

# Appendix A

## Outreach to Solicit Community Input



## **Assessing Community Interest in a Restoration Advisory Board for Environmental Cleanup at Marine Corps Base Quantico**



A clean, healthy environment is essential to supporting the Department of the Navy's (DON's) primary mission of maintaining fleet readiness. Although past activities have resulted in the release of contaminants into the environment, DON is committed to cleaning up Navy properties in an effective and efficient manner. To accomplish cleanup, DON's environmental restoration team encourages and supports partnerships among various stakeholders, including state and federal regulators, American Indian tribes, and local communities.

The DON, Naval Facilities Engineering Command Washington and the Marine Corps Base Quantico (MCBQ), in cooperation with the United States Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ), implement the Defense Environmental Restoration Program (DERP) at Marine Corps Base Quantico (MCBQ).

### **Environmental Investigation and Cleanup at MCBQ**

The purpose of the Environmental Restoration (ER) Program is to reduce the risk to human health and the environment from past waste disposal operations and hazardous substance spills at DON activities including MCBQ. The program goal is to provide for cost-effective and timely site assessment, planning, and remediation of identified releases consistent with DERP requirements.

### **Assessing Community Interest in a Restoration Advisory Board**

In the 1990s, MCBQ had a Technical Review Committee (now called a Restoration Advisory Board or RAB) consisting of MCBQ personnel, representatives of state and federal regulatory agencies, elected officials, and community members. However, over time, community interest and participation waned. The committee stopped meeting and was ultimately dissolved.

The use of RABs is an effective means of promoting stakeholder participation, and is the cornerstone of efforts to expand community involvement in decisions about cleanup at military bases. RABs serve as a primary mechanism to ensure that individuals within the community not only have access to information relevant to environmental restoration but also have the ability to participate in the decision-making process.

MCBQ periodically re-assesses community interest in the establishment of a RAB. If re-established, the RAB would include local residents who reflect the diverse interests of the community. RAB involvement could include participation in meetings, participation in public reviews, and commenting on reports relating to the ongoing environmental studies and restoration activities at MCBQ. Members would have an opportunity to provide input on activities that will accelerate the ER Program. Members may also serve as voluntary liaisons between the community and the RAB and be available to meet with community members and/or groups. All RAB meetings would be open to the public.

**If you think that MCBQ should establish a  
Restoration Advisory Board, or you would like more information,  
please contact the Restoration Program Manager at (703) 432-0521 or  
send an email to [brian.ventura@usmc.mil](mailto:brian.ventura@usmc.mil) by December 14, 2016.**



# Do You Want More Information about Marine Corps Base Quantico's Environmental Restoration Program?



## DO YOU KNOW?

Marine Corps Base Quantico (MCBQ) and the U.S. Navy, in cooperation with state and federal environmental regulators, implement the Environmental Restoration Program (ERP), which focuses on:

1. **Chemical contamination** - Investigating and addressing contamination that may have occurred in the past due to spills, leaks, or historic disposal practices
2. **Munitions response** – Investigating and addressing potential environmental and safety hazards from past unexploded ordnance, discarded military munitions, and munitions constituents.



## WE NEED YOUR HELP!

YOU can help the ERP update its "Community Involvement Plan" and learn how people would like to get more information about the environmental and munitions investigations and cleanup being done at the base. Simply go to MCBQ's environmental restoration website at <https://go.usa.gov/xngKr> and fill out a confidential electronic questionnaire to help the ERP develop its Community Involvement Plan. *Please respond by the end of January 2018.*

**Thanks – we value your input!**

Environmental > Products and Services > Environmental Restoration > Installation Map > NAVFAC Atlantic > NAVFAC Washington > **Marine Corps Base Quantico**

Naval Support Facility  
Indian Head

Naval Air Station Patuxent  
River

Washington Navy Yard

Naval Support Facility  
Dahlgren

**Marine Corps Base  
Quantico**

Site Descriptions

Community Outreach

Administrative Records

Links

Naval Research Laboratory  
– Chesapeake Bay  
Detachment

## Marine Corps Base Quantico



HOME PAGE    SITE DESCRIPTIONS    COMMUNITY OUTREACH    ADMINISTRATIVE RECORDS    LINKS

### WE NEED YOUR INPUT!

An important part of implementing the Environmental Restoration Program (ERP) at MCBQ is understanding what people know and how they would like to be kept informed and aware of the investigation and cleanup work being done. To accomplish this, we gather information (confidentially) from people like you, and use it to help prepare and implement a "Community Involvement Plan" for the ERP.

YOU can help by completing our electronic questionnaire:

- Download our questionnaire as a fillable .pdf [here](#), save your responses, and email them to us at [amy.brand@jacobs.com](mailto:amy.brand@jacobs.com).

Please reply by the **end of January 2019**. Your responses will be kept confidential and compiled with others to help prepare the MCBQ Community Involvement Plan for the ERP.

Thank you for your help!

Marine Corps Base Quantico (MCBQ) is located approximately 35 miles south of Washington, DC. MCBQ consists of approximately 59,000 acres and lies within southern Prince William, northern Stafford, and eastern Fauquier counties. MCBQ is bounded to the north by Cedar Run and Virginia State Route 646; to the east by the Potomac River; to the south by Tank Creek, Aquia Creek, and Virginia State Route 610; and to the west by Dorrels Run and Virginia State Route 612. MCBQ is divided into two sections, the Mainside located east of Interstate Route 95 and the Guadalcanal (Gusd) Area located west of Interstate Route 95.

## **MCBQ Community Involvement Plan Questionnaire Email to Base Housing**

**Subject:** MCBQ's Environmental Restoration Program Needs Your Input

**Attachment:** MCBQ CIP fillable questionnaire final.pdf

### **To update the Environmental Restoration Program's Community Involvement Plan, WE NEED YOUR HELP!**

The environmental restoration program focuses on cleaning up environmental contamination caused by past disposal, storage, and handling of hazardous materials, including both chemical contaminants and discarded munitions and unexploded ordnance. The Community Involvement Plan guides how we will communicate with the community during implementation of this program.

To update the plan, we need input from people like you! Your confidential responses will be used in a summary format to update the Community Involvement Plan. The plan is a public document, which will be used by Marine Corps officials as a guide for community involvement in the environmental restoration program.

A copy will be placed in the information repositories located in the reference area at Chinn Park Regional Library in Prince William County, Porter Branch Library in Stafford County, and the MCBQ Natural Resources and Environmental Affairs Branch at 3049 Bordelon Street on base.

**You can help by filling out the questionnaire located here:**

<https://www.surveymonkey.com/r/6M2KTQ2>

Or, if you prefer or you cannot access the Survey Monkey link, you can fill out the attached fillable .pdf questionnaire. Just save your responses and email your file to amy.brand@ch2m.com

Thank you in advance for your help! Your input is valuable and will the Marine Corps communicate effectively with the community about the environmental restoration program.

**COMMUNITY INVOLVEMENT QUESTIONNAIRE  
for  
ENVIRONMENTAL RESTORATION PROGRAM  
MARINE CORPS BASE QUANTICO**



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**1. Welcome to the Community Involvement Questionnaire for Marine Corps Base Quantico (MCBQ)**

As part of the overall environmental restoration program at Marine Corps Base Quantico (MCBQ), we are updating the Community Involvement Plan.

The environmental restoration program focuses on cleaning up environmental contamination caused by past disposal, storage, and handling of hazardous materials, including both chemical contaminants and discarded munitions and unexploded ordnance. The Community Involvement Plan guides how we will communicate with the community during implementation of this program.

To update the plan, we need input from local community members like you! Your confidential responses will be used in a summary format to update the Community Involvement Plan. The plan is a public document, which will be used by Marine Corps officials as a guide for community involvement in the environmental and munitions response program.

A copy of the Community Involvement Plan will be placed in the information repositories located in the reference area at Chinn Park Regional Library in Prince William County, Porter Branch Library in Stafford County, and the MCBQ Natural Resources and Environmental Affairs Branch at 3049 Bordelon Street on base.

Thank you for participating in our questionnaire. Your input is valuable and will help the Marine Corps communicate effectively with the community about the environmental restoration program.

## 2. Profile

This section asks questions about you, your role in the local community, and the community in general.

1. What is your 5-digit zip code?
2. How long have you lived in Stafford, Fauquier, or Prince William County (including Quantico)?  <input type="radio"/> < 1 year <input type="radio"/> 11-15 years <input type="radio"/> I do not live in Stafford, Fauquier, or Prince William County (including Quantico) <input type="radio"/> 2-5 years <input type="radio"/> 16-20 years <input type="radio"/> 6-10 years <input type="radio"/> > 21 years
3. How long have you worked in Stafford, Fauquier, or Prince William County (including Quantico)?  <input type="radio"/> < 1 year <input type="radio"/> 11-15 years <input type="radio"/> I do not work in in Stafford, Fauquier, or Prince William County (including Quantico) <input type="radio"/> 2-5 years <input type="radio"/> 16-20 years <input type="radio"/> 6-10 years <input type="radio"/> > 21 years
4. How would you describe your role in the community? (select all that apply)  <input type="radio"/> Local resident <input type="radio"/> Representative or member of a local environmental group <input type="radio"/> Local business owner <input type="radio"/> Community leader <input type="radio"/> Local employee <input type="radio"/> Other (please specify) <input type="radio"/> Representative of a homeowner association or other civic organization <input type="radio"/> Public or elected official
5. Have you or any of your relatives ever worked at Marine Corps Base Quantico (MCBQ)?  <input type="radio"/> Yes (me) <input type="radio"/> Yes (relative) <input type="radio"/> No (me) <input type="radio"/> No (relative)
6. On a scale of 1-10, do you think people in the local community are concerned about environmental issues in general?  Scaled rating (1-Not concerned at all, 10-Extremely concerned)
7. What do you think are the most important environmental issues facing your community today? (choose up to 4)  <input type="radio"/> Traffic <input type="radio"/> Drinking water <input type="radio"/> Trash and littering <input type="radio"/> Growth and development <input type="radio"/> Food sources <input type="radio"/> Water quality <input type="radio"/> Chemical contamination in the environment <input type="radio"/> Air quality <input type="radio"/> Climate change <input type="radio"/> Other (please specify)

### 3. Awareness of and Interest in Environmental Cleanup from Past Activities at MCBQ

This page will ask about your awareness of and interest in the environmental cleanup of past contamination at MCBQ through the environmental restoration program. Contamination may have resulted from historical disposal, storage, and handling of hazardous materials.

*Don't worry if you don't know much about the environmental cleanup at MCBQ - that is useful information too!*

<p>8. Are you aware that the Navy and Marine Corps are investigating and cleaning up environmental contamination from past activities at MCBQ?</p> <p> <input type="radio"/> Yes, aware                              <input type="radio"/> Vaguely aware                              <input type="radio"/> No, not aware                              <input type="radio"/> Not sure       </p>																																																															
<p>9. If yes, what is your general understanding of the environmental cleanup activities? Please describe.</p>																																																															
<p>10. On a scale of 1-10, how interested or concerned are you about the environmental cleanup activities at MCBQ?</p> <p>Scaled rating (1-Not at all interested or concerned, 10-Extremely interested or concerned)</p>																																																															
<p>11. What issues related to the environmental cleanup activities at MCBQ interest or concern you the most?</p> <p>Each item has a 1-5 scale from "not interested or concerned" to "very interested or concerned." "Not applicable" is also an option.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 10%; text-align: center;">not interested or concerned (1)</th> <th style="width: 10%; text-align: center;">(2)</th> <th style="width: 10%; text-align: center;">somewhat interested or concerned (3)</th> <th style="width: 10%; text-align: center;">(4)</th> <th style="width: 10%; text-align: center;">very interested or concerned (5)</th> <th style="width: 10%; text-align: center;">not applicable</th> </tr> </thead> <tbody> <tr> <td>Potential health risk</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Soil</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Groundwater</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Property values</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Health issues</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Surface water (ponds, streams)</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Air quality</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Other (please specify)</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>		not interested or concerned (1)	(2)	somewhat interested or concerned (3)	(4)	very interested or concerned (5)	not applicable	Potential health risk							Soil							Groundwater							Property values							Health issues							Surface water (ponds, streams)							Air quality							Other (please specify)						
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12. Do you feel you have been directly or indirectly affected by MCBQ's environmental sites?

- No       Not sure       Yes (please fill in comment box)

13. On a scale of 1-10, how interested or concerned do you think community members are about the environmental cleanup activities at the base?

Scaled rating

(1-Not at all interested or concerned, 10-Extremely interested or concerned)

14. Please provide any comments on your responses to Questions 10-13.

Please continue on the next page.

#### 4. Awareness of and Interest in Munitions Response at MCBQ

This page will ask about your awareness of and interest in munitions response at MCBQ through the environmental restoration program. Munitions response addresses environmental health and safety hazards from unexploded ordnance, discarded military munitions, and munitions constituents from historical use at the base.

*Don't worry if you don't know much about munitions response at MCBQ - that is useful information too!*

<p>15. Are you aware that the Navy and Marine Corps are investigating and cleaning up munitions from past activities at MCBQ?</p> <p style="text-align: center;"> <input type="radio"/> Yes, aware                  <input type="radio"/> Vaguely aware                  <input type="radio"/> No, not aware                  <input type="radio"/> Not sure         </p>																																																															
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19. Do you feel you have been directly or indirectly affected by MCBQ's past munitions sites?

- No       Not sure       Yes (please fill in comment box)

20. On a scale of 1-10, how interested or concerned do you think community members are about munitions response at the base?

Scaled rating

(1-Not at all interested or concerned, 10-Extremely interested or concerned)

21. Please provide any comments on your responses to Questions 17-20.

Please continue on the next page.

## 5. Potential Community Involvement

This page addresses potential community involvement in the MCBQ environmental and munitions response program.

22. A Restoration Advisory Board (RAB) is a stakeholder group that typically meets 1-2 times per year to discuss environmental restoration at a Department of Defense property. RABs enable people interested in the environmental cleanup and munitions response activities at a specific Base to exchange information with representatives of regulatory agencies, the installation, and the community. More information about RABs can be found here: <http://www.denix.osd.mil/rab/home/unassigned/rab-rule-handbook/>

MCBQ does not currently have a RAB. Do you think it needs one?

- Yes                       No                       Not sure

23. If MCBQ established a RAB, would you be interested in serving on it?

- Yes                       Maybe – would need more information                       No

Please add any comments

Please continue on the next page.

## 6. Information and Communications

This page addresses how you get information and how you might want to receive information about MCBQ's environmental restoration program.

24. How do you get news about your local community? (check all that apply)

- Social media – please list platforms in comment box below (e.g., Facebook, Twitter, Snapchat, etc.)
- Websites – please list websites in comment box
- Newspaper (print) – please list papers in comment box
- Newspaper (online) – please list papers in comment box
- Radio – please list stations in comment box
- Television – please list stations in comment box
- Other – please provide more information

Please list social media platforms, websites, newspapers, and radio and television stations

25. Have you ever used the information repositories at Chinn Park Regional Library in Prince William County and/or Porter Branch Library in Stafford County?

- Yes
- No
- Not aware of them

26. Have you ever visited the MCBQ environmental cleanup and munitions response website?

[https://www.navfac.navy.mil/products\\_and\\_services/ev/products\\_and\\_services/env\\_restoration/installation\\_map/navfac\\_atlantic/washington/mcb\\_quantico.html](https://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/installation_map/navfac_atlantic/washington/mcb_quantico.html)

- Yes
- No
- Not aware of it

27. If yes to Questions 25 and 26, was the information available there useful to you?

- Yes
- No

Please provide any additional comments

28. How would you like to get information about the environmental restoration program at MCBQ?  
(check all that apply)

- Social media (please specify which ones)
- MCBQ website updates
- Email notification (please provide email address at the end of this survey)
- Mail (please provide mailing address at the end of this survey)
- Newspaper
- Radio
- Meeting
- Other (please specify)

29. Who would you call if you had questions about the environmental restoration program at MCBQ?

- I don't know
- Other (please specify)

30. Do you have any other questions or comments about the environmental restoration program at MCBQ?

## 7. Contact Information

If you replied “yes” to questions about receiving email or mailed notifications, please provide your contact information on this page.

31. (Optional) If you replied “yes” to receiving email or mail, please provide the following information:

Name

Company (if applicable)

Address

Address 2

City/Town

State/Province

Zip/Postal Code

Email Address

Phone Number

32. May we contact you if we have questions about your responses to this questionnaire?

- Yes (please provide email or phone number)
- No

**This concludes the questionnaire. Thank you for your time! Your responses will be kept confidential and used only in a summary format to update MCBQ’s Community Involvement Plan.**



**UNITED STATES MARINE CORPS**  
MARINE CORPS INSTALLATIONS NATIONAL CAPITAL REGION  
MARINE CORPS BASE QUANTICO  
3250 CATLIN AVENUE  
QUANTICO VIRGINIA 22134 5001

5090  
B 046

Senator NAME  
Address 1  
Address 2  
Address 3

Dear Senator NAME:

The U.S. Marine Corps and the U.S. Navy are committed to protecting and conserving our environment and natural resources at Marine Corps Base Quantico. As part of this commitment, the Navy and Marine Corps Base Quantico, in partnership with the U.S. Environmental Protection Agency and the Virginia Department of Environmental Quality, implement the Environmental Restoration Program (ERP).

The ERP focuses on investigating and addressing contamination that may have occurred in the past due to spills, leaks, or historic disposal practices that are no longer acceptable under today's environmental regulations. It also includes the Munition Response Program, which addresses potential hazards from unexploded ordnance, discarded military munitions, and munitions constituents. Environmental restoration and munitions response are conducted under the Comprehensive Environmental Response, Compensation, and Liability Act process.

An important part of this effort is to understand what the community knows about the cleanup of this historic contamination, and to understand how people would like to be kept informed and aware of opportunities to participate in the decision-making process. To accomplish this, the Navy and Marine Corps Base Quantico prepare and implement a Community Involvement Plan specifically for the ERP. This document identifies community interests and describes how the Navy and Marine Corps Base Quantico will communicate with the public about environmental cleanup and munitions response activities.

To update the Community Involvement Plan, we need to hear from local community members. The best way to achieve that is for us to sit down with community members and ask questions. We have prepared a set of interview questions that can be used to guide an informal discussion about the community and cleanup efforts. The results of this interview will help us keep the public better informed and identify ways that the community can continue to provide input into the overall cleanup process. Responses to questions will be used in a summary format in the updated Community Involvement Plan and individuals will not be identified personally.

This letter is to inform you that we are reaching out to your constituents, but also to provide you or a designated staff person an opportunity to participate in an interview. Amy Brand is a community involvement specialist with CH2M HILL (now Jacobs), working under contract to the Navy to conduct community outreach activities. Ms. Brand will be conducting interviews in

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November 2018. If you or your designee would like to participate in a personal or telephone interview, please contact Ms. Brand at 757-803-3986 or amy.brand@jacobs.com.

If you have any questions, please contact Mr. Brian Ventura, Environmental Restoration Program Manager, at (703) 432-0521 or brian.ventura@usmc.mil. Thank you in advance for taking the time to help us update the ERP Community Involvement Plan.

Sincerely,

W. C. BENTLEY III  
Colonel, U.S. Marine Corps  
Commander



**UNITED STATES MARINE CORPS**  
MARINE CORPS INSTALLATIONS NATIONAL CAPITAL REGION  
MARINE CORPS BASE QUANTICO  
3250 CATLIN AVENUE  
QUANTICO VIRGINIA 22134 5001

5090  
B 046

NAME  
TITLE, DEPARTMENT  
ADDRESS 1  
CITY, STATE, ZIP

SALUTATION:

The U.S. Marine Corps and the U.S. Navy are committed to protecting and conserving our environment and natural resources at Marine Corps Base Quantico. As part of this commitment, the Navy and Marine Corps Base Quantico, in partnership with the U.S. Environmental Protection Agency and the Virginia Department of Environmental Quality, implement the Environmental Restoration Program (ERP).

The ERP focuses on investigating and addressing contamination that may have occurred in the past due to spills, leaks, or historic disposal practices that are no longer acceptable under today's environmental regulations. It also includes the Munition Response Program, which addresses potential hazards from unexploded ordnance, discarded military munitions, and munitions constituents. Environmental restoration and munitions response are conducted under the Comprehensive Environmental Response, Compensation, and Liability Act process.

An important part of this effort is to understand what the community knows about the cleanup of this historic contamination, and to understand how people would like to be kept informed and aware of opportunities to participate in the decision-making process. To accomplish this, the Navy and Marine Corps Base Quantico prepare and implement a Community Involvement Plan specifically for the ERP. This document identifies community interests and describes how the Navy and Marine Corps Base Quantico will communicate with the public about environmental cleanup and munitions response activities.

We need your help! To update the Community Involvement Plan, we need to hear from local community members. You can help us get a better picture of the community's knowledge about the ERP and help us understand what information the community wants or needs. The best way to achieve that is for us to sit down with people like you and ask questions. We have prepared a set of interview questions that can be used to guide an informal discussion about the community and cleanup efforts. The results of this interview will help us keep the public better informed and identify ways that the community can continue to provide input into the overall cleanup process. Responses to questions will be used in a summary format in the updated Community Involvement Plan and you will not be identified personally.

We hope that you will meet with us to participate in an interview. Amy Brand is a community involvement specialist with CH2M HILL (now Jacobs), working under contract to

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the Navy to conduct community outreach activities. Ms. Brand will be conducting interviews within the next month and will call you to coordinate a time to meet. Ms. Brand can meet at your convenience - during the day or evening, at your workplace or a public location like a coffee shop or library. If you are unavailable to meet, but do wish to participate, she can arrange to do a telephone interview with you. We are looking for input in October and November 2018.

If you have any questions, please contact Mr. Brian Ventura, Environmental Restoration Program Manager, at (703) 432-0521 or [brian.ventura@usmc.mil](mailto:brian.ventura@usmc.mil). Thank you in advance for taking the time to help us update the ERP Community Involvement Plan.

Sincerely,

W. C. BENTLEY III  
Colonel, U.S. Marine Corps  
Commander

Appendix B  
Summary of Community Interviews and  
Questionnaires

**COMMUNITY INVOLVEMENT QUESTIONNAIRE  
for  
ENVIRONMENTAL RESTORATION PROGRAM  
MARINE CORPS BASE QUANTICO**

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A copy will be placed in the information repositories located in the reference area at Chinn Park Regional Library in Prince William County, Porter Branch Library in Stafford County, and the MCBQ Natural Resources and Environmental Affairs Branch at 3049 Bordelon Street on base.

Thank you for participating in our questionnaire. Your input is valuable and will help the Marine Corps communicate effectively with the community about the environmental restoration program.

Following, in **bold red text**, are summarized responses from 17 personal interviews and 8 written questionnaires. Totals do not equal 25, however, because in some cases, people chose more than one response, and in other cases, people did not answer the question.

## 2. Profile

This section asks questions about you, your role in the local community, and the community in general.

1. What is your 5-digit zip code? <b>Not provided</b>			
2. How long have you lived in Stafford, Fauquier, or Prince William County (including Quantico)?			
<b>1</b> < 1 year	<b>3</b> 11-15 years	<b>5</b> I do not live in Stafford, Fauquier, or Prince William County (including Quantico)	
<b>2</b> 2-5 years	<b>4</b> 16-20 years		
<b>1</b> 6-10 years	<b>3</b> > 21 years		
3. How long have you worked in Stafford, Fauquier, or Prince William County (including Quantico)?			
<input type="radio"/> < 1 year	<b>4</b> 11-15 years	<input type="radio"/> I do not work in in Stafford, Fauquier, or Prince William County (including Quantico)	
<b>2</b> 2-5 years	<b>2</b> 16-20 years		
<b>3</b> 6-10 years	<b>5</b> > 21 years		
4. How would you describe your role in the community? (select all that apply)			
<b>12</b> Local resident	<b>3</b> Representative or member of a local environmental group		
<b>1</b> Local business owner	<input type="radio"/> Community leader		
<b>4</b> Local employee	<input type="radio"/> Other (please specify)		
<b>2</b> Representative of a homeowner associate or other civic organization			
<b>10</b> Public or elected official			
5. Have you or any of your relatives ever worked at Marine Corps Base Quantico (MCBQ)?			
<b>9</b> Yes (me)	<b>2</b> Yes (relative)	<b>11</b> No (me)	<b>11</b> No (relative)
6. On a scale of 1-10, do you think people in the local community are concerned about environmental issues in general?			
Scaled rating <b>6, 5, 5, 6, 7, 7, 8, 4, 6, 5</b>			
<ul style="list-style-type: none"> <li>• <b>Very x3</b></li> <li>• <b>Some very, some not at all</b></li> <li>• <b>Regionally, pretty high</b></li> </ul>			
(1-Not concerned at all, 10-Extremely concerned)			

7. What do you think are the most important environmental issues facing your community today? (choose up to 4)

- |  |                         |                              |
|--|-------------------------|------------------------------|
| <b>8</b> Traffic                                   | <b>8</b> Drinking water | <b>4</b> Trash and littering |
| <b>8</b> Growth and development                    | <b>1</b> Food sources   | <b>10</b> Water quality      |
| <b>1</b> Chemical contamination in the environment | <b>2</b> Air quality    | <b>1</b> Climate change      |

Other (please specify): **groundwater (x4), stormwater runoff (x3), lead in soil, dry cleaners, Occoquan River, destruction of forests and loss of wildlife (= loss of quality of life), surface waters, wetlands, recycling, dumping, coal ash, sprawl, loss of trees, flooding, streams, animal protection, stormwater maintenance, community cleanups, dredging of Aquia Creek and Rappahannock**

### 3. Awareness of and Interest in Environmental Cleanup from Past Activities at MCBQ

This page will ask about your awareness of and interest in the environmental cleanup of past contamination at MCBQ through the environmental restoration program. Contamination may have resulted from historical disposal, storage, and handling of hazardous materials.

*Don't worry if you don't know much about the environmental cleanup at MCBQ - that is useful information too!*

8. Are you aware that the Navy and Marine Corps are investigating and cleaning up environmental contamination from past activities at MCBQ?

- |                     |                        |                         |                   |
|---------------------|------------------------|-------------------------|-------------------|
| <b>7</b> Yes, aware | <b>3</b> Vaguely aware | <b>10</b> No, not aware | <b>2</b> Not sure |
|---------------------|------------------------|-------------------------|-------------------|

9. If yes, what is your general understanding of the environmental cleanup activities?

- **Cleaning up a number of sites involving contaminants and unexploded ordnance**
- **Part of job**
- **Very aware of Lunga Reservoir – waiting to go camping and fishing again, surprised by lack of information about Lunga Reservoir, cause of delays, information is vague**
- **Not directly aware but have a great deal of trust in people on the base. No reason to think they're not doing what they should be doing.**
- **Quantico sponsored a large conference several years ago, talked about environmental cleanup**

10. On a scale of 1-10, how interested or concerned are you about the environmental cleanup activities at MCBQ?

Scaled rating **10, 7, 9, 9, 6, 8, 4, 1, 1, 3**

- **only as it affects groundwater (x2)**
- **more concerned with how it affects groundwater and surface water – lead would be the biggest concern**
- **generally interested in impacts to Potomac River**
- **only concerns are about noise and vibration from training (groundwater if it was coming off-base)**
- **generally have faith that they are doing the right thing**
- **concerned about creeks coming off base**
- **general interest – have many friends and citizens who work in the military**

(1-Not at all interested or concerned, 10-Extremely interested or concerned)

11. What issues related to the environmental cleanup activities at MCBQ interest or concern you the most?

Each item has a 1-5 scale from “not interested or concerned” to “very interested or concerned”.  
Not applicable is also an option.

	not interested or concerned (1)	(2)	somewhat interested or concerned (3)	(4)	very interested or concerned (5)	not applicable
Potential health risk			<b>1</b>	<b>4</b>	<b>3</b>	
Soil	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	
Groundwater		<b>1</b>	<b>3</b>	<b>1</b>	<b>7</b>	
Property values	<b>2</b>	<b>2</b>	<b>3</b>			<b>2</b>
Health issues		<b>1</b>		<b>5</b>	<b>3</b>	
Surface water (ponds, streams)		<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>	
Air quality	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>2</b>	

Other (please specify): **drinking water, noise (x2), contaminants from old laundry facilities, fuels, Occoquan River quality and flow, dumping (but don't think it is related to Quantico), stormwater, trail development, noise and vibration**

12. Do you feel you have been directly or indirectly affected by MCBQ's environmental sites?		
<b>9</b> No	<b>5</b> Not sure	<b>3</b> Yes (please fill in comment box)
<ul style="list-style-type: none"> <li>• <b>We worry about any potential effects due to the water, having previously lived at Camp Lejeune. Spend a good deal of money buying our own water because of this. We have had periods of discoloration and some neighbors have had basically slush for water at times that we have seen firsthand.</b></li> <li>• <b>Part of job</b></li> <li>• <b>Poor agriculture due to dumping but don't think it is from Quantico</b></li> <li>• <b>Hears about noise issues related to the ranges</b></li> <li>• <b>Are site contaminants moving off-base (or off-shore) and affecting fish/wildlife?</b></li> <li>• <b>Recreational use of trails</b></li> <li>• <b>Potomac River has been affected by MCB Quantico</b></li> <li>• <b>No concerns heard from residents.</b></li> <li>• <b>County Supervisor is very pro-active about the environment.</b></li> </ul>		
<p>13. On a scale of 1-10, how interested or concerned do you think community members are about the environmental cleanup activities at the base?</p> <p>Scaled rating <b>5, 6, 6, 7, 4, 8, 7, 1, 1, 1, 3</b></p> <ul style="list-style-type: none"> <li>• <b>Not at all unless it gets into groundwater</b></li> </ul> <p>(1-Not at all interested or concerned, 10-Extremely interested or concerned)</p>		
<p>14. Please provide any comments on your responses to Questions 10-13.</p> <ul style="list-style-type: none"> <li>• <b>Depends on how knowledgeable they are in the first place. The more they know, the more interest shown.</b></li> <li>• <b>Not likely to get a lot of public reaction unless it affects off-base groundwater. Tried to do a lot of outreach with the Joint Land use Study and didn't get much response.</b></li> <li>• <b>People are getting very concerned about coal ash and do not necessarily realize that is different</b></li> </ul>		

#### 4. Awareness of and Interest in Munitions Response at MCBQ

This page will ask about your awareness of and interest in munitions response at MCBQ through the environmental restoration program. Munitions response addresses environmental health and safety hazards from unexploded ordnance, discarded military munitions, and munitions constituents from historical use at the base.

*Don't worry if you don't know much about munitions response at MCBQ - that is useful information too!*

15. Are you aware that the Navy and Marine Corps are investigating and cleaning up munitions from past activities at MCBQ?

**8** Yes, aware      **2** Vaguely aware      **11** No, not aware      **3** Not sure

16. If yes, what is your general understanding of munitions response? Please describe.

- **I've seen bright flags scattered throughout the base and when asked, I have been told that it is unexploded ordinance of some sort.**
- **I am aware of the munitions cleanup at the site of the former Russell Elementary School and also various other places that I have seen little flags.**
- **Identifying areas with UXO and cleaning them up as resources (i.e., \$\$\$) allow.**
- **Generally aware of munitions cleanup at Lunga Reservoir – waiting for it to re-open for use**
- **Things have been found in off-base community now and then (e.g., old cannonball) – we call EOD and they come get it**

17. On a scale of 1-10, how interested or concerned are you about munitions response at MCBQ?

Scaled rating **8, 7, 5, 7, 4, 9, 1, 1, 1, 1, 1, 2**

(1-Not at all interested or concerned, 10-Extremely interested or concerned)

18. What issues related to munitions response at MCBQ interest or concern you the most?

Each item has a 1-5 scale from “not interested or concerned” to “very interested or concerned”. Not applicable is also an option.

	not interested or concerned (1)	(2)	somewhat interested or concerned (3)	(4)	very interested or concerned (5)	not applicable
Soil		<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>
Potential Health Risk		<b>1</b>	<b>1</b>	<b>4</b>	<b>2</b>	
Groundwater		<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>
Surface Water (ponds, streams)		<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Property Values	<b>1</b>	<b>3</b>	<b>1</b>			<b>2</b>
Health Issues		<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	
Air Quality		<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

Other (please specify)

- **The potential for any possible physical damage due to any armed munitions.**
- **No specific concerns as long as nothing is leaving the base. Biggest concern would be lead in groundwater.**

19. Do you feel you have been directly or indirectly affected by MCBQ's past munitions sites?

**6** No                    **3** Not sure                    **7** Yes (please fill in comment box)

- Can't use Lunga Reservoir**

---

20. On a scale of 1-10, how interested or concerned do you think community members are about munitions response at the base?

Scaled rating **6, 7, 5, 6, 10, 1, 1, 2**  
(1-Not at all interested or concerned, 10-Extremely interested or concerned)

---

21. Please provide any comments on your responses to Questions 17-20.

- Occasionally a resident with ask about noise from live firing – not a concern, just curious**
- Base does a good job informing us of live firing**

**5. Potential Community Involvement**

This page addresses potential community involvement in the MCBQ environmental and munitions response program.

22. A Restoration Advisory Board (RAB) is a stakeholder group that typically meets 1-2 times per year to discuss environmental restoration at a Department of Defense property. RABs enable people interested in the environmental cleanup and munitions response activities at a specific Base to exchange information with representatives of regulatory agencies, the installation, and the community. More information about RABs can be found here: <http://denix.osd.mil/rab/home/>

MCBQ does not currently have a RAB. Do you think it needs one?

**3** Yes                    **9** No                    **7** Not sure

---

23. If MCBQ established a RAB, would you be interested in serving on it?

**5** Yes                    **5** Maybe – would need more information                    **7** No

Please add any comments

- I'm not a subject matter expert and I don't need the extra work.**
- Can't get a County Board member to go to joint meetings – would be hard to get a representative to go**
- Would want to be a "customer" of the information from the meetings (but not join)**
- Don't see a need for a RAB. If they are "forced" to establish one, would be happy to serve (town official)**
- Haven't heard of anyone express the need for a RAB, but if established, would serve on it (environmental representative)**
- Always good to have something like that**
- The Joint Land Use Committee serves this purpose to some extent – regional organizations, county representatives, and environmental representatives all participate**
- No direct or indirect effects from MCB Quantico**

## 6. Information and Communications

This page addresses how you get information and how you might want to receive information about MCBQ's environmental restoration program.

24. How do you get news about your local community? (check all that apply)

- 13** Social media – please list platforms in comment box below (e.g., **Facebook**, **Twitter**, Snapchat, etc.)
- 9** Websites – please list websites in comment box
- 7** Newspaper (print) – please list papers in comment box
- 7** Newspaper (online) – please list papers in comment box
- 3** Radio – please list stations in comment box
- 11** Television – please list stations in comment box
- 4** Other – please provide more information
  - **People don't tend to pay attention to local news**
  - **NO on radio and television for local news**
  - **Military community (both on- and off-base) relies on the military to tell them (e.g., base newspaper) but non-military community pays no attention to the base**
  - **County e-blasts (app where you can choose the things that interest you)**

Please list social media platforms, websites, newspapers, and radio and television stations

- **base website**
- **emails from housing**
- **MCB Quantico Facebook**
- **base newspaper (x2)**
- **radio broadcasts and MCCA TV advertisements**
- **online news sources (The Hill, NPR, Al Jazeera America, BBC)**
- **WTOP/Emblem/NPR**
- **Facebook x6**
- ***Free Lance Star* x3**
- ***Fauquier Now* x4**
- **Fauquier.com (Fauquier Times newspaper online) x4**
- ***Prince William Times* x5**
- ***Inside NOVA* (x3)**
- **Occoquan issues a monthly newsletter and occasional online e-news updates**
- **Town and County websites**
- **County announcements – e-blasts, newsletters x3**
- **Dumfries flyer**
- ***Potomac News* x2**
- **Supervisors newsletters x3**
- **Neighborhood list-servs**
- **Local cable television x4 (Channel 23, local government station)**
- ***Bull Run Observer* x2**

25. Have you ever used the information repositories at Chinn Park Regional Library in Prince William County and/or Porter Branch Library in Stafford County?

**1** Yes

**13** No

**6** Not aware of them

**That is the best location though.**

26. Have you ever visited the MCBQ environmental cleanup and munitions response website:

([https://www.navfac.navy.mil/products\\_and\\_services/ev/products\\_and\\_services/env\\_restoration/installation\\_map/navfac\\_atlantic/washington/mcb\\_quantico.html](https://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/installation_map/navfac_atlantic/washington/mcb_quantico.html))

**2** Yes

**13** No

**6** Not aware of it

- **Is it linked to the base website?**
- **Looked at it before interview– not much there**
- **Could add link to County website**

27. If yes to Questions 25 and 26, was the information available there useful to you?

**4** Yes

**5** No

Please provide any additional comments

- **Part of job**
- **Local town – only 70% have home computers – lower than average population**

28. How would you like to get information about the environmental restoration program at MCBQ?  
(check all that apply)

**4** Social media (please specify which ones) **Facebook**

**10** MCBQ website updates

**7** Email notification (please provide email address at the end of this survey)

**3** Mail (please provide mailing address at the end of this survey)

**4** Newspaper – **online versions of local papers (people will spread it through social media)  
do an annual update through local newspapers**

**1** Radio

Meeting

Other (please specify):

- **fact sheet (emailed, posted online)**
- **put announcement in annual environmental report, post to website**
- **add brief announcements to mass notification about Marine Corps events**
- **Fox News and CNN (for big issues)**
- **Presentation to Town Council (broadcast on cable TV)**
- **Post at Dunkin Donuts and Harold & Kathy's Diner on Route 1**
- **Offer information in Spanish too**
- **Local town can post on their Facebook and social media accounts**
- **Bimonthly meetings of environmental representatives – could schedule a speaker**
- **Prince William Conservation Alliance – can put in their newsletter (large membership)**
- **Reach businesses through Quantico/Fort Belvoir Alliance**
- **Reach out the Prince William Park to communicate with park visitors – the back-country boundary is not always clear**
- **George Mason University – talk to faculty and students, they have a research lab on the Potomac (x2)**
- **Prince William Wildflower Society – would be interested in environmental restoration with native plants (and could help provide volunteers)**
- **Present to County Boards of Supervisors – a lot of turnover at elections**
- **Keep County Board of Supervisors informed – they send out online updates, monthly newsletters, or do town hall meetings. (x5)**
- **Local Environmental Education Partners – would be glad to have someone from the base come speak or come to a meeting. Could also speak to Keep Prince William Beautiful or Greater Climate Action Team**
- **Quantico Marine Corps Museum – lots of programs and talk on various topics, it is well-visited, could place a display there x2**
- **Email blasts are sent out by Counties**
- **Local government television station allows others to place information**
- **Send information to Counties, they can farm out through their website, online newsletters**

29. Who would you call if you had questions about the environmental restoration program at MCBQ?

**7** I don't know

**7** Other (please specify)

- **My Co-worker**
- **NREA (3)**
- **Call the Base**
- **Base PAO**
- **Go through internal colleagues (County) who know people**
- **Base Commander's office (x2)**
- **Call switchboard – they're able to route to the right person**
- **John Rohm at MCB Quantico**
- **Would look on website for a contact person**

30. Do you have any other questions or comments about the environmental restoration program at MCBQ?

- **If no environmental impact outside the base, no need to really do much outreach off-base. Don't stir the pot.**
- **The current Base Commander meets with local official monthly – very open communication, very interested in relationship with community. Previous base commanders were not as interested in meeting regularly.**
- **Base has been super cooperative with the community – helps with Prince William bike event which starts at the Marine Corps Museum and goes through the base.**
- **Not a huge need for more information in the public. If you do put out a lot of information, there will always be someone who will pay attention and become a pain in the neck. Only push out more information if it is good news or big success stories**
- **The Base's environmental impact has been positive – mitigation funding for buffers around the base to help mitigate impacts and conserve land**
- **Be aware of Quantico Creek cleanup process and how that Base may be affected or involved**
- **Not a lot of demand for information in Fauquier County – only if there are off-base groundwater impacts**
- **Training information already goes out from PAO– people can sign up for updates**
- **Quantico has a good relationship with surrounding Counties**
- **Already participate in the Joint Land Use Committee**
- **County representatives participate in quarterly meetings with the Commander's office**
- **Tend to have faith (based on good relationship with Quantico) that they are doing the right thing**
- **Young Marines in the community represent the military and MCB Quantico well – no problems in communities**
- **The Bluebell Festival is supported by MCB Quantico**
- **The Nokesville Christmas Birdcount Circle – work with MCB Quantico, good partner**
- **MCB Quantico was a pleasure to work with during development of Merrimac Farm Wildlife Management Area**
- **Pro-military area, MCB Quantico has a good relationship with the local community**

## Contact Information

If you replied “yes” to questions about receiving email or mailed notifications, please provide your contact information on this page.

31. (Optional) If you replied “yes” to receiving email or mail, please provide the following information:

Name

Company (if applicable)

Address

Address 2

City/Town

State/Province

Zip/Postal Code

Email Address

Phone Number

32. May we contact you if we have questions about your responses to this questionnaire?

**3** Yes (please provide email or phone number)

**3** No

**This concludes the questionnaire. Thank you for your time! Your responses will be kept confidential and used only in a summary format to update MCBQ’s Community Involvement Plan.**

# Appendix C

## Key Community Contacts

Office	Salutation	Name	Address1	Address2	City	St	Zip	Phone	E-mail
<b>STAFFORD COUNTY</b>									
Chairman, Board of Supervisors, Falmouth District	Chairman	Meg Bohmke	P.O. Box 339		Stafford	VA	22555-0339	540-373-2485	mbohmke@staffordcountyva.gov
Supervisor, Griffis-Widewater District	Supervisor	Jack Cavalier	P.O. Box 339		Stafford	VA	22555-0339	540-207-5317	jcavalier@staffordcountyva.gov
Supervisor, Garrisonville District	Supervisor	Mark Dudenhefer	P.O. Box 339		Stafford	VA	22555-0339	703-405-8393	mdudenhefer@staffordcountyva.gov
Supervisor, Rock Hill District	Supervisor	Wendy Maurer	P.O. Box 339		Stafford	VA	22555-0339	540-226-6589	maurenw@staffordcountyva.gov
County Administrator	Mr.	Thomas Foley	1300 Courthouse Road	3rd Floor	Stafford	VA	22554	540-658-4541	
Director, Economic Development and Tourism	Mr.	John Holden	P.O. Box 339		Stafford	VA	22555-0339	540-658-8681	jholden@staffordcountva.gov
Manager, Economic Development	Mr.	Rick Cobert	P.O. Box 339		Stafford	VA	22555-0339	540-658-8681	rcobert@staffordcountyva.gov
Community Engagement Manager	Ms.	Shannon Howell	1300 Courthouse Road		Stafford	VA	22554	540-658-4893 540-498-8176 (cell)	showell@staffordcountyva.gov
Director, Public Works	Mr.	Jason Towery, P.E.	1300 Courthouse Road	2nd Floor	Stafford	VA	22554	540-658-4208	jtowery@staffordcountyva.gov
<b>PRINCE WILLIAM COUNTY</b>									
Board of Supervisors, Chairman at Large	Chairman	Corey Stewart	McCoart Administration Building	1 County Complex Court	Prince William	VA	22192	703-792-4640	cstewart@pwcgov.org
Supervisor, Potomac District	Supervisor	Maureen Caddigan	15941 Donald Curtis Drive	Suite 145	Woodbridge	VA	22191	703-792-4645	mcaddigan@pwcgov.org
Supervisor, Brentsville District	Supervisor	Jeanine Lawson	9440 Innovation Drive		Manassas	VA	20110	703-792-6190	jlawson@pwcgov.org
Supervisor, Coles District	Supervisor	Martin Nohe	13476 Dumfries Road		Manassas	VA	20112	703-792-4620	mnohe@pwcgov.org
County Executive	Mr.	Christopher Martino	Office of Executive Management	1 County Complex Court	Prince William	VA	22192	703-692-6600	
Director, Business Development and Investment	Mr.	Tom Flynn	13575 Heathcote Boulevard	Suite 240	Gainesville	VA	20155	703-792-5517	tflynn@pwcgov.org
Communications Director	Mr.	Jason Grant	Office of Executive Management	1 County Complex Court	Prince William	VA	22192	703-792-6606	communications@pwcgov.org
Public Works, Natural Resources Section Chief, Environmental Services	Mr.	Clay Morris	5 County Complex Court	Suite 170	Prince William	VA	22192	703-792-6820	cmorris@pwcgov.org
Public Works, Public Information and Outreach	Ms.	Deb Oliver	5 County Complex Court	Suite 170	Prince William	VA	22192	703-792-6819	doliver@pwcgov.org
Division Chief, Environmental Services		Marc Aveni							maveni@pwcgov.org
Public Works, Neighborhood Services Division Chief	Mr.	Paul Lynch	5 County Complex Court	Suite 170	Prince William	VA	22192	703-792-7070	plynch@pwcgov.org
<b>FAUQUIER COUNTY</b>									
Board of Supervisors, Cedar Run District	Supervisor	Richard Gerhardt	Fauquier County Administration	10 Hotel Street, Suite 204	Warrenton	VA	20186	540-422-8001	richard.gerhardt@fauquiercounty.gov
County Administrator	Mr.	Paul S. McCulla	Fauquier County Administration	10 Hotel Street, Suite 204	Warrenton	VA	20186	540-422-8001	paul.mcculla@fauquiercounty.gov
Director of Economic Development	Mr.	Miles Friedman	35 Culpeper Street		Warrenton	VA	20186	540-422-8270	miles.friedman@fauquiercounty.gov
Assistant Director of Community Development	Ms.	Holly Meade	Planning Division	10 Hotel Street, 3rd Floor	Warrenton	VA	20186	540-222-8210	holly.meade@fauquiercounty.gov
Director, Department of General Services Interim Director, Environmental Services Department	Mr.	Michael Kresse	94 Manor Court, Suite 25		Warrenton	VA	20186	540-422-8484	michael.kresse@fauquiercounty.gov
<b>TOWN OF QUANTICO</b>									
Mayor	Mayor	Kevin P. Brown	337 5th Avenue		Quantico	VA	22134	703-640-7411	mayor@townofquantico.org
Chief of Police	Chief	John Clair	337 5th Avenue		Quantico	VA	22134	703-640-7411	jclair@townofquantico.org
<b>TOWN OF DUMFRIES</b>									
Mayor	Mayor	Derrick Wood	Town Hall	17755 Main Street	Dumfries	VA	22026	703-221-3400	hondwood@dumphriesva.gov
Community Development Director	Mr.	Jatinder Khokhar	Town Hall	17739 Main Street, Suite 200	Dumfries	VA	22026	703-221-3400 x146	jkhokhar@dumphriesva.gov
Town Planner	Ms.	Catjana Falsetti	Town Hall	17739 Main Street, Suite 200	Dumfries	VA	22026	703-221-3400 x115	cfalsetti@dumphriesva.gov
<b>TOWN OF OCCOQUAN</b>									

Mayor	Mayor	Earnie Porta, JD, PhD	PO Box 195	314 Mill Street	Occoquan	VA	22125	703-491-1918	eporta@occoquanva.gov
Interim Town Manager	Ms.	Elizabeth Quist	PO Box 195	314 Mill Street	Occoquan	VA	22125	703-491-1918	equist@occoquanva.gov
<b>COMMUNITY REPRESENTATIVES</b>									
Fredericksburg Regional Chamber of Commerce	Ms.	Susan Spears, President & CEO	2300 Fall Hill Avenue	Suite 240	Fredericksburg	VA	22401	540-373-9400 x229	susan@fxbgchamber.org
Prince William County Chamber of Commerce	Ms.	Debbie Jones, President & CEO	9720 Capital Court	Suite 203	Manassas	VA	20110	703-368-6600	djones@pwchamber.org
Izaak Walton League, Prince William Chapter	Mr.	Robert Lazaro, Executive Director	12506 Izaak Walton Drive		Brentsville	VA	20136	703-335-0820	admin@pwiwla.org
Prince William Forest Park	Superintendent	Tanya M. Gossett	18100 Park Headquarters Road		Triangle	VA	22172	703-221-2925	tonya_gossett@nps.gov
American Legion Post 28	Mr.	Glyness Whitehurst	17934 Liming Lane		Triangle	VA	22172	703-221-2507	
Hawkins-Reeve VFW Post 7916	Col. (Ret.)	Chuck Wilson	204 Mill Street		Occoquan	VA	22125	703-491-1884	adjpost7916@va.vfwwebmail
Aquia Harbour Property Owner's Association	Ms.	Patricia Harman, General Manager	1221 Washington Drive		Stafford	VA	22554	540-659-3050	gm@aquiaharbour.org
Prince William Conservation Alliance	Ms.	Kim Hosen, Executive Director	PO Box 6351		Woodbridge	VA	22195	703-490-5200 703-499-4954	khosen@pwconserve.org
Northern Virginia Conservation Trust	Mr.	Alan Rowsome, Executive Director	4022-A Hummer Road		Annandale	VA	22003	703-354-5093	arowsome@nvct.org
Virginia Outdoors Federation	Ms.	Brett Christina Glymph, Executive Director	39 Garrett Street	Suite 200	Warrenton	VA	20186	540-347-7727	bglymph@vofonline.org
Piedmont Environmental Council	Ms.	Julie Bolthouse	45 Horner Street		Warrenton	VA	20186	540-347-2334 x7020	bwest@pecva.org
Rappahannock-Rapidan Regional Commission	Mr.	Patrick Mauney, Executive Director	420 Southridge Parkway	Suite 106	Culpeper	VA	22701	540-829-7450	planinfo@rrregion.org
Northern Virginia Regional Commission	Mr.	Robert Lazaro, Executive Director	3040 Williams Drive	Suite 200	Fairfax	VA	22031	703-642-0700	rlazaro@novaregion.org
Northern Virginia Regional Commission	Ms.	Peggy Tadej, Director of Military Affairs	3040 Williams Drive	Suite 200	Fairfax	VA	22031	703-642-4635	peggy.tadej@novaregion.org
George Washington Regional Commission	Ms.	Linda Struyk Millsaps	406 Princess Anne Street		Fredericksburg	VA	22401	540-373-2890	millsaps@gwregion.org

Organization	Title	Name	Address1	Address2	City	St	Zip	Phone	E-mail
<b>FEDERAL ELECTED OFFICIALS</b>									
U.S. Senate	Senator	Tim Kaine	9408 Grant Avenue	Suite 202	Manassas	VA	20110	703-361-3192	online form
U.S. Senate	Senator	Mark Warner	800 Towers Crescent Drive	Suite 200	Vienna	VA	22182	703-442-0670	online form
U.S. Representative, District 1	Representative	Robert Wittman	95 Dunn Drive	Suite 201	Stafford	VA	22556	540-659-2734	online form
U.S. Representative, District 11	Representative	Gerald Connolly	3341-D Tacketts Mill Drive		Woodbridge	VA	22192	571-408-4407	online form
<b>STATE ELECTED OFFICIALS</b>									
Governor	Governor	Ralph Northam	Office of the Governor	PO Box 1475	Richmond	VA	23218	804-786-2211	online form
Senate District 36	Senator	Scott A. Surovell	PO Box 289		Mount Vernon	VA	22121	571-249-4484	district36@senate.virginia.gov
Senate District 28	Senator	Richard Stuart	PO Box 1146		Montross	VA	22520	804-493-8892	district28@senate.virginia.gov
Delegate District 52	Delegate	Luke E Torian	4222 Fortuna Plaza	Suite 659	Dumfries	VA	22025	703-785-2224	DelL.Torian@house.virginia.gov
Delegate District 28	Delegate	Robert M. Thomas Jr.	PO Box 9142		Fredericksburg	VA	22403	540-693-0726	DelBThomas@house.virginia.gov
Delegate District 2	Delegate	Jennifer D. Carroll Foy	PO Box 5113		Woodbridge	VA	22194	571-402-5704	DelJCarrollFoy@house.virginia.gov
Delegate District 51	Delegate	Hala S. Ayala	PO Box 7434		Woodbridge	VA	22195	703-232-7248	DelHAyala@house.virginia.gov
Delegate District 31	Delegate	Elizabeth R. Guzman	PO Box 1818		Woodbridge	VA	22195	571-403-1213	DelEGuzman@house.virginia.gov

Appendix D  
Example Public Notices and Fact Sheets



# Fourth Five-Year Review Fact Sheet

Marine Corps Base Quantico  
Quantico, Virginia

## MISSION CLEANUP – CLEAN, PROTECT, RESTORE

October 2018

Marine Corps Base Quantico (MCBQ), Naval Facilities Engineering Command (NAVFAC), Virginia Department of Environmental Quality (VDEQ), and the U.S. Environmental Protection Agency (EPA) worked together to achieve this Five-Year Review Completion, in which we assessed the remedies at five environmental sites at MCBQ to ensure they continue to protect public health and the environment in the long-term.

**Mission Cleanup** is an ongoing federal-state partnership that capitalizes on sound science to **Clean, Protect, and Restore** federal lands nationwide.

### BACKGROUND

MCBQ is located about 35 miles south of Washington, DC, and occupies approximately 59,000 acres within southern Prince William, northern Stafford, and eastern Fauquier counties.

MCBQ's history and mission have required the use, handling, storage, and disposal of hazardous material and petroleum products, including paints, solvents, degreasers, waste oil, fuels, pesticides/herbicides, and household products. Typical historical activities at MCBQ included maintenance of aircraft, vehicles, and engines; fuel and oil storage and distribution; landfill disposal; weapons cleaning and repair, facilities maintenance, photo processing,

medical and dental clinics; munitions operations; and water and sewage treatment. These activities resulted in localized areas of potential or confirmed contamination of soil, groundwater, surface water, and/or sediment.

In 1975, the Department of Defense (DoD) developed a nationwide program to identify and address environmental problems resulting from past operations and waste disposal practices at DoD facilities. Since the early 1980s, the Department of the Navy (Navy) has been addressing hazardous constituents from past operations at MCBQ under this Environmental Restoration Program (ERP).

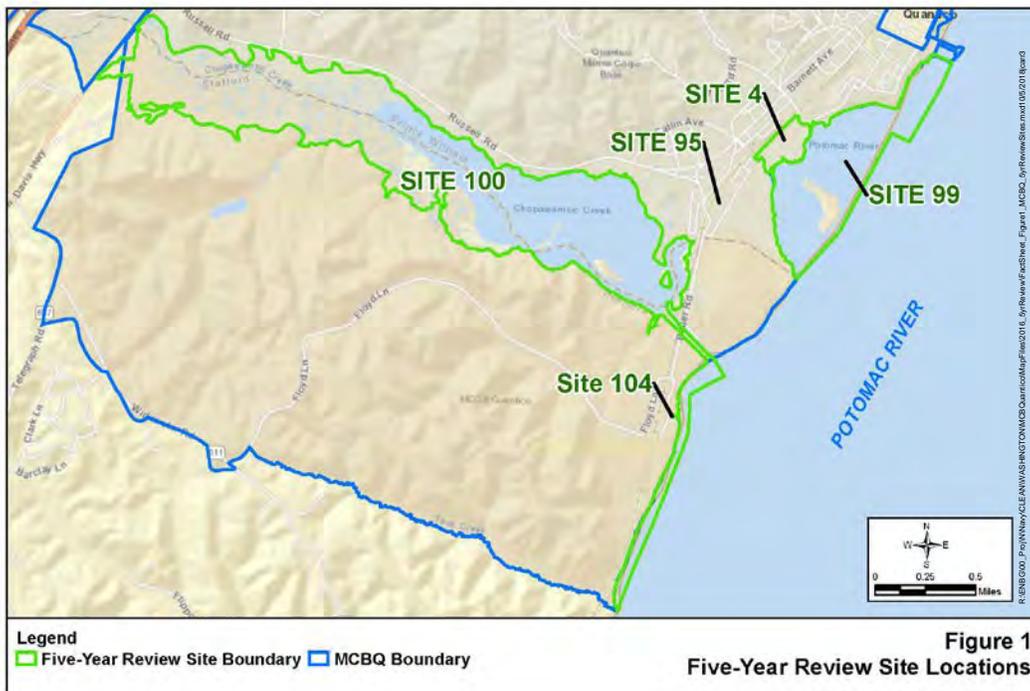
### FIVE-YEAR REVIEWS

The purpose of a Five-Year Review is to evaluate the effectiveness of remedies and remedial actions for sites with contaminants remaining above levels that allow for unlimited use and unrestricted exposure (UU/UE) and for which there is a Record of Decision (ROD) or Decision Document (DD) in place.

The Navy prepared the Fourth Five-Year Review Report under federal regulations that require a review of remedial actions no less often than every five years after initiation of remedial action. The Navy has elected to conduct an installation-wide Five-Year Review. This Fourth Five-Year Review Report was completed by reviewing various reports

pertaining to post-ROD implementation activities and completion of site inspections. The Five-Year Review Report includes additional information on sites that do not require a review at this time. Only the five sites requiring review at this time are included in this fact sheet. These are shown on Figure 1. The Five-Year Review document can be found online at <https://go.usa.gov/xngKr>

The Navy is committed to addressing the potential for perfluorinated compounds at Navy installations and is completing a Base-wide desktop study at MCBQ, which will be published in a separate report that was not available at the time of this Five-Year Review.



## SITE DESCRIPTIONS

### Site 4 – Old Landfill

Site 4 is a 24-acre landfill located on the banks of the Potomac River. It was used for disposal of MCBQ wastes from the early 1920s until 1971. The landfill site includes a scrapyards constructed in the 1950s and used until 1979, and Building 669, which was used to store electrical transformers until 1979. Historical use of Site 4 resulted in contaminated soil, groundwater, and sediments. Soil contaminated with polychlorinated biphenyls (PCBs) was removed in 1990, and additional actions were taken to prevent continued migration of contaminated sediments.

An interim ROD was signed for Site 4 in September 1997, to prevent exposure to contaminated soil and sediments. Interim actions consisted of: demolishing several buildings on the site; excavating surface soil and drainage swale sediments; excavating waste, debris, and sediment from the river; installing a geotextile cover and vegetated soil barrier (landfill cap); stabilizing the shoreline; creating a wetland; and installing fencing and warning signs to control site access.

The final ROD was signed in 2007 and included maintenance of the site fence and soil barrier layer, continued implementation of land use controls (LUCs), and implementation of a long-term monitoring (LTM) program and site review.

***The remedy for Site 4 is currently protective of human health and the environment. Continued implementation of institutional controls, operations and maintenance, and groundwater monitoring will maintain the future effectiveness of the remedy.***



*Figure 2: Site 4, Riprap along the shoreline with outlet of the constructed wetland in the background.*

### Site 95 – Building 2101 Paint Booth Sump

Site 95 was the paint booth sump associated with former Building 2101, which was used for aircraft maintenance beginning in 1941. A dry paint booth for painting helicopter parts was added to the building in 1984. Various organic primers, lacquers, and solvents were used in the paint booth. A floor drain received wash water from the paint booth and discharged to an adjacent sump, which was pumped to an outside spigot. The spigot connected to a hose, which drained to a sanitary sewer system.

Use of Site 95 resulted in shallow groundwater contaminated by volatile organic compounds (VOCs).

The selected remedy in the 2008 ROD consists of treatment of groundwater by enhanced in situ (in place) bioremediation using an oxygen releasing compound (ORC), groundwater monitoring, LUCs, and five-year reviews.

The remedy is being re-evaluated based on results of an ORC treatability study. During completion of a Supplemental Investigation to further delineate the VOC contamination, a source area upgradient of the sump was identified. An additional Treatability Study for in situ chemical oxidation was completed, and a Time-Critical Removal Action (TCRA) consisting of groundwater treatment and soil mixing, was completed in April 2013.

In 2013, Building 2101 was demolished so bachelor enlisted quarters and a dining hall could be constructed. Vapor intrusion mitigation measures were incorporated into the building design to ensure that VOCs would not travel from shallow groundwater into the air below and inside the buildings.

A Supplemental Investigation was completed in 2015 to delineate remaining contamination. Results recommended additional sampling to delineate the northern boundaries of the groundwater plume, and completion of a Focused Feasibility Study to evaluate whether monitored natural attenuation is a viable remedial alternative.



*Figure 3: Site 95, Open lawn area on the north side of the new bachelor enlisted quarters, looking west.*

**The protectiveness of the remedy for Site 95 cannot be determined until further information is obtained. Protectiveness will be determined when further documentation of the vapor intrusion mitigation measures at the bachelor enlisted quarters is obtained and the additional groundwater investigation and focused feasibility study have been completed. These actions are expected to be completed by May 2019, with a protectiveness determination to be made in June 2019.**

### Site 99 – Quantico Embayment

MCBQ project managers identified the need to evaluate potential releases and environmental impacts from various Installation Restoration Program (IRP) sites to the watersheds. Site 99 is the Quantico Embayment portion of the watershed study and consists of approximately 190 acres located along the eastern shoreline of MCBQ, forming a semi-circular inlet of the Potomac River.

Site 99 is surrounded by several possible historical sources of contamination, including Site 4, Building 669, Site 32, the Mainside sewage treatment plant, and an active airfield. Various activities have been completed to eliminate or control onshore sources; however, historical releases have contributed to sediment contamination at Site 99.



Figure 4: Site 99, Habitat enhancement cap facing southeast

A ROD was signed in 2011, primarily to protect ecological receptors such as birds from unacceptable risks associated with exposure to sediments as well as to minimize migration of contaminated sediments to other parts of the river. The selected remedy included installing a habitat enhancement cap (HEC) and implementing LUCs for contaminated sediments; implementing monitored natural recovery and LUCs for contaminated sediment in the Potomac River Southern Area; and dredging and offsite disposal of contaminated sediment in the drainage channel near the Mainside sewage treatment plant.

The remedy for Site 99 is currently in place except for buoys and signs in the Quantico Embayment. Signs are posted along the shoreline to warn anglers of a fish advisory, but in-water signs need to be installed to protect the habitat enhancement cap.

**The remedy at Site 99 will be protective of human health and the environment. Only one year of LTM data has been collected; further risk evaluation will be conducted following completion of five years of LTM. For the remedy to be protective in the long term, the signage required in the LUC ROD should be installed to minimize potential disturbance of the habitat enhancement cap.**

### Site 100 – Chopawamsic Creek

Site 100 is the Chopawamsic Creek portion of the watershed study. Site 100 was divided into four areas (Areas 1 to 4) for the remedial investigation and feasibility study. Based on investigations of Site 100 and human and ecological health risks, no action was required for Areas 1, 2, and a portion of Area 4, which is now designed separately as Site 102. Investigations revealed lead contamination in Area 3, attributable to surface runoff and deposition of lead from former skeet range activities in nearby areas.

The source of lead contamination was addressed during a removal action conducted in 2004. Because range operations ceased more than 30 years ago, sources of lead at the former skeet range are buried by clean sediment and cannot run off into the Chopawamsic Creek.

The basis for taking remedial action at Area 3 was to protect ecological receptors (e.g., birds and fish) from unacceptable risks associated with exposure to sediments.

The ROD, signed in 2011, recommended monitored natural recovery to allow natural deposition of clean sediment over contaminated sediment to reduce the concentrations of lead in surface sediments, as well as LUCs to minimize sediment disturbance, and LTM. The remedy is in place with the exception of signs for the “no wake zone.”



Figure 5: Site 100, Area 3 wetland area, looking west from Wounded Warrior duck blind south of the Quantico Inn

**The remedy for Site 100 will be protective of human health and the environment. LTM data collected to date indicate that actual exposure data are significantly less than the modeled exposure data used to select the remedy. The actual exposure data results in no unacceptable ecological risk in Area 3. Additional LTM**

**data will be collected and a re-evaluation of site risk will be included in the Year 5 LTM report. However, for the remedy to be effective long-term, the signs need to be installed to minimize potential disturbance of sediments.**

### Site 104 – Building 2113 Underground Tank Loading/Unloading Area

Site 104 is located at Building 2113, a former heating plant for MCBQ located along the Potomac River. It consists of the former concrete pad, sump, associated underground piping, and the loading/unloading area that served the Building 2113 Underground Tank. Site 104 is located approximately 75 feet south of Building 2113, and includes Building 69, formerly used as a motor pool where degreasers were used for cleaning activities.

Suspected sources of contamination at Site 104 include fuel supply activities, motor pool activities that occurred at Building 69, and flammable storage activities conducted in Building 1508. The basis for taking action at Site 104 is to protect hypothetical future residents and constructions workers from unacceptable risks from exposure to VOCs in groundwater.

A ROD was signed for Site 104 in 2014. Remedial actions consist of in situ enhanced bioremediation, LTM, LUCs, and five-year reviews.

The remedy has not yet been implemented. The LUC remedial design for Site 104 was finalized in August 2016. LUCs prohibit the use of groundwater as a potable water supply and restrict excavation. Potential petroleum contamination was observed during recent construction activities upgradient of Site 104. Therefore, this potential contamination will be investigated in 2018 to determine if there are impacts to the Site 104 remedy.

***The remedy at Site 104 is expected to be protective of human health and the environment upon completion. The interim exposure pathways that could result in unacceptable risks are being controlled.***



Figure 6: Site 104, Concrete pad (underground tank loading/unloading area), looking east

## PROTECTIVENESS SUMMARY

Of the five sites addressed in the Fourth Five-Year Review Report, one is protective of human health and the environment, three are expected to be protective based on additional actions and more LTM data, and protectiveness for one site cannot be determined until further information is obtained.

The fourth Five-Year Review Report also described sites currently under investigation as well as sites closed since the last Five-Year Review process. More information can be found by going to <https://go.usa.gov/xngKr> or reviewing the Fourth Five-Year Review Report at the information repositories listed below.

NAVFAC, MCBQ, VDEQ, and EPA have agreed to the steps for addressing the protectiveness at these sites. Together, they use sound science in making all Mission Cleanup milestone decisions leading up to, and in support of this Fourth Five-Year Review, which is an important milestone in ensuring long-term protection of public health and the environment.

## MISSION CLEANUP: Clean, Protect, Restore

### COMMUNITY INVOLVEMENT

The community was notified of the start of the Five-Year Review process through a public notice in the *Prince William Times* and the *Free-Lance Star* on July 27, 2016. The final Fourth Five-Year Review was signed on June 4, 2018.

### FOR MORE INFORMATION

For questions about the MCBQ ERP, contact:

Brian Ventura  
MCBQ Natural Resources  
and Environmental Affairs Branch  
703-784-4030

Documents about the MCBQ ERP can be reviewed at:

Chinn Park Regional Library  
13065 Chinn Park Drive  
Prince William, VA 22193  
703-792-4810

John Musante Porter Memorial Library  
2001 Parkway Boulevard  
Stafford, VA 22554  
703-659-4909

MCBQ  
Natural Resources and Environmental Affairs Branch  
3049 Bordelon Street  
Quantico, VA 2134-5001  
703-784-4030

Online at: <https://go.usa.gov/xngKr>



## Fact Sheet

### Marine Corps Base Quantico Munitions Response Program Lunga Park Recreation Area (UXO-034) & Lunga Reservoir (UXO 035)

#### What's going On?

Lunga Park Recreation Area is closed due to the known presence of unexploded munitions, explosives of concern, and material potentially presenting an explosive hazard. Marine Corps Base Quantico is working with Naval Facilities Engineering Command Washington, the Virginia Department of Environmental Quality, and the U.S. Environmental Protection Agency to effectively clean up the area so that it may be returned to recreational use as soon as possible. In addition to the land portion of Lunga Park Recreation Area, Lunga Reservoir is also closed to the public (no wading, swimming, boating, or fishing), due to the known presence of the same materials below the water's surface.

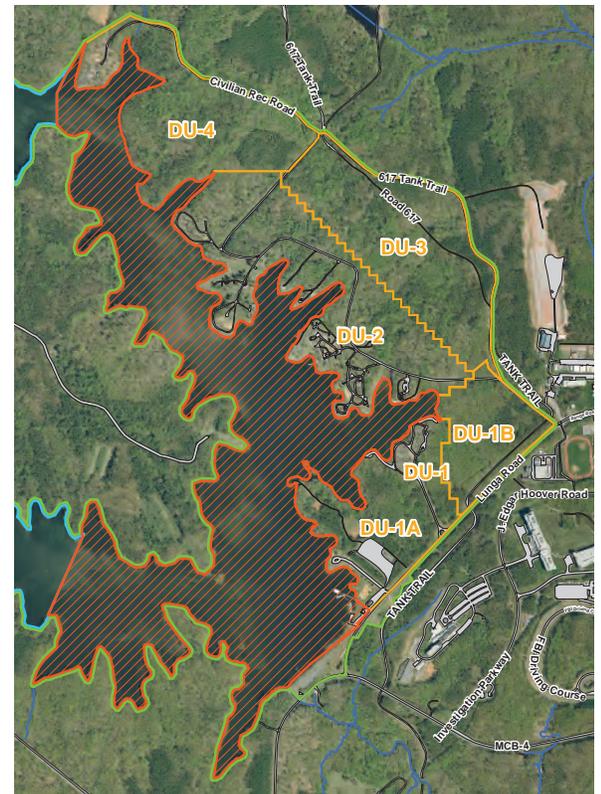
#### Site History

Lunga Park Recreation Area and Lunga Reservoir coincide with the firing line and a portion of the impact area for the former "Range 2," one of 15 ranges used for training activities during the World War II era. From 1943 to the mid-1950s, Range 2 was used for the firing of all division weapons, and activities, which included both light weapons and artillery training. Munitions used at this range included mortars, recoilless rifle ammunition, rifle grenades, anti-tank rockets, and shoulder fired projectiles.

#### Previous Investigations and Actions

From 1984 to 1999, Marine Corps Base Quantico Explosive Ordnance Disposal unit reports indicate that 383 ordnance items were discovered in the Lunga Park Recreation Area and Lunga Reservoir, with the majority being recovered during a 1989 clearance of the area.

A Site Investigation was performed in Spring 2012, and suspect unexploded munitions, explosives of concern, and material potentially presenting an explosive hazard were identified. These discoveries were deemed to be a serious risk for the health and well-being of



Lunga Playground-2.36" rocket found near playground

base patrons. Munitions and explosives were found on the land's surface, as well as at depth. Discoveries included a number of 2.36-inch rockets, and 60 and 81 mm mortars. A time-critical removal action was initiated to find and remove these explosive hazards both on the surface and under the surface of the land areas. These removal actions have been ongoing since May of 2012. To date, more than 500 metallic items have been recovered, of which more than 30 were considered to be "live" munitions consisting of rockets, flares, rifle grenades, and mortars.



The Lunga Park Recreation Area is also known as Munitions Response Site UXO-034. It is approximately 358 acres of forested land, lakeshore, and recreational areas. It is located in the central quadrant of the Guadalcanal Area of Marine Corps Base Quantico, between Lunga Road and Lunga Reservoir, and adjacent to the FBI Academy Facility. Since the late 1950s, Lunga Park and Lunga Reservoir have been used for recreation activities such as camping, boating, picnicking, and hiking. However, the area was closed in the Spring of 2012, due to newly identified safety concerns. Currently, no military training activities are being conducted at UXO-034, and the future land use plans for the area continue to be recreational in nature once reopened.

UXO-034, for investigation and remediation purposes, has been divided into individual "Decision Units (DUs)" as follows:

- DU1 – consists of 92 acres in the southwest section of UXO-034. Currently this area consists of campgrounds, picnic areas, playgrounds, a ball field, as well as a recreational vehicle (RV) trailer and boat storage yard.
- DU2 – consists of 108 acres located along the eastern shore of the Lunga Reservoir. Currently this area consists of playgrounds, campgrounds, and hiking trails.
- DU3 – consists of 82 wooded acres located in the northeastern section of UXO-034. The area is used only for hiking trails.
- DU4 – consists of 74 acres in the northwestern portion of UXO-034. It is mostly wooded, except for the Civilian Workers Recreation Area in the northern portion of the section.

In Fall 2012, scientists from Naval Sea Systems Command performed an underwater survey of the Reservoir bottom using highly specialized equipment to detect the presence of munitions. Based on the number of findings, a removal action is required to address the munitions and explosives of concern in the Reservoir.

### Current Status

Due to fiscal constraints, clean-up of Lunga Park and Lunga Reservoir is being done in phases with the land areas of Lunga Park being addressed first. After the removal action is completed for Lunga Park, a removal action for munitions on the Reservoir bottom will follow. Unexploded Ordnance teams continue to conduct removal actions of unexploded munitions, explosives of concern, and material potentially presenting an explosive hazard throughout the area. It is anticipated that operations will continue for several years.

As portions of Lunga Park are determined to be "safe for use," they may be re-opened by the Commander of Marine Corps Base Quantico. However, Lunga Reservoir will remain closed until the removal action along the reservoir bottom is completed. The Commander of Marine Corps Base Quantico will re-open the Reservoir as soon as it is determined to be "safe for use."



Live, fuzed High Explosive 60 mm mortar found on surface



Live, 2.25-inch, Sub Caliber Aircraft Rocket (SCAR), found just below the surface

### Additional Information!

For More Information Contact the Natural Resources & Environmental Affairs Branch at 703-784-4030



# PUBLIC NOTICE OF TIME CRITICAL REMOVAL ACTION



## Munitions on the Exposed Shoreline at Munitions Response Site UXO 035 Lunga Reservoir Marine Corps Base Quantico, Quantico, Virginia

The Department of the Navy and Marine Corps Base Quantico (MCBQ), in cooperation with the United States Environmental Protection Agency and the Virginia Department of Environmental Quality, are performing a Time-Critical Removal Action (TCRA) for munitions items detected along a portion of the shoreline of Lunga Reservoir located at MCBQ in Quantico, Virginia. Lunga Reservoir is identified as Munitions Response Site UXO 035. This TCRA is being conducted as part of the Department of the Navy's Munitions Response Program, which addresses potential environmental health and safety hazards from past unexploded ordnance, discarded military munitions, and munitions constituents. Lunga Reservoir is part of MCBQ's Lunga Recreation Area; it is currently closed for recreational use due to munitions findings.

**MUNITIONS AT LUNGA RESERVOIR:** Lunga Reservoir covers approximately 520 acres and is centrally located within the Guadalcanal Area of MCBQ, west of Interstate 95. UXO 035 lies within the firing fan of a former artillery and mortar range used from 1943 through the mid-1950s. UXO 035 has been identified for a TCRA for removal of munitions based on: (1) its location within the former range firing fan; (2) identification of surface and subsurface munitions along the shoreline during previous Munitions Response Program activities; and (3) Identification of metallic objects from an underwater survey previously conducted within the reservoir. These underwater metallic objects may be munitions items or may be other metallic objects. Approximately 800 munitions items have been recovered during other removal actions on land adjacent to Lunga Reservoir.

**TCRA:** This TCRA involves removing and disposing of surface and potential subsurface munitions items from approximately 72 acres of the exposed shoreline in the eastern portion of UXO 035. The goal of the TCRA is to remove munitions items from the top 12 inches of soil and sediment across the entire exposed area, thereby mitigating the potential explosive hazard.

The TCRA will be performed while the shoreline is exposed during low water levels within the reservoir. MCBQ will lower the water level by controlling water discharge using the Lunga Dam. None of the TCRA activities will be performed below the water line. Once the reservoir water level has been lowered to expose the shoreline, munitions response professionals will perform the following activities:

- 1. Surface Removal:** Munitions-related items and small arms ammunition in addition to other metallic debris will be removed from the exposed shoreline/lake bed surface using handheld metal detectors.
- 2. Mapping of Subsurface Metallic Objects and Intrusive Investigation:** A technique called digital geophysical mapping (DGM) will be used to identify and map metallic objects in the subsurface that may represent potential munitions items. An investigation will be conducted, in which munitions response professionals will dig up and remove all identified objects. In areas inaccessible for DGM, munitions response professionals will use handheld metal detectors to identify and dig up metallic objects.
- 3. Onsite Inspection, Destruction, and Offsite Disposal of Munitions Items:** Munitions items with a known or potential explosive hazard will be destroyed by controlled, intentional detonation using sandbags to contain the explosive shock and debris. The items will be inspected to ensure there is no explosive hazard and then will be removed from the site for offsite recycling.

**The TCRA activities and associated documentation at UXO 035 began on February 19, 2018 and are anticipated to be completed by November 2018.**

### FOR MORE INFORMATION

More information can be found in the Action Memorandum for Time Critical Removal Action of Munitions and Explosives of Concern on the Exposed Shoreline and Lake Bed of Munitions Response Site UXO 035 – Lunga Reservoir. This document and others related to UXO 035 can be reviewed at the MCBQ administrative record information repositories listed below and on MCBQ Environmental Restoration Program web site listed below:

Chinn Park Regional Library  
13065 Chinn Park Drive  
Woodbridge, VA 22192  
Phone: (703) 792-4800

John Musante Porter Library  
2001 Parkway Blvd  
Stafford, VA 22254  
Phone: (540) 659-4909

Marine Corps Base Quantico  
Natural Resources and Environmental Affairs Branch  
3049 Bordelon Street  
Quantico, VA 22134-5001

MCBQ Environmental Restoration Program web site:  
<https://go.usa.gov/xngKr>

For additional information or questions, please contact the MCBQ Environmental Restoration Program Manager at (703) 432-0521.

### PUBLIC COMMENT PERIOD

A 30-day public comment period on this TCRA and other related documents in the Administrative Record will begin on March 26, 2018 and end on April 25, 2018. Written comments should be sent to:

**Marine Corps Base Quantico  
Natural Resources and Environmental Affairs Branch  
Installation Restoration Program  
3049 Bordelon Street  
Quantico, VA 22134-5001**

Public comments will be considered by the Navy and MCBQ, and responses be summarized in a Responsiveness Summary document, which will be placed in the Administrative Record.

**NOTICE OF AVAILABILITY  
and  
PUBLIC COMMENT PERIOD**

**Engineering Evaluation/Cost Analysis Report  
for Munitions Response Site UXO 034, Lunga Recreation Area  
Training Area 10, Operable Unit 27,  
Marine Corps Base Quantico**

The Department of the Navy, Naval Facilities Engineering Command Washington and Marine Corps Base Quantico, in cooperation with the United States Environmental Protection Agency (USEPA) and the Virginia Department of Environmental Quality (VDEQ), announces the availability of the following document for public review and comment:

***Engineering Evaluation/Cost Analysis (EE/CA) for Munitions Response Site UXO 034  
Lunga Recreation Area Training Area 10, Operable Unit 27 at Marine Corps Base Quantico***

The EE/CA describes the Navy's proposed "non-time-critical removal action" for potential munitions and explosives of concern (MEC) within the site known as Operable Unit 27 (OU-27). OU-27 consists of approximately 96 acres in the southern portion of what is now the Lunga Recreation Area. During World War II, the site was part of a range used for training activities, including mortar and artillery training. Previous munitions investigations and "time-critical removal actions" have been conducted to identify and remove suspected MEC on the ground surface. Currently, a Phase I Remedial Investigation is being conducted to identify potential subsurface MEC. This EE/CA describes alternatives for removing the MEC from the subsurface, with the goal of reducing any potential explosive hazard, so that the area can be re-opened for recreational use.

The recommended alternative is Alternative 2 – subsurface removal of "targets of interest," as potential MEC and material potentially presenting an explosive hazard to two feet below ground surface, with land use controls to prevent exposure to potential MEC that may be deeper. The EE/CA, along with other general and site-specific information, is available for public review at:

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**Information Repositories**

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Chinn Park Regional Library  
13065 Chinn Park Drive  
Woodbridge, VA 22192  
(703) 792-4800

John Musante Porter Memorial Library  
2001 Parkway Blvd  
Stafford, VA 22254  
(540) 659-4909

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Marine Corps Base Quantico  
Natural Resources and Environmental Affairs Branch  
3049 Bordelon Street  
Quantico, VA 22134-5001

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A 45-day, public review period for the EE/CA will begin on **April 30** and end on **June 15**. Written comments on the EE/CA may be sent to:

**Marine Corps Base Quantico  
Natural Resources and Environmental Affairs Branch  
Installation Restoration Program  
3049 Bordelon St.  
Quantico, VA 22134-5001**

After the EE/CA public comment period has ended, and comments have been reviewed and considered, the Navy, in partnership with the USEPA and VDEQ, will select a cleanup method.

For additional information, please contact the  
Restoration Program Manager at (703) 432-0521.

## **MARINE CORPS BASE QUANTICO MUNITIONS RESPONSE SITE PRIORITIZATION PROTOCOL**

The Naval Facilities Engineering Command (NAVFAC) Washington announces the update of the Department of Defense's Munitions Response Site Prioritization Protocol (MRSPP) scoring for four sites at the Marine Corps Base Quantico (MCBQ) in Quantico, Virginia:

UXO 031 – Camp Barrett Training Areas 5 and 8

UXO 037 – Chopawamsic Creek Range Fans

UXO 038 – Lunga Recreation Area Central

UXO 039 – Lunga Recreation Area North

The MRSPP is used to assess sites that may have unexploded ordnance, discarded military munitions, and/or munitions constituents and to assign priorities for any additional investigation or munitions removal that may be required. Evaluation criteria, including the types of munitions that may be present, ease of public access to the site, and the number of people living near the site, are considered through the application of the MRSPP. The MRSPP scoring for the four sites have been updated based on information obtained through the Munitions Response Program activities implemented at MCBQ.

Community input is integral to the remedial process and public involvement is encouraged. Public comments on the MRSPP reports for these four sites will be accepted from October 1 through October 31, 2018. Comments must be postmarked no later than October 31, 2018.

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The public may send written comments to the following address:

Ms. Victoria Waranoski  
Remedial Project Manager, NAVFAC  
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Copies of the MRSPP reports for these sites are available for review at:

Marine Corps Base Quantico Environmental  
Restoration Public Web Site: <https://go.usa.gov/xngKr>

Public Information Repositories:

Chinn Park Regional Library  
13065 Chinn Park Drive  
Woodbridge, VA 22192  
(703) 792-4800

John Musante Porter Memorial Library  
2001 Parkway Blvd  
Stafford, VA 22254  
(540) 659-4909

Marine Corps Base Quantico  
Natural Resources and Environmental Affairs Branch  
3049 Bordelon Street  
Quantico, VA 22134-5001  
(703) 784-4030



# Five-Year Review of Environmental Cleanup Actions

Marine Corps Base Quantico  
Quantico, Virginia



The Department of the Navy, Naval Facilities Engineering Command Washington and the Marine Corps Base Quantico, in cooperation with the United States Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ), are beginning a Five-Year Review of five ongoing remedial actions (environmental cleanup) at the installation.

The purpose of a Five-Year Review is to ensure that cleanup actions are continuing to protect human health and the environment. A site is included in the Five-Year Review if contaminants remain above levels that would allow for unlimited use and unrestricted exposure and if there is a signed Record of Decision (ROD) in place. The ROD, which includes an evaluation of the potential human health or environmental risks posed by the site, documents the cleanup remedy that was selected following consideration of public comments.

This is the fourth Five-Year Review for Marine Corps Base Quantico. The Navy will submit draft findings of the Five-Year Review to EPA and VDEQ in January 2017. The final report will be made available to the public by April 2018.

Community members who have questions, comments, or information about the effectiveness of the remedies are encouraged to contact the Restoration Program Manager at (703) 432-0521. The Administrative Record for technical reports and other information about the environmental cleanup program, including documents that will be used as the basis for this review, is available at the information repositories listed below.

### Information Repositories

Chinn Park Regional Library  
13065 Chinn Park Drive  
Woodbridge, VA 22192  
703-792-4800

John Musante Porter Memorial Library  
2001 Parkway Blvd  
Stafford, VA 22254  
540-659-4909

Marine Corps Base Quantico  
Natural Resources and Environmental Affairs Branch  
3049 Bordelon Street  
Quantico, VA 22134-5001



## Five-Year Review of Environmental Sites Completed

Marine Corps Base Quantico  
Quantico, Virginia



### MISSION CLEANUP – CLEAN, PROTECT, RESTORE

The Department of the Navy, Naval Facilities Engineering Command Washington (NAVFAC), the Marine Corps Base Quantico (MCBQ), the United States Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ), have worked together to complete a Five-Year Review of ongoing remedial actions (environmental cleanup) at five sites at the installation.

The purpose of a Five-Year Review is to ensure that cleanup actions are continuing to protect human health and the environment. A site is included in the Five-Year Review if contaminants remain above levels that would allow for unlimited use and unrestricted exposure and if there is a signed Record of Decision (ROD) in place. The ROD, which includes an evaluation of the potential human health or environmental risks posed by the site, documents the cleanup remedy that was selected following consideration of public comments. This is the fourth Five-Year Review for MCBQ.

The following sites were included in this Five-Year Review:

Site 4: Old Landfill	Site 100: Chopawamsic Creek
Site 95: Building 2101 Paint Booth Sump	Site 104: Building 2113 Underground
Site 99: Quantico Embayment	Tank Loading/Unloading Area

Community members who have questions, comments, or information about the effectiveness of the remedies are encouraged to contact the Restoration Program Manager at (703) 432-0521. The Five-Year Review and other associated documents can be reviewed at the MCBQ administrative record information repositories listed below and on the MCBQ Environmental Restoration Program web site listed below:

#### Information Repositories

Chinn Park Regional Library 13065 Chinn Park Drive Woodbridge, VA 22192 703-792-4800	John Musante Porter Memorial Library 2001 Parkway Blvd Stafford, VA 22254 540-659-4909
Marine Corps Base Quantico Natural Resources and Environmental Affairs Branch 3049 Bordelon Street Quantico, VA 22134-5001 703-784-4030	MCBQ Environmental Restoration Program web site: <a href="https://go.usa.gov/xngKr">https://go.usa.gov/xngKr</a>



## **Assessing Community Interest in a Restoration Advisory Board for Environmental Cleanup at Marine Corps Base Quantico**



A clean, healthy environment is essential to supporting the Department of the Navy's (DON's) primary mission of maintaining fleet readiness. Although past activities have resulted in the release of contaminants into the environment, DON is committed to cleaning up Navy properties in an effective and efficient manner. To accomplish cleanup, DON's environmental restoration team encourages and supports partnerships among various stakeholders, including state and federal regulators, American Indian tribes, and local communities.

The DON, Naval Facilities Engineering Command Washington and the Marine Corps Base Quantico (MCBQ), in cooperation with the United States Environmental Protection Agency (EPA) and the Virginia Department of Environmental Quality (VDEQ), implement the Defense Environmental Restoration Program (DERP) at Marine Corps Base Quantico (MCBQ).

### **Environmental Investigation and Cleanup at MCBQ**

The purpose of the Environmental Restoration (ER) Program is to reduce the risk to human health and the environment from past waste disposal operations and hazardous substance spills at DON activities including MCBQ. The program goal is to provide for cost-effective and timely site assessment, planning, and remediation of identified releases consistent with DERP requirements.

### **Assessing Community Interest in a Restoration Advisory Board**

In the 1990s, MCBQ had a Technical Review Committee (now called a Restoration Advisory Board or RAB) consisting of MCBQ personnel, representatives of state and federal regulatory agencies, elected officials, and community members. However, over time, community interest and participation waned. The committee stopped meeting and was ultimately dissolved.

The use of RABs is an effective means of promoting stakeholder participation, and is the cornerstone of efforts to expand community involvement in decisions about cleanup at military bases. RABs serve as a primary mechanism to ensure that individuals within the community not only have access to information relevant to environmental restoration but also have the ability to participate in the decision-making process.

MCBQ periodically re-assesses community interest in the establishment of a RAB. If re-established, the RAB would include local residents who reflect the diverse interests of the community. RAB involvement could include participation in meetings, participation in public reviews, and commenting on reports relating to the ongoing environmental studies and restoration activities at MCBQ. Members would have an opportunity to provide input on activities that will accelerate the ER Program. Members may also serve as voluntary liaisons between the community and the RAB and be available to meet with community members and/or groups. All RAB meetings would be open to the public.

**If you think that MCBQ should establish a  
Restoration Advisory Board, or you would like more information,  
please contact the Restoration Program Manager at (703) 432-0521 or  
send an email to [brian.ventura@usmc.mil](mailto:brian.ventura@usmc.mil) by December 14, 2016.**



## Do You Want More Information about Marine Corps Base Quantico's Environmental Restoration Program?



### DO YOU KNOW?

Marine Corps Base Quantico (MCBQ) and the U.S. Navy, in cooperation with state and federal environmental regulators, implement the Environmental Restoration Program (ERP), which focuses on:

1. **Chemical contamination** - Investigating and addressing contamination that may have occurred in the past due to spills, leaks, or historic disposal practices
2. **Munitions response** – Investigating and addressing potential environmental and safety hazards from past unexploded ordnance, discarded military munitions, and munitions constituents.



### WE NEED YOUR HELP!

YOU can help the ERP update its "Community Involvement Plan" and learn how people would like to get more information about the environmental and munitions investigations and cleanup being done at the base. Simply go to MCBQ's environmental restoration website at <https://go.usa.gov/xngKr> and fill out a confidential electronic questionnaire to help the ERP develop its Community Involvement Plan. *Please respond by the end of January 2018.*

**Thanks – we value your input!**