



DEPARTMENT OF
ECOLOGY
State of Washington

Response to Comments

Remedial Investigation/Feasibility Study

Westman Marine Site Blaine, WA

Facility Site ID: 66519819

Cleanup Site ID: 2205

August 2020

Publication and Contact Information

This document is available on the Department of Ecology's Westman Marine website at:
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2205>

For more information contact:

Ian Fawley
Public Involvement Coordinator
Ecology – Bellingham Field Office
913 Squalicum Way, Unit 101
Bellingham, WA 98225
360-255-4382

Cris Matthews, LHG
Site Manager
Ecology – Bellingham Field Office
913 Squalicum Way, Unit 101
Bellingham, WA 98225
360-255-4379

Washington State Department of Ecology – www.ecology.wa.gov

- Headquarters, Olympia 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Olympia 360-407-6300
- Central Regional Office, Union Gap 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-255-4400 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.

Response to Comments

Remedial Investigation/Feasibility Study

**Westman Marine Site
Blaine, WA**

*Facility Site ID: 66519819
Cleanup Site ID: 2205*

Washington State Department of Ecology
Northwest Regional Office
Toxics Cleanup Program
Bellevue, Washington

This page is purposely left blank

Table of Contents

	<u>Page</u>
List of Tables	vi
Public Outreach.....	1
Comment Summary	2
Next Steps	2
Comments and Responses.....	2
Comment from: David and Mary Margaret	3
Comment from: RE Sources for Sustainable Communities (Kirsten McDade)	5
Appendices.....	8

List of Tables

Page

Tables

Table 1: List of Commenters	2
-----------------------------------	---

Public Outreach

From September 3 – October 2, 2019, the Department of Ecology (Ecology) solicited public comments on an environmental report for the Westman Marine cleanup site in Bellingham. The report, called a remedial investigation/feasibility study (RI/FS):

- Describes contamination found at the Site.
- Evaluates cleanup alternatives.
- Identifies a preferred cleanup alternative.

The Port of Bellingham (Port) prepared this report with Ecology oversight. Investigations conducted by the Port found contamination from historical boat maintenance and repair operations.

Our public involvement activities related to this 30-day comment period included:

- **Fact Sheet:**
 - US mail distribution of a fact sheet providing information about the cleanup documents and the public comment period to approximately 2,500 people including neighboring businesses and other interested parties.
 - Email distribution of the fact sheet to approximately 160 people, including interested individuals, local/county/state/federal agencies, and interested community groups.
- **Legal Notices:**
 - Publication of one paid display ad in *The Northern Light*, dated Thursday, August 29, 2019.
 - Publication of one paid display ad in *The Bellingham Herald*, dated Friday, August 30, 2019.
- **Site Tour:**
 - Ecology staff along with Port of Bellingham staff joined a site tour hosted by RE Sources for Sustainable Communities on Wednesday, September 4, 2019 from Noon – 2 p.m. This tour was funded through a Public Participation Grant from Ecology.
- **Site Register:**
 - Publication of 3 notices in Ecology’s Toxics Cleanup Site Register:
 - Comment Period Notice:
 - August 29, 2019
 - September 12, 2019
 - September 26, 2019
 - Response Summary Notice:
 - August 13, 2020
 - Visit [Ecology’s Site Register website](#)¹ to download PDFs.
- **Website:**
 - Announcement of the public comment period and posting of the fact sheet and associated documents for review on [Ecology’s Westman Marine website](#)²

¹<https://fortress.wa.gov/ecy/publications/UIPages/PublicationList.aspx?IndexTypeName=Program&NameValue=Toxics+Cleanup&DocumentTypeName=Newsletter>

² <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=2205>

- **Document Repositories:**
 - Provided copies of the documents for public review through three information repositories:
 - Whatcom County Public Library in Blaine, WA
 - Ecology’s Bellingham Field Office in Bellingham
 - Ecology’s Northwest Regional Office in Bellevue

Comment Summary

Ecology received two comments during the 30-day comment period.

Table 1: List of Commenters

	First Name	Last Name	Agency/Organization/Business	Submitted By
1	David and Mary Margaret	Leu		Individual
2	Kirsten	McDade	RE Sources for Sustainable Communities	Organization

Next Steps

Ecology will make a draft Cleanup Action Plan available for public review and comment (estimated in 2021). This draft Cleanup Action Plan for the Site is based on the information in the final Remedial Investigation and Feasibility Study report.

Comments and Responses

Ecology has reviewed and considered all comments received on the Remedial Investigation/ Feasibility Study. Based on Ecology’s evaluation of the comments, we made one update to the document, and they will now be finalized:

- Updated bird species list. (See final Remedial Investigation/Feasibility Study Section 5.4.3.3)

The comments are presented below, along with Ecology’s responses. Appendix A, on page 8, contains the comments in their original format.

Comment from: David and Mary Margaret

October 1, 2019

Comments on the Westman Marine Draft RI/FS Document.

These comments on the Westman Marine Site's "Draft Report: Remedial Investigation/Feasibility Study" are being made through the efforts of the members of the Semiahmoo Resort Association/Homeowners Association's Environmental Committee (Environmental Committee) as part of the Public Comment Process whose comment period ends of October 2, 2019. However, due to the timing of the deadline to submit such comments within the period of the Public Comment Period, these comments have not yet been approved by the Semiahmoo Resort Association/Homeowners Association's Board of Directors. Therefore, the below comments represent only the views of David J. Leu, Ph.D. and Mrs. Mary Margaret Leu, MSN, who are members of the above referenced Environmental Committee. These comments have been reviewed and approved by the Environmental Committee and have been submitted to the Board of Directors for approval. If approved, they shall be submitted to the Department of Ecology at that time.

Additionally, these comments have been created with the input, review and approval of Mrs. Alicia Rule, Blaine City Council, Member at Large. She is the city council's designated interface with the Port of Bellingham.

The Westman Marine site is identified by the Department of Ecology as Facility Site ID: 66519819; Cleanup Site ID: 2205.

These comments are presented in response to the review of the aforementioned document (referred to below as RI/FS); the September 4, 2019 site tour conducted by the Department of Ecology; and a follow-up meeting held with the Department of Ecology, the Port of Bellingham (POB), and the Environmental Committee's representative, David J. Leu, Ph.D. on September 11, 2019.

The comments are based on the desire to protect: 1) human health and the environment; 2) the recreational resources located in and around Drayton Harbor, including swimming beaches along the Sandy Spit area and adjacent to the Semiahmoo Resort Area; 3) the potential impacts to the commercial fishing fleet and the pleasure boat fleet in Blaine Harbor; 4) the commercial oyster beds and wetlands in Drayton Harbor and fisheries in Semiahmoo Bay; 5) the various private operations being conducted within Blaine Harbor, including a desire to continue the boatyard operations on the subject property; and 6) a desire that the POB continues its ownership and environmental stewardship of the Blaine Harbor area.

We are concerned with the potential impacts dredging of contaminated sediment may have on Drayton Harbor and Semiahmoo Bay waters and environs. The RI/FS fails to adequately address how the dredging discharge waters will be managed and monitored and fails to identify what mitigation measures may be required if such discharge waters could negatively impact the waters of Drayton Harbor and Semiahmoo Bay.

Drayton Harbor and Semiahmoo Bay waters are very sensitive because they include the recreational areas in and around Drayton Harbor and the Sandy Spit area, the commercial oyster beds in

Drayton Harbor and nearby wetlands. We understand the POB is anticipating that a monitoring plan on such waters will be required when that agency goes through the design and then permitting stages of this site's cleanup. We request that we be notified when the draft monitoring plan is created so that it be shared with our Environmental Committee for review and comments. This is especially important to us given not only the potential impacts of the identified contaminants of principal concern but also the potential pathogen pathway such discharged waters may present to the recreational areas of Drayton Harbor including the Sandy Spit area, the commercial oyster beds and the fisheries of Semiahmoo Bay. The pathogens may originate from the bird feces in sediments located in and around the proposed dredging area. There is a large nesting population of cormorants and sea gulls which occupy Blaine Harbor's outer breakwater adjacent to the Westman Marine site which may have impacted such sediment.

We are also concerned with how the dredging project may impact the ability of commercial and pleasure boats to enter and leave Blaine Harbor and would like to see how the management of the dredging operations will be conducted to minimize such impacts.

We strongly suggest that the remediation option for the uplands portion of the site include asphaltting the entire site. It appears that the selected remedial option identified in the RI/FS, called U-1, would leave surface soils exposed to future contamination caused by boat maintenance activities. We saw during the site tour that boats currently being stored and/or worked on at the site have just a thin layer of plastic sheeting under them to collect and contain contaminants such as spilled oils, solvents, fuels and removed paint chips. Such as system is not viewed by us as adequate protection of the soils and a more permanent solution, such as asphaltting the exposed soils within the work area is desirable.

Also, we ask that you please update your list of bird species found in and around the vicinity of the Westman Marine site. There are numerous electronic databases which lists birds of the Drayton Harbor area, one being EBirds.

Thank you for allowing us to submit these comments. Any response to comments may be submitted to:

- 1) Dr. and Mrs. David J. Leu, 8668 Great Horned Owl Lane, Blaine, WA 98230;, tel: 605-400-2907*
- 2) Alicia Rule, Blaine City Council, Member at Large, 435 Martin St., Suite 3000, Blaine, WA 98230, tel: 360-296-1995*

Response:

Dredging:

The intent and focus of the RI/FS is to define the nature and extent of contamination and select appropriate remedial measures. The preferred remedy in the Feasibility Study will require dredging to remove contaminated sediment. However, the specific nature and scope of that work, including measures to prevent redistribution of contaminants, will be addressed in future design/engineering planning for the project. The work will require necessary Clean Water Act, Sections 401 and 404, permitting through the Department of Ecology and US Army Corps of Engineers, respectively. Requirements would include water quality monitoring and discharge management controls to protect the environment and minimize the redistribution of contaminants while work is underway. The Port of Bellingham operates

Blaine Harbor and will take appropriate measures to ensure cleanup operations do not affect/hinder private and commercial marine traffic.

Future Port of Bellingham water quality monitoring plan:

Comment noted.

Upland portion of the site:

The principal focus and intent of the cleanup is to remove existing contamination. The preferred upland remedy, alternative U-1, was chosen based partly on the larger amount of contaminated soil to be removed. Asphalt/hard surfacing could introduce unintended direct run-off pathways affecting the adjacent marine environment also subject to cleanup. Post-cleanup land use decisions are the responsibility of the Port of Bellingham as property owner. The Port's arrangements with current or future tenants include provisions for best management practices in working areas to minimize or prevent future environmental contamination.

Updated bird species list

Please see the final Remedial Investigation/Feasibility Study, Section 5.4.3.3, for an updated bird species list. You can download a copy from [Ecology's Westman Marine webpage](#)³.

Comment from: RE Sources for Sustainable Communities (Kirsten McDade)

*To: Cris Matthews
Site Manager
Department of Ecology
913 Squalicum Way, Unit 101
Bellingham, WA 98225*

Transmitted Via Online Public Comment Form: <http://cs.ecology.commentinput.com/?id=x2VEh>

2 Oct 2019

RE: Westman Marine Inc Remedial Investigation/Feasibility Study

Dear Cris Matthews,

Thank you for taking the time to consider our comments on the Remedial Investigation/Feasibility Study (RI/FS) for Westman Marine Inc located in Blaine, WA. We are encouraged by the amount of research and investigation that went into creating this document and we are confident that this will result in a much cleaner and ecologically productive site.

³ <https://apps.ecology.wa.gov/gsp/Sitepage.aspx?csid=2205>

RE Sources for Sustainable Communities is a local organization in northwest Washington, founded in 1982. RE Sources works to build sustainable communities and protect the health of northwest Washington's people and ecosystems through the application of science, education, advocacy, and action. Our North Sound Baykeeper program is dedicated to protecting and enhancing the marine and nearshore habitats of northern Puget Sound and the Georgia Strait. Our chief focus is on preventing pollution from entering the North Sound and Strait, while helping our local citizenry better understand the complex connections between prosperity, society, environmental health, and individual wellbeing. Our North Sound Baykeeper is the 43rd member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has over 20,000 members in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

In regards to the section “Tides, Flooding, Storm Surge, Tsunamis, and Climate change” we noticed that the information used for projected sea level rise is outdated (2007 and 2008) and may under represent actual sea level rise. Washington Coastal Hazards and Resilience Network has developed site-specific sea level rise information based on data from 2014¹. When looking at the site-specific scenarios for Drayton Harbor the likely range of sea level rise over the next 100 years for a low carbon dioxide emissions scenario is 1.1-3.7 feet and for a high carbon dioxide emissions scenario is 2.0-4.8 feet. Both of these ranges encompass higher values than the 2.4 foot rise that was used to formulate the cleanup plans for this site.

*The infrastructure located on Westman Marine is extensive and could potentially contribute toxics to the Bay if inundated with water (petroleum products, anti-fouling agents, PCBs etc...). Washington Coastal Hazards Resilience Network recommends that low-probability projections should be used for high-impact situations such as these to minimize expensive damage to infrastructure and recontamination of the environment. **Therefore, we strongly urge you to consider a sea level rise of at least 3.3 feet, the value that has a 50% probability given a high carbon dioxide emission scenario¹.***

Drayton Harbor has a thriving but tenuous oyster industry that could be adversely affected by the cleanup efforts in the Bay. Additionally, recreational shellfish harvest was reopened in recent years to the public at Semiahmoo Spit in Drayton Harbor. Because oysters are filter feeders, suspending contaminated sediments could result in contaminated oysters and other shellfish that would harm these local commercial and recreational industries. Please include a detailed plan on how sediments will be contained during the sedimental removal stage of the cleanup process.

We appreciate the effort that went into writing this very thorough and comprehensive document. The use of photos, diagrams, and tables supported the dialogue very well and added to the complete story. To further increase the readability of the document we suggest that you limit the use of acronyms. In a 398 page document it is very cumbersome to have to keep scrolling to the top to translate sentences. There are numerous sentences such as this one that are really difficult to read unless one has memorized all the acronyms:

“IHS concentrations in both subunits of SMA-1 exceeding the SCOs are mostly limited to the upper 1 ft of sediment, although in some areas extend to a depth of approximately 2.5 ft. All exceedances of the CSLs for PBTs are also contained within SMA-1.” (p. 11-2)

Thank you for reading our comments and taking our recommendations into consideration. We

Response to Comments: Westman Marine Site

appreciate being able to have an active role in the fate of the toxic cleanup sites in Whatcom County and are encouraged by the progress made to make these documents more accessible to local citizens.

Sincerely,

Kirsten McDade

Pollution Prevention Specialist

RE Sources for Sustainable Communities

¹Washington Coastal Hazards Resilience Network. Retrieve from:

<http://www.wacoastalnetwork.com/wcrp-documents.html>

Response:

Sea Level Rise:

Sea level rise is a factor at this site and will be considered as part of the cleanup process. Potential change and effects will be evaluated more closely during engineering design for the cleanup. Specific engineering plans to address these potential impacts will be presented to Ecology in an engineering design report. The Port of Bellingham will be required to use best available and current sea level rise projections when engineering the final cleanup action.

Sediment removal:

The preferred cleanup remedy requires dredging to remove contaminated sediment. The specific nature and scope of removal work, including measures to contain and prevent redistribution of contaminants, will be addressed in future engineering design for the project. The work will require necessary Clean Water Act, Sections 401 and 404, permitting through the Department of Ecology and US Army Corps of Engineers, respectively. Requirements would include water quality monitoring and discharge management controls to protect the environment and minimize the redistribution of contaminants while work is underway.

Use of acronyms:

Comment noted and appreciated.

Appendices

Appendix A. Public Comments in Original Format

Comments on the Westman Marine Draft RI/FS Document.

These comments on the Westman Marine Site's "Draft Report: Remedial Investigation/Feasibility Study" are being made through the efforts of the members of the Semiahmoo Resort Association/Homeowners Association's Environmental Committee (Environmental Committee) as part of the Public Comment Process whose comment period ends of October 2, 2019. However, due to the timing of the deadline to submit such comments within the period of the Public Comment Period, these comments have not yet been approved by the Semiahmoo Resort Association/Homeowners Association's Board of Directors. Therefore, the below comments represent only the views of David J. Leu, Ph.D. and Mrs. Mary Margaret Leu, MSN, who are members of the above referenced Environmental Committee. These comments have been reviewed and approved by the Environmental Committee and have been submitted to the Board of Directors for approval. If approved, they shall be submitted to the Department of Ecology at that time.

Additionally, these comments have been created with the input, review and approval of Mrs. Alicia Rule, Blaine City Council, Member at Large. She is the city council's designated interface with the Port of Bellingham.

The Westman Marine site is identified by the Department of Ecology as Facility Site ID: 66519819; Cleanup Site ID: 2205.

These comments are presented in response to the review of the aforementioned document (referred to below as RI/FS); the September 4, 2019 site tour conducted by the Department of Ecology; and a follow-up meeting held with the Department of Ecology, the Port of Bellingham (POB), and the Environmental Committee's representative, David J. Leu, Ph.D. on September 11, 2019.

The comments are based on the desire to protect: 1) human health and the environment; 2) the recreational resources located in and around Drayton Harbor, including swimming beaches along the Sandy Spit area and adjacent to the Semiahmoo Resort Area; 3) the potential impacts to the commercial fishing fleet and the pleasure boat fleet in Blaine Harbor; 4) the commercial oyster beds and wetlands in Drayton Harbor and fisheries in Semiahmoo Bay; 5) the various private operations being conducted within Blaine Harbor, including a desire to continue the boatyard operations on the subject property; and 6) a desire that the POB continues its ownership and environmental stewardship of the Blaine Harbor area.

We are concerned with the potential impacts dredging of contaminated sediment may have on Drayton Harbor and Semiahmoo Bay waters and environs. The RI/FS fails to adequately address how the dredging discharge waters will be managed and monitored and fails to identify what mitigation measures may be required if such discharge waters could negatively impact the waters of Drayton Harbor and Semiahmoo Bay. Drayton Harbor and Semiahmoo Bay waters are very sensitive because they include the recreational areas in and around Drayton Harbor and the Sandy Spit area, the commercial oyster beds in Drayton Harbor and nearby wetlands. We understand the POB is anticipating that a monitoring plan on such waters will be required when that agency goes through the design and then permitting stages of this site's cleanup. We request that we be notified when the draft monitoring plan is created so that it be shared with our Environmental Committee for review and comments. This is especially important to us given not only the potential impacts of the identified contaminants of

Comments on the Westman Marine Draft RI/FS Document.

principal concern but also the potential pathogen pathway such discharged waters may present to the recreational areas of Drayton Harbor including the Sandy Spit area, the commercial oyster beds and the fisheries of Semiahmoo Bay. The pathogens may originate from the bird feces in sediments located in and around the proposed dredging area. There is a large nesting population of cormorants and sea gulls which occupy Blaine Harbor's outer breakwater adjacent to the Westman Marine site which may have impacted such sediment.

We are also concerned with how the dredging project may impact the ability of commercial and pleasure boats to enter and leave Blaine Harbor and would like to see how the management of the dredging operations will be conducted to minimize such impacts.

We strongly suggest that the remediation option for the uplands portion of the site include asphaltting the entire site. It appears that the selected remedial option identified in the RI/FS, called U-1, would leave surface soils exposed to future contamination caused by boat maintenance activities. We saw during the site tour that boats currently being stored and/or worked on at the site have just a thin layer of plastic sheeting under them to collect and contain contaminants such as spilled oils, solvents, fuels and removed paint chips. Such a system is not viewed by us as adequate protection of the soils and a more permanent solution, such as asphaltting the exposed soils within the work area is desirable.

Also, we ask that you please update your list of bird species found in and around the vicinity of the Westman Marine site. There are numerous electronic databases which lists birds of the Drayton Harbor area, one being EBirds.

Thank you for allowing us to submit these comments. Any response to comments may be submitted to:

- 1) Dr. and Mrs. David J. Leu, 8668 Great Horned Owl Lane, Blaine, WA 98230; tel: 605-400-2907
- 2) Alicia Rule, Blaine City Council, Member at Large, 435 Martin St., Suite 3000, Blaine, WA 98230, tel: 360-296-1995

RE Sources for Sustainable Communities

Please see attached file

To: Cris Matthews
Site Manager
WA Department of Ecology
913 Squalicum Way, Unit 101
Bellingham, WA 98225

Transmitted Via Online Public Comment Form: <http://cs.ecology.commentinput.com/?id=x2VEh>

2 Oct 2019

RE: Westman Marine Inc Remedial Investigation/Feasibility Study

Dear Cris Matthews,

Thank you for taking the time to consider our comments on the Remedial Investigation/Feasibility Study (RI/FS) for Westman Marine Inc located in Blaine, WA. We are encouraged by the amount of research and investigation that went into creating this document and we are confident that this will result in a much cleaner and ecologically productive site.

RE Sources for Sustainable Communities is a local organization in northwest Washington, founded in 1982. RE Sources works to build sustainable communities and protect the health of northwest Washington's people and ecosystems through the application of science, education, advocacy, and action. Our North Sound Baykeeper program is dedicated to protecting and enhancing the marine and nearshore habitats of northern Puget Sound and the Georgia Strait. Our chief focus is on preventing pollution from entering the North Sound and Strait, while helping our local citizenry better understand the complex connections between prosperity, society, environmental health, and individual wellbeing. Our North Sound Baykeeper is the 43rd member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has over 20,000 members in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

In regards to the section "Tides, Flooding, Storm Surge, Tsunamis, and Climate change" we noticed that the information used for projected sea level rise is outdated (2007 and 2008) and may under represent actual sea level rise. Washington Coastal Hazards and Resilience Network has developed site-specific sea level rise information based on data from 2014¹. When looking at the site-specific scenarios for Drayton Harbor the likely range of sea level rise over the next 100 years for a low carbon dioxide emissions scenario is 1.1-3.7 feet and for a high carbon dioxide emissions scenario is 2.0-4.8 feet. Both of these



ranges encompass higher values than the 2.4 foot rise that was used to formulate the cleanup plans for this site.

The infrastructure located on Westman Marine is extensive and could potentially contribute toxics to the Bay if inundated with water (petroleum products, anti-fouling agents, PCBs etc...). Washington Coastal Hazards Resilience Network recommends that low-probability projections should be used for high-impact situations such as these to minimize expensive damage to infrastructure and recontamination of the environment. ***Therefore, we strongly urge you to consider a sea level rise of at least 3.3 feet, the value that has a 50% probability given a high carbon dioxide emission scenario¹.***

Drayton Harbor has a thriving but tenuous oyster industry that could be adversely affected by the cleanup efforts in the Bay. Additionally, recreational shellfish harvest was reopened in recent years to the public at Semiahmoo Spit in Drayton Harbor. Because oysters are filter feeders, suspending contaminated sediments could result in contaminated oysters and other shellfish that would harm these local commercial and recreational industries. Please include a detailed plan on how sediments will be contained during the sedimental removal stage of the cleanup process.

We appreciate the effort that went into writing this very thorough and comprehensive document. The use of photos, diagrams, and tables supported the dialogue very well and added to the complete story. To further increase the readability of the document we suggest that you limit the use of acronyms. In a 398 page document it is very cumbersome to have to keep scrolling to the top to translate sentences. There are numerous sentences such as this one that are really difficult to read unless one has memorized all the acronyms:

"IHS concentrations in both subunits of SMA-1 exceeding the SCOs are mostly limited to the upper 1 ft of sediment, although in some areas extend to a depth of approximately 2.5 ft. All exceedances of the CSLs for PBTs are also contained within SMA-1." (p. 11-2)

Thank you for reading our comments and taking our recommendations into consideration. We appreciate being able to have an active role in the fate of the toxic cleanup sites in Whatcom County and are encouraged by the progress made to make these documents more accessible to local citizens.

Sincerely,

Kirsten McDade
Pollution Prevention Specialist
RE Sources for Sustainable Communities

¹Washington Coastal Hazards Resilience Network. Retrieve from:
<http://www.wacoastalnetwork.com/wcrp-documents.html>