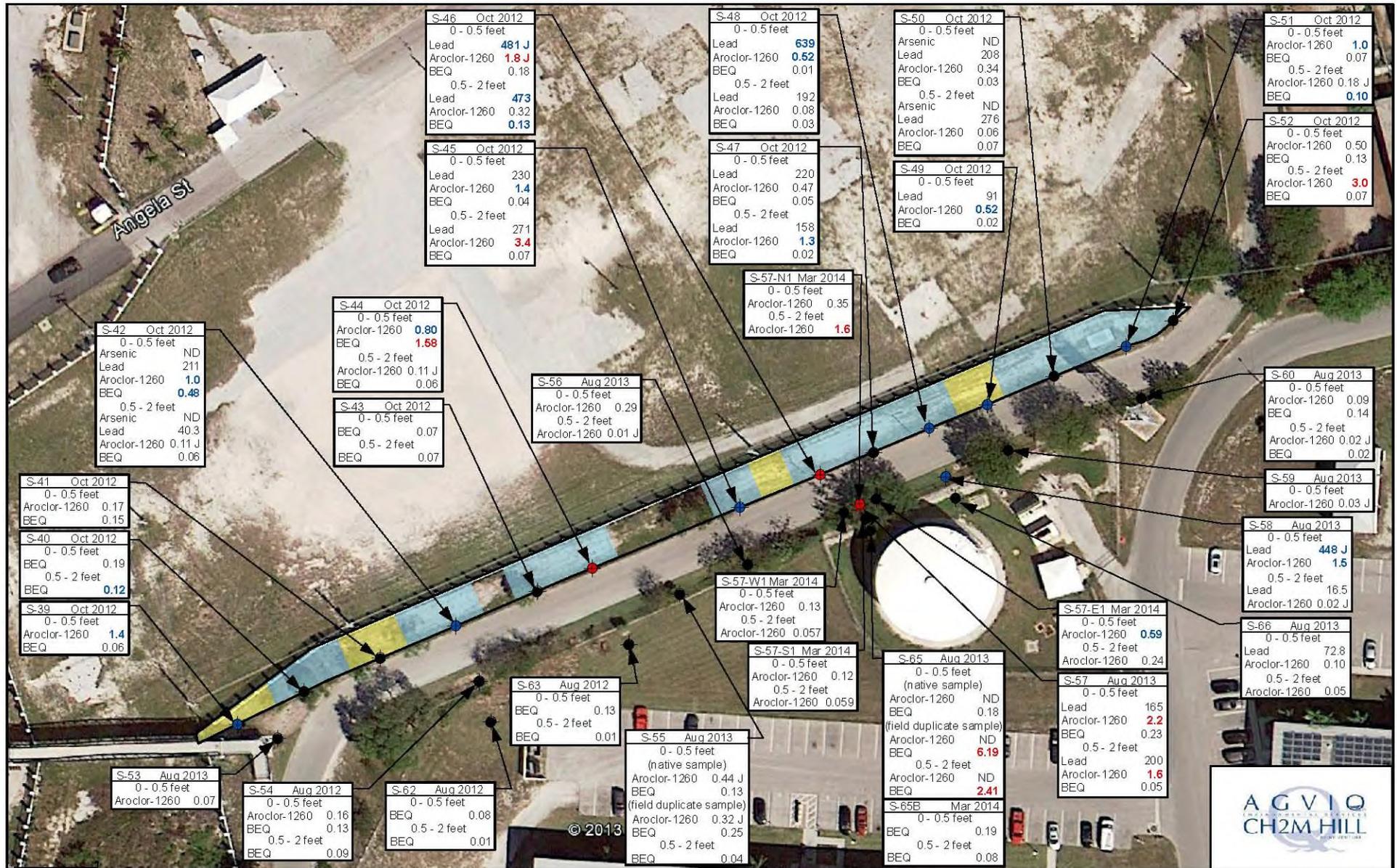
All units in milligrams per kilogram

**Notes:**  
 BEQ = Benzo(a)pyrene Equivalent  
 BTV = Background Threshold Value  
 Google Earth Aerial 3/7/2013



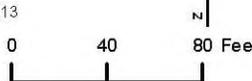
**Figure 4**  
 Soil Analytical Results  
 North DRMO Land Sliver  
 Former DRMO Slivers, Truman Annex  
 NAS Key West  
 Key West, Florida

# Confirmation Sample Results South Sliver (0-0.5 ft)



- Legend**
- Soil Boring (No Exceedance)
  - Soil Boring (Exceeds Residential SCTL) (For BEQ, Exceeds BTV)
  - Soil Boring (Exceeds 3X Residential SCTL) (For BEQ, Exceeds 3X BTV)
  - 0.5 feet Deep Excavation (2,387 square feet)
  - 2 feet Deep Excavation (8,680 square feet)

**Notes:**  
 BEQ = Benzo(a)pyrene Equivalent  
 BTV = Background Threshold Value  
 J = Estimated Value  
 ND = Not Detected  
 Google Earth Aerial 3/7/2013

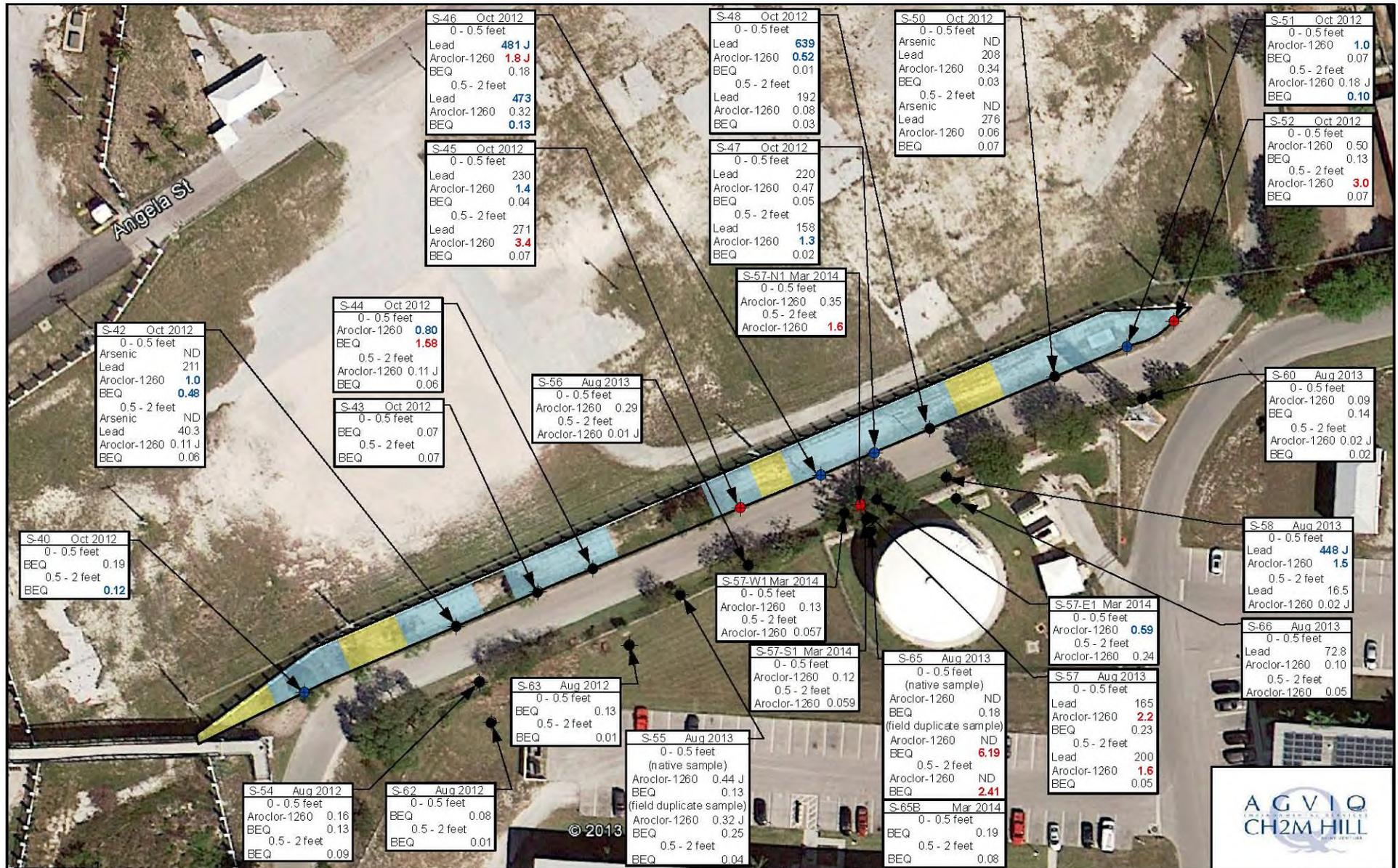


Analyte	SCREENING STANDARDS			
	Residential SCTL	Residential 3X SCTL	BTV (Background UCL) 0- 0.5 feet	0.5- 2 feet
Arsenic	2.1	6.3	---	---
BEQ	0.1	0.3	0.35	0.093
Aroclor-1260	0.5	1.5	---	---
Lead	400	1,200	---	---

All units in milligrams per kilogram

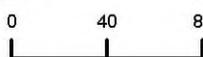
**Figure 5**  
 Soil Analytical Results (0 - 0.5 feet)  
 South DRMO Land Sliver  
 Former DRMO Slivers, Truman Annex  
 NAS Key West  
 Key West, Florida

# Confirmation Sample Results South Sliver (0.5-2 ft)



- Legend**
- Soil Boring (No Exceedance)
  - Soil Boring (Exceeds Residential SCTL) (For BEQ, Exceeds BTV)
  - Soil Boring (Exceeds 3X Residential SCTL) (For BEQ, Exceeds 3X BTV)
  - 0.5 feet Deep Excavation (2,387 square feet)
  - 2 feet Deep Excavation (8,680 square feet)

**Notes:**  
 BEQ = Benz(a)pyrene Equivalent  
 BTV = Background Threshold Value  
 J = Estimated Value  
 ND = Not Detected  
 Google Earth Aerial 3/7/2013



Analyte	SCREENING STANDARDS			
	Residential SCTL	Residential 3X SCTL	BTV (Background UCL) 0-0.5 feet	0.5-2 feet
Arsenic	2.1	6.3	---	---
BEQ	0.1	0.3	0.35	0.093
Aroclor-1260	0.5	1.5	---	---
Lead	400	1,200	---	---

All units in milligrams per kilogram



**Figure 6**  
 Soil Analytical Results (0.5 - 2 feet)  
 South DRMO Land Sliver  
 Former DRMO Slivers, Truman Annex  
 NAS Key West  
 Key West, Florida



# Future Activities

- **Due to soil action level exceedances, additional sampling is planned adjacent to and beneath the road to Ft. Zachary Taylor**
- **The Florida Department of Environmental Protection has also asked for groundwater sampling in the highest soil concentration areas to assess whether the groundwater has been impacted by site contaminants**
- **The Uniform Federal Policy Sampling and Analysis Plan and work plan are currently being revised for the additional work. Field work is anticipated to occur in late summer 2014**
- **Additional remedial action is warranted. A final completion report will be prepared to document the remedial actions at the site**





# Questions/Comments?





# **Base Realignment and Closure (BRAC) Sites Update July 2014 RAB Key West, FL**

**David Criswell - NAVFAC, BRAC Office**

**Amy Twitty – CH2M HILL**





# BRAC Sites To Be Discussed

- **Truman Annex Sites**
  - **Defense Reutilization and Marketing Office (DRMO)**
  - **City Owned Portion of Parcel K**
  - **Parcel E**





# Truman Annex Sites



**Truman Waterfront Park**  
 THE CITY OF KEY WEST  
 DATE: 4/16/2014

This site is subject to the Code of Federal Regulations Citation CFR 334.610, restricting access to any person and/or any vessel other than Government-owned vessels to the Truman Harbor.



# Former Defense Reutilization and Marketing Office (DRMO) Site

## Truman Annex





# DRMO Location





# History

- **Navy transferred to City of Key West 2002**
- **Subsequent to transfer, Navy discovered additional soil contamination**
- **Navy conducted a number of soil removals 1999-2009**
  - **DRMO soil was cleaned up to allow unrestricted use (meets Florida Department of Environmental Protection [FDEP] residential use criteria)**





# Current & Future Activities

- **Navy submitted Site Rehabilitation Completion Report to FDEP**
  - **Recommended no further action without Land Use Controls (LUCs)**
- **FDEP has requested groundwater sampling for iron in at least 2 locations at the site.**
  - **Estimated sampling date: September 2014**
- **FDEP (if concur) will issue a Site Rehabilitation Completion Order**
  - **Estimated submittal date: December 2014**
- **Navy will modify deed to reflect unrestricted use (no LUCs in soil and possibly groundwater)**
  - **Estimated completion date early 2015**





# City Owned Portion of Parcel K

## Truman Annex





# Parcel K (City Owned) Location





# History

- **Transferred from Navy to City of Key West in 2002**
- **April 2009 City took soil samples**
  - Results greater than FDEP soil criteria
- **City contacted the Navy**
- **Navy conducted additional soil sampling**
  - Lead, PCBs (polychlorinated biphenyls), petroleum constituents exceedances
- **Navy delineated the soil contamination and worked with FDEP on soil cleanup levels**
  - Acceptable for recreational use





# Soil and Groundwater

- Navy conducted soil removal in January and February 2012
- FDEP asked for groundwater sampling in the highest lead area and along the site perimeter
- The groundwater sampling occurred in August 2013. Lead concentrations were within acceptable levels for unrestricted use.





# Current and Future Activities

- **Navy submitted Site Rehabilitation Completion Report to FDEP in April 2014**
  - **Recommend no further action with LUCs**
    - residential use prohibited
    - acceptable for recreational use (proposed park)
- **FDEP (if concur) will issue a Site Rehabilitation Completion Order**
  - **Estimated submittal date: August 2014**





# Future Activities

- **Navy will modify deed to allow recreational (park) use**
  - **Current deed only allows industrial use**
  - **Estimated completion date early 2015**
- **City planning on redeveloping site as a park**





# Parcel E

# Truman Annex





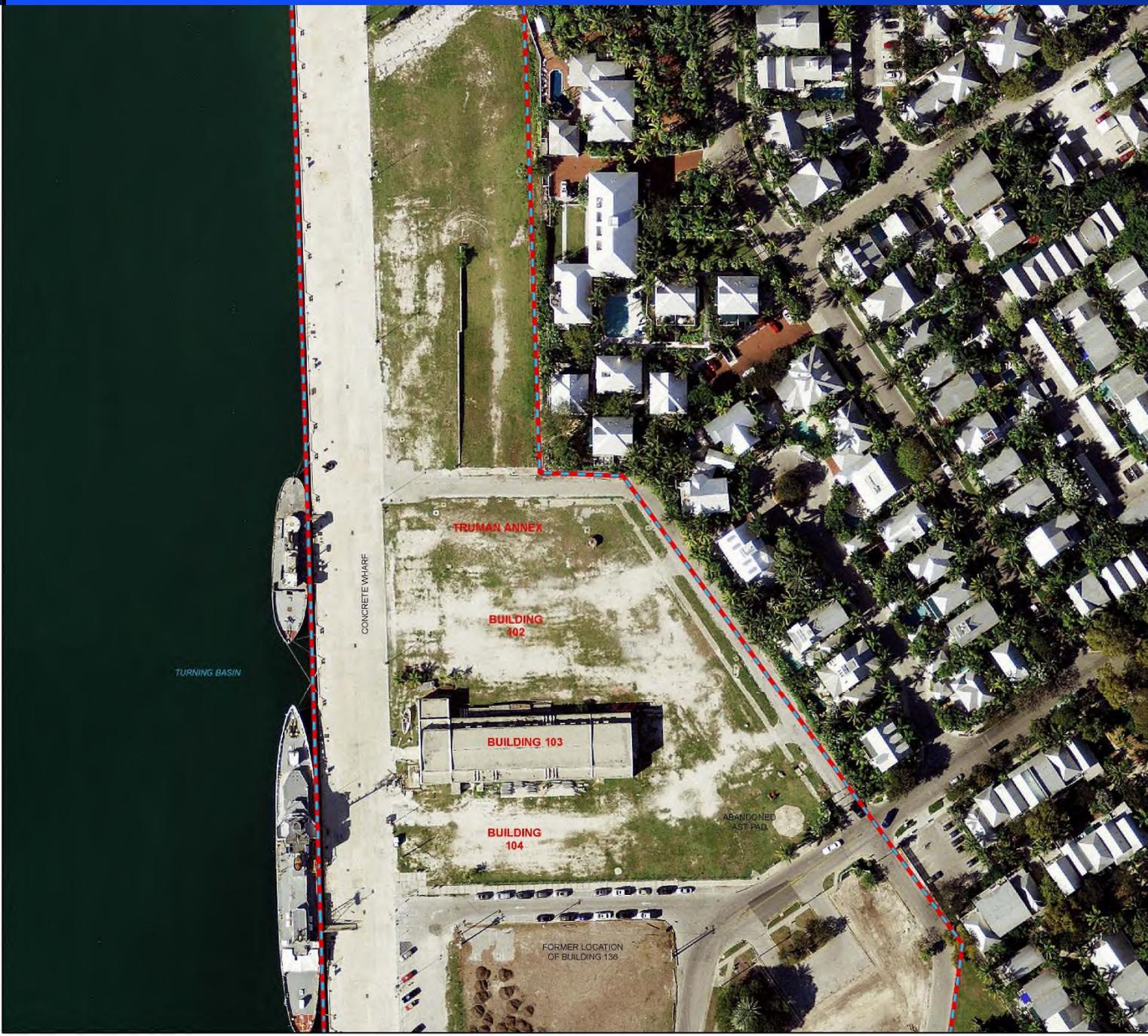
## Parcel E

- **Parcel E consists of several sites including:**
  - **Building 102 - Former Torpedo Overhaul and Storehouse**
  - **Building 103 - Former Central Power Plant**
  - **Building 104 - Former Battery Overhaul and Storage**
  - **Building 136 – Former Shipfitters/Plate and Mold Shop**
  - **Building 189 - Former Liquor Store (No Further Action; 2001)**





# Parcel E - Buildings 102, 103, 104





# Parcel E - Building 136





# History

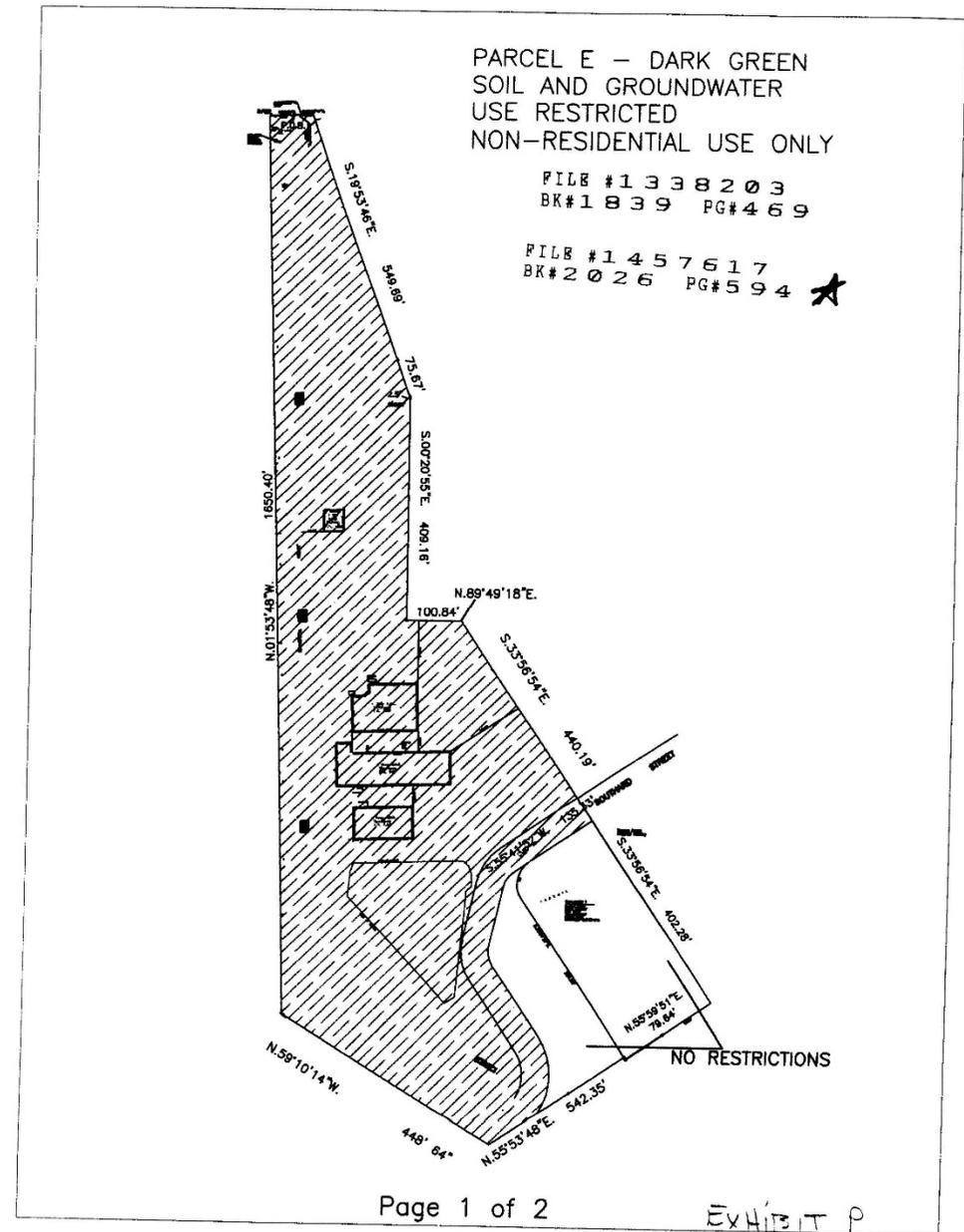
- **Parcel E was transferred to City of Key West in 2002**
- **Building 103 - Soil cleaned to depths of 2 to 6 feet including PCBs**
- **Former Buildings 102 and 104 - Soil cleaned to depth of 2 feet for polycyclic aromatic hydrocarbons (PAHs)**
- **Former Building 136 – Soil cleaned to depth of 2 feet for arsenic, iron, and PAHs; contaminants under the road required special handling. Last contaminant (arsenic) removed in 2007 excavation**
- **Building 189 – Was adjacent to an area affected by a petroleum leak from an underground pipeline. Received Site Rehabilitation Completion Order from FDEP in 2001**





# Parcel E LUCs per 2002 Deed

- Quitclaim Deed, November 2002, states Parcel E property is "non-residential use only"
- Per the 2002 deed, soil and groundwater use restricted (shaded area only)
- Decision Document for 10 BRAC Sites states in Appendix A (page A-4) that Parcel E could be used for a recreational use





# Truman Annex Summary

- **Navy will modify Truman Annex deed once the following are complete:**
  - **FDEP submits Site Rehabilitation Completion Order for DRMO parcel (including Building 136) – October 2014**
  - **FDEP submits City owned portion of Parcel K Site Rehabilitation Completion Order – August 2014**
  - **Deed modification, approximately early 2015**
- **City of Key West will submit a Construction Management Plan for the LUC areas at Truman Annex for review by Navy and FDEP**



# Truman Annex Future LUCs - Soil



**Truman Waterfront Park**  
 THE CITY OF KEY WEST  
 DATE: 12-5-2012

Red Outline: No residential use allowed (okay for recreation use-park)

# Truman Annex Future LUCs - Water



**Truman Waterfront Park**  
 THE CITY OF KEY WEST  
 DATE: 12-5-2012

Red Outline: Use of the Groundwater is Prohibited



Questions ?

