APPENDICES

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APPENDIX A

OUTREACH AND CORRESPONDENCE

CONTAINS:

- A-1: Department of Archaeology and Historic Preservation Correspondence
- A-2: Tribal Outreach Correspondence
- A-3: Comments Received on Draft EA
- A-4: NOAA's Response to Comments

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APPENDIX A-1
Department of Archaeology and Historic Preservation Correspondence

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

Dr. Rob Whitlam, PhD
State Archaeologist
Holly Borth, MS
Preservation Design Reviewer
Washington State Department of Archaeology and Historic Preservation
PO Box 48343
Olympia, WA 98504-8343

Submitted by e-mail to rob.whitlam@dahp.wa.gov and holly.borth@dahp.wa.gov

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project – Section 106 Consultation

Dear Dr. Whitlam and Ms. Borth,

The National Oceanic and Atmospheric Administration (NOAA) is proposing to replace its Seawater System and expand its facilities at the National Marine Fisheries Service (NMFS) Manchester Research Station located at 7305 E. Beach Drive, Manchester, WA (NE ¼ of Section 16, T24N, R2E in the attached Map of Project Location). The Manchester Research Station is one element of the NMFS Northwest Fisheries Science Center (NWFSC) and is NOAA's premier marine culture and experimental research station, developing state-of-the-art technology for salmonid and marine fish culture.

Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act, and 36 CFR 800, NOAA has determined that the proposed project is a federal undertaking that has the potential to cause effects on historic properties, and seeks to initiate consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP). Please find attached NOAA's proposed Area of Potential Effects (APE) for the Project, for your concurrence.

NOAA Fisheries and NWFSC are proposing to install a replacement seawater system and to construct up to four new buildings of undetermined sizes at the Manchester Research Station in two Phases. Phase 1 of the proposed project would include the design and installation of a replacement seawater processing, distribution, and depuration system that delivers processed water to a common head tank capable of supplying existing and future fisheries and aquaculture operations for the entire facility. The proposed design is intended to reduce overall seawater system operation and maintenance costs and make the system more reliable. The components of the seawater system would include the installation of seawater distribution pipelines throughout the upland areas of the site that would connect the existing seawater intake facilities to a proposed new filter/UV system, an aeration head tank, and a distribution valve manifold; and would distribute treated seawater to existing laboratories and other buildings

throughout the site (see attached Map of Area of Potential Effect). All of the project components (Phase 1 and Phase 2) would be constructed upland of the higher high water level.

Phase 2 of the proposed project would include the construction of up to four new buildings on the site to accommodate expanded program requirements identified by NOAA as part of their 2022 Site Master Plan. The new buildings would provide laboratories, hatcheries, office space, and storage areas to serve the Environmental and Fisheries Science and Conservation Biology Divisions or both. The total square footage of the proposed new buildings (Buildings A, B, C and D in the attached Map of Area of Potential Effect) is estimated at approximately 21,000 square feet. Since the detailed design for the buildings has not commenced, the number of buildings, dimensions, layout and/or footprint of the proposed buildings are subject to change during the design process.

To accommodate the proposed new buildings, changes to the internal site circulation and parking areas would be required. Detailed design for these site changes has not yet been developed, however preliminary planning has indicated that modifications to the main parking lot access, driveways, and building access points would be needed.

Project effects to historic properties, if present, could include disturbance to soils holding cultural materials, alterations to buildings, structures, and/or landscape features that diminish their historical integrity, and/or changes to the historic settings of buildings and structures. Best management practices such as following standard protocols for inadvertent discoveries, if encountered, would be implemented in consultation with DAHP.

In addition to initiating consultation with the DAHP, pursuant to 36 CFR 800.4(a)(4), NOAA is also initiating engagement with six Federally recognized tribes including: Suquamish Tribe, Muckleshoot Indian Tribe, Stillaguamish Tribe, Tulalip Tribe, Skokomish Tribe, and Port Gamble S'Klallam Tribe. NOAA also reached out to the non-Federally recognized Duwamish Tribe. Copies of our correspondence, and any tribal responses, will be included with the cultural resources report when it is submitted.

This letter requests your concurrence on the APE. Following your concurrence on the APE, a cultural resource assessment report containing identification of historic properties and assessment of potential adverse effects will be submitted for your concurrence. Please direct any comments or questions regarding the information in this letter to me at Rachel.Chang@noaa.gov or Kirk Ranzetta at Kirk.Ranzetta@aecom.com.

Sincerely,

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic & Atmospheric Administration

Cc: Brantley Bain, NOAA Facilities Engineering Office
John Battle, NOAA Federal Preservation Officer
Mark Benne, NOAA Facilities Engineering Office
Barry Berejikian, NWFSC Station Chief - Manchester Research Station
Hélène Scalliet, NOAA Northwest Fisheries Science Center, Tribal Liaison
Minh Trinh, NWFSC Facilities Management Program Manager
Kevin Werner, NWFSC Science and Research Director
Kirk Ranzetta, AECOM Architectural Historian

Enclosure: Map of Project Location
Map of Area of Potential Effects

Bremerton East, Washington USGS Topographic 7.5' Series Quadrangle 2020.
Section 16, Township 24 North, Range 02 East, Willamette Principal Meridian, Washington.
Acreage of APE: 11.4 acres.
Approximate area of temporary disturbance within APE: 2.3 acres

PROJECT LOCATION AND AREA OF POTENTIAL EFFECT

AECOM

AUGUST 2022
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SEAWATER SYSTEM AND FACILITIES PROJECT
NWFSC MANCHESTER RESEARCH STATION
MANCHESTER, WASHINGTON

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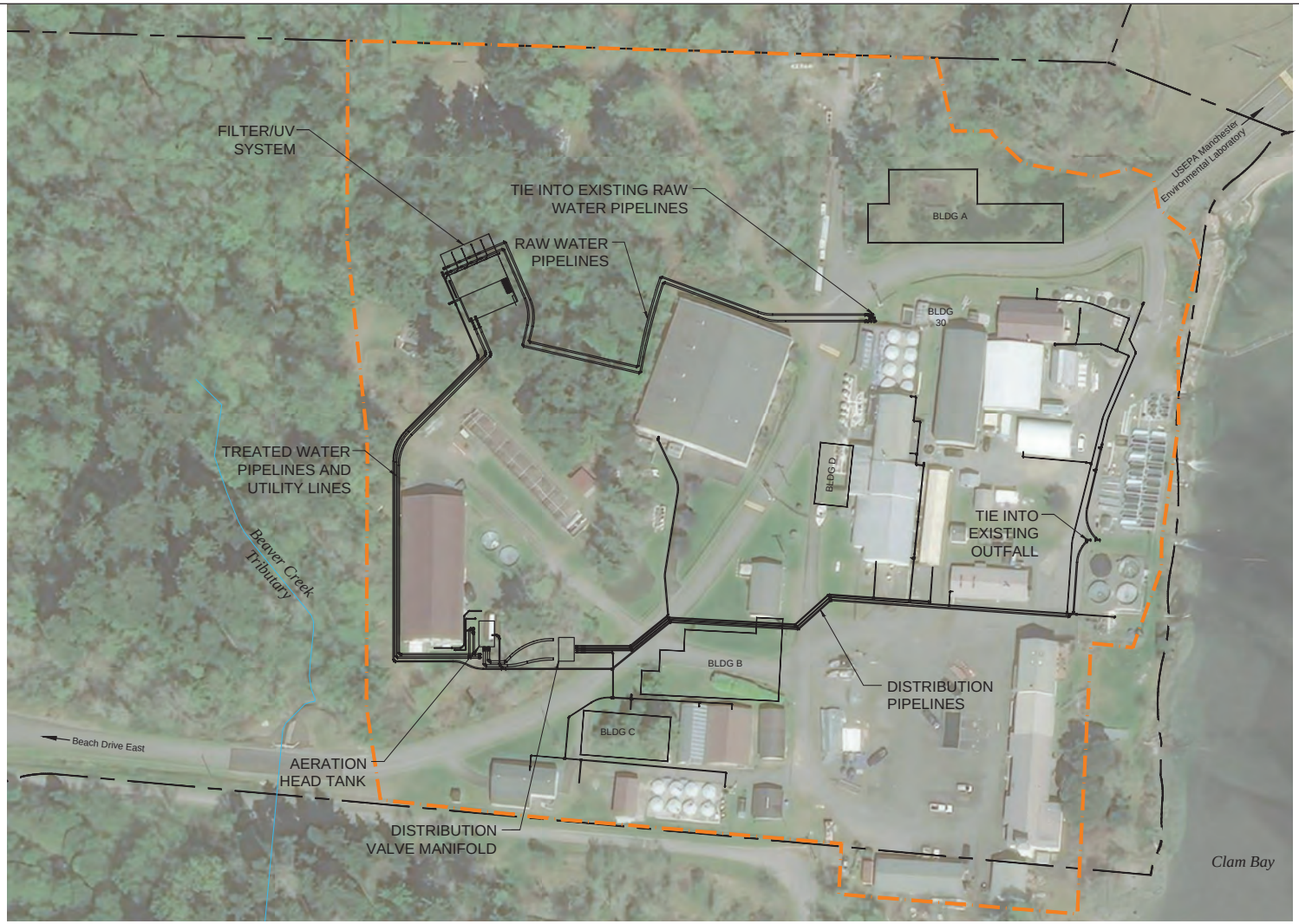

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SCALE IN FEET

LEGEND
- PROPERTY BOUNDARY
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- PROPOSED ACTION COMPONENTS

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AECOM

AREA OF POTENTIAL EFFECT

NOAA NWFSC MANCHESTER RESEARCH STATION
SEAWATER SYSTEM REPLACEMENT AND CAMPUS ADDITION PROJECT
MANCHESTER, WASHINGTON

OCTOBER 2022
60680959

K:\Puget_Sound\VPE.dwg Oct 04, 2022 - 1:12pm

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

October 12, 2022

Rachel S. Chang
Environmental Compliance Division/SECO
NOAA
7600 Sand Point Way NE
Seattle, Washington 98115

RE: NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project
Log No: 2022-10-06784 -NOAA

Dear Rachel Chang;

Thank you for contacting our department. We have reviewed the materials you provided for the proposed NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project, Kitsap County, Washington.

Thank you for your description of the Area of Potential Effect (APE). We concur with your proposed Area of Potential Effect as illustrated in the attached figures. We look forward to receiving the results of your cultural resources review, the professional cultural resources survey report, results of consultations with the concerned tribes, and the Determination of Effect.

We would also appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in compliance with the Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations 36CFR800.4.

Should additional information become available, our assessment may be revised, including information regarding historic properties that have not yet been identified. Thank you for the opportunity to comment and we look forward to receiving the reports on the results of your investigations.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 890-2615
email: *rob.whitlam@dahp.wa.gov*

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

November 17, 2022

Allyson Brooks, Ph.D.
State Historic Preservation Officer
Department of Archaeology and Historic Preservation
1110 South Capitol Way, Suite 30
Olympia, WA 98501

Submitted by e-mail to Allyson.Brooks@dahp.wa.gov

RE: Request for Concurrence on Finding of No Historic Properties Affected
NOAA National Marine Fisheries Service - Manchester Research Station Seawater Replacement and Campus Addition Project, Cultural Resources Assessment, Manchester, Kitsap County, Washington
DAHP Project No. 2022-10-06784-NOAA

Dear Dr. Brooks,

On behalf of the National Oceanic and Atmospheric Administration (NOAA) and National Marine Fisheries Service (NOAA Fisheries), we submit this determination of effect for your review and concurrence, in accordance with Section 106 of the National Historic Preservation Act (NHPA), 36 CFR Part 800.

Project Description for the NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project

NOAA Fisheries and NWFSC are proposing to install a replacement seawater system and to construct up to four new buildings of undetermined sizes at the Manchester Research Station in two Phases. Phase 1 of the proposed project would include the design and installation of a replacement seawater processing, distribution, and depuration system that delivers processed water to a common head tank capable of supplying existing and future fisheries and aquaculture operations for the entire facility. The proposed design is intended to reduce overall seawater system operation and maintenance costs and make the system more reliable. The components of the seawater system would include the installation of seawater distribution pipelines throughout the upland areas of the site that would connect the existing seawater intake facilities to a proposed new filter/UV system, an aeration head tank, and a distribution valve manifold; and would distribute treated seawater to existing laboratories and other buildings throughout the site.

Phase 2 of the proposed project would include the construction of up to four new buildings on the site to accommodate expanded program requirements identified by NOAA as part of their 2022 Site Master Plan. The new buildings would provide laboratories, hatcheries, office space, and storage areas to serve the Environmental and Fisheries Science and Conservation Biology Divisions or both. The total square footage of the proposed new buildings (Buildings A, B, C and D) is estimated at approximately 21,000 square feet. Since the detailed design for the buildings has not commenced, the number of buildings, dimensions, layout and/or footprint of the proposed buildings are subject to change during the design process.

To accommodate the proposed new buildings, changes to the internal site circulation and parking areas would be required. Detailed design for these site changes has not yet been developed, however preliminary planning has indicated that modifications to the main parking lot access, driveways, and building access points would be needed. All of the project components (Phase 1 and Phase 2) would be constructed upland of the higher high water level.

As a federal undertaking, the project is subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. §§ 300108), as implemented in 36 Code of Federal Regulations (CFR) Part 800.

Area of Potential Effects

The Area of Potential Effects (APE) for the Seawater System Replacement and Campus Addition Project (Project) is depicted in the attached report and is the same forwarded to DAHP for review on October 10, 2022. The undertaking is in the NE¼ of Section 16, T24N, R2E, Willamette Meridian, as found in the United States Geological Survey (USGS) 7.5-minute Series Bremerton East, WA Quadrangle (2017). NOAA received concurrence on the APE from DAHP on October 12, 2022.

Determination of Effect

In compliance with Section 106 of the NHPA, AECOM, on behalf of NOAA, conducted a cultural resources assessment of the APE to guide project planning and provide NOAA with information concerning the identification and evaluation of cultural resources in the Project's APE. The study also assesses NOAA's potential to affect historic properties (i.e., properties eligible for or listed in the NRHP). AECOM completed background research, an intensive archaeological survey and exploratory subsurface probing, and a built environment survey for the Project in accordance with Washington DAHP's Standards for Cultural Resources Reporting (DAHP 2020). An underwater archaeological survey was also performed by the Bonneville Power Administration for the submerged conduit corridor. As a result of the assessment, one new archaeological site and six built environment resources were identified and documented.

The newly recorded archaeological site (temporary site no. RS-07282022-S01) consists of a historic concrete foundation likely to have been used as a "simulator" to train Navy personnel on extinguishing ship fires. The archaeological site is recommended as not eligible for listing in the NRHP.

The MRS is primarily composed of buildings and structures constructed in or after 1987. Only 6 historic-age building and structures are located within the APE. A potential historic district containing Buildings 1 2 3, 4, 5, 6, the Firefighting Training Pond, and Well House is historically significant under NRHP Criterion A and meets the threshold for significance under Criterion Consideration G but lacks integrity due to alterations that diminish integrity of setting, design, materials, workmanship, and feeling. Therefore, the MRS historic district is recommended as not eligible for the NRHP. The resources lack distinction to be eligible for the NRHP based on individual merit (Wood et al. 2022).

A copy of the cultural resources assessment is enclosed (Document 1) for your review – please note that the assessment was prepared to cover both this Seawater System Replacement and Campus Addition Project (DAHP Project No. 2022-10-06784-NOAA) as well as a separate federal undertaking at the same property (the Electrical Upgrade Project, DAHP Project No. 2022-03-01722-NOAA) . This joint approach was discussed with DAHP staff (Holly Borth on July 27, 2022 and Rob Whitlam on September 22, 2022). Although the survey covers both NOAA projects, this letter and request for DAHP concurrence relates only to the Seawater System Replacement and Campus Addition Project. The survey meets the Secretary of Interior Standards and Guidelines for Archaeology and Historic Preservation.

In addition, in October of 2022, NOAA initiated engagement with six federally recognized tribes including: Suquamish Tribe, Muckleshoot Indian Tribe, Stillaguamish Tribe, Tulalip Tribe, Skokomish Tribe, and Port Gamble S'Klallam Tribe. NOAA also reached out to the non-Federally recognized Duwamish Tribe. NOAA requested a response by November 11, 2022 (within 30 days). NOAA received a response from the Stillaguamish Tribe (Document 2) and had a meeting with their Tribal Historic Preservation Officer on October 31, 2022. The meeting focused mainly on future opportunities for science collaboration and the future of NOAA science that formerly took place at the now-closed Mukilteo Research Station. There were no concerns identified regarding the proposed action.

Because there are no historic properties present in the APE, NOAA has determined that the proposed federal action (MRS Seawater System Replacement and Campus Addition Project) would result in a **finding of No Historic Properties Affected** consistent with 36 CFR 800.4(d)(1). **We request your concurrence with this finding of effect.**

Please direct any comments or questions regarding the information in this letter to me at Rachel.Chang@noaa.gov or Kirk Ranzetta at Kirk.Ranzetta@aecom.com.

Sincerely,

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic and Atmospheric Administration

cc: Brantley Bain, NOAA Facilities Engineering Office
John Battle, NOAA Federal Preservation Officer
Mark Benne, NOAA Facilities Engineering Office
Barry Berejikian, NOAA NWFSC Station Chief - Manchester Research Station
Hélène Scalliet, NOAA Northwest Fisheries Science Center, Tribal Liaison
Minh Trinh, NOAA NWFSC Facilities Management Program Manager
Kevin Werner, NOAA NWFSC Science and Research Director
Kirk Ranzetta, AECOM Architectural Historian

Enclosures:
Document 1: Cultural Resources Assessment for the National Oceanic and Atmospheric Administration Manchester Research Station Seawater System Replacement and Campus Addition Project and Electrical Upgrade Project, Manchester, Kitsap County, Washington.
Document 2: October 11, 2022 Email Response from Stillaguamish Tribe.

Allyson Brooks Ph.D., Director
State Historic Preservation Officer

March 22, 2023

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic and Atmospheric Administration

In future correspondence please refer to:
Project Tracking Code: 2022-10-06784
Property: NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project
Re: No Historic Properties Affected

Dear Rachel,

Thank you for contacting the Washington State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) regarding the above referenced proposal. Your communication on this action has been reviewed on behalf of the SHPO under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. Our review is based upon documentation provided in your submittal.

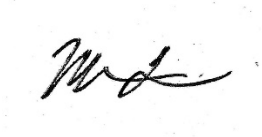
First, we concur that the following properties are not eligible for listing in the National Register of Historic Places.

- Property ID: 730341, Building 1 2 3 at 7305 Beach Dr E, Port Orchard, WA
- Property ID: 730352, Building 4 at 7305 Beach Dr E, Port Orchard, WA
- Property ID: 730355, Building 5 at 7305 Beach Dr E, Port Orchard, WA
- Property ID: 730360, Building 6 at 7305 Beach Dr E, Port Orchard, WA
- Property ID: 730361, Firefighting Training Pond at 7305 Beach Dr E, Port Orchard, WA
- Property ID: 730362, the Well House at 7305 Beach Dr E, Port Orchard, WA

We also concur that no historic properties will be affected by the current project as proposed. As a result of our concurrence, further contact with DAHP on this proposal is not necessary. However, if new information about affected resources becomes available and/or the project scope of work changes significantly, please resume consultation as our assessment may be revised. Also, if any archaeological resources are uncovered during construction, please halt work immediately in the area of discovery and contact the appropriate Native American Tribes and DAHP for further consultation.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. If you have any questions, please feel free to contact me.

Sincerely,



Maddie Levesque
Architectural Historian
(360) 819-7203
Maddie.Levesque@dahp.wa.gov

APPENDIX A-2
Tribal Outreach Correspondence

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

The Honorable Jaison Elkins
Chairperson of Muckleshoot Tribal Council
39015 172nd Ave. SE
Auburn, WA 98092-9763
Submitted by e-mail to Jaison.elkins@muckleshoot.nsn.us

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation

Dear Mr. Elkins,

The National Oceanic and Atmospheric Administration (NOAA) is proposing to replace its Seawater System and expand its facilities at the National Marine Fisheries Service (NMFS) Manchester Research Station located at 7305 E. Beach Drive, Manchester, WA (NE ¼ of Section 16, T24N, R2E in the attached Map of Project Location). The Manchester Research Station is one element of the NMFS Northwest Fisheries Science Center (NWFSC) and is NOAA's premier marine culture and experimental research station, developing state-of-the-art technology for salmonid and marine fish culture.

Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act, and 36 CFR 800, NOAA has determined that the proposed project is a federal undertaking that has the potential to cause effects on historic and cultural resources and seeks to initiate consultation with you. We are also initiating consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP).

NOAA Fisheries and NWFSC are proposing to install a replacement seawater system and to construct up to four new buildings of underdetermined sizes at the Manchester Research Station in two phases. Phase 1 of the proposed project would include the design and installation of a seawater processing, distribution, and depuration system that delivers processed water to a common head tank capable of supplying existing and future fisheries and aquaculture operations for the entire facility. The proposed design is intended to reduce overall seawater system operation and maintenance costs and make the system more reliable. The components of the seawater system would include the installation of seawater distribution pipelines throughout the upland areas of the site that would connect the existing seawater intake facilities to a proposed new filter/UV system, an aeration head tank, and a distribution valve manifold; and would distribute treated seawater to existing laboratories and other buildings throughout the site (see attached Map of Area of Potential Effect). All of the project components (Phase 1 and Phase 2) would be constructed upland of the higher high water level.

Phase 2 of the proposed project would include the design and construction of up to four new buildings on the site to accommodate expanded program requirements identified by NOAA as part of their 2022 Site Master Plan. The new buildings would provide laboratories, hatcheries, office space, and storage areas to serve the Environmental and Fisheries Science and Conservation Biology Divisions or both. The total square footage of the proposed new buildings (Buildings A, B, C and D in the attached Map of Area of Potential Effect) are estimated at about 21,000 square feet. Since the detailed design for the buildings has not yet commenced, the number of buildings, dimensions, layout and/or footprint of the proposed buildings are subject to change during the design process.

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Project effects to historic properties and cultural resources, if present, could include disturbance to soils holding cultural materials, alterations to buildings, structures, and/or landscape features that diminish their historical integrity, and/or changes to the historic settings of buildings and structures. Best management practices such as following standard protocols for inadvertent discoveries, if encountered, would be implemented in consultation with DAHP. We are reaching out early at this stage of the project because we would like to ensure there is enough time for meaningful engagement with you.

We are looking forward to receiving a response from you within 30 days so that we can plan adequate time for consultation within our project timeline. Any lack of response within 30 days will not preclude future opportunities to consult under Section 106 or engage in government-to-government consultation on this project. Please direct any comments or questions regarding the information in this letter to Ms. Hélène Scalliet, NOAA NWFSC Tribal Liaison at 206-462-8865; Helene.Scalliet@noaa.gov or me at 206-526-4912; Rachel.Chang@noaa.gov. In addition, we would be happy to set up a meeting to discuss this project.

We appreciate your dedication of time and attention to this matter. Thank you for your participation and assistance.

Sincerely,

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic & Atmospheric Administration

Cc: Brantley Bain, NOAA Facilities Engineering Office
John Battle, NOAA Federal Preservation Officer
Mark Benne, NOAA Facilities Engineering Office
Barry Berejikian, NWFSC Station Chief - Manchester Research Station
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Kirk Ranzetta, AECOM Architectural Historian

Enclosure: Map of Project Location
Map of Area of Potential Effects

Bremerton East, Washington USGS Topographic 7.5' Series Quadrangle 2020.
Section 16, Township 24 North, Range 02 East, Willamette Principal Meridian, Washington.
Acreage of APE: 11.4 acres.
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AECOM

AUGUST 2022
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SEAWATER SYSTEM AND FACILITIES PROJECT
NWFSC MANCHESTER RESEARCH STATION
MANCHESTER, WASHINGTON

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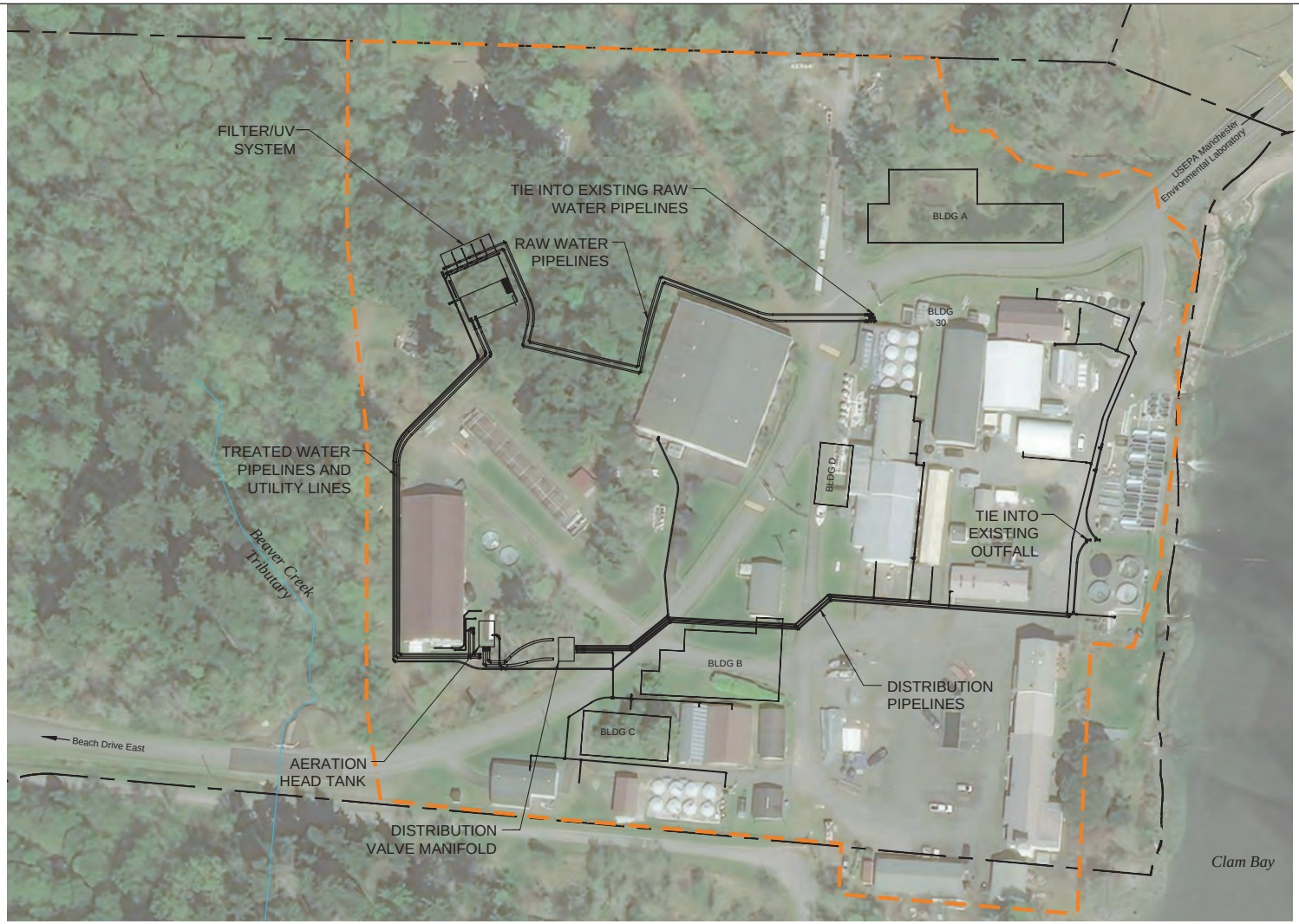

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AREA OF POTENTIAL EFFECT

NOAA NWFSC MANCHESTER RESEARCH STATION
SEAWATER SYSTEM REPLACEMENT AND CAMPUS ADDITION PROJECT
MANCHESTER, WASHINGTON

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

The Honorable Jeromy Sullivan
Chair of Port Gamble S'Klallam Tribal Council
31912 Little Boston Road NE
Kingston, WA 98346
Submitted by e-mail to jeromys@pgst.nsn.us

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation

Dear Mr. Sullivan,

The National Oceanic and Atmospheric Administration (NOAA) is proposing to replace its Seawater System and expand its facilities at the National Marine Fisheries Service (NMFS) Manchester Research Station located at 7305 E. Beach Drive, Manchester, WA (NE ¼ of Section 16, T24N, R2E in the attached Map of Project Location). The Manchester Research Station is one element of the NMFS Northwest Fisheries Science Center (NWFSC) and is NOAA's premier marine culture and experimental research station, developing state-of-the-art technology for salmonid and marine fish culture.

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We appreciate your dedication of time and attention to this matter. Thank you for your participation and assistance.

Sincerely,

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic & Atmospheric Administration

Cc: Brantley Bain, NOAA Facilities Engineering Office
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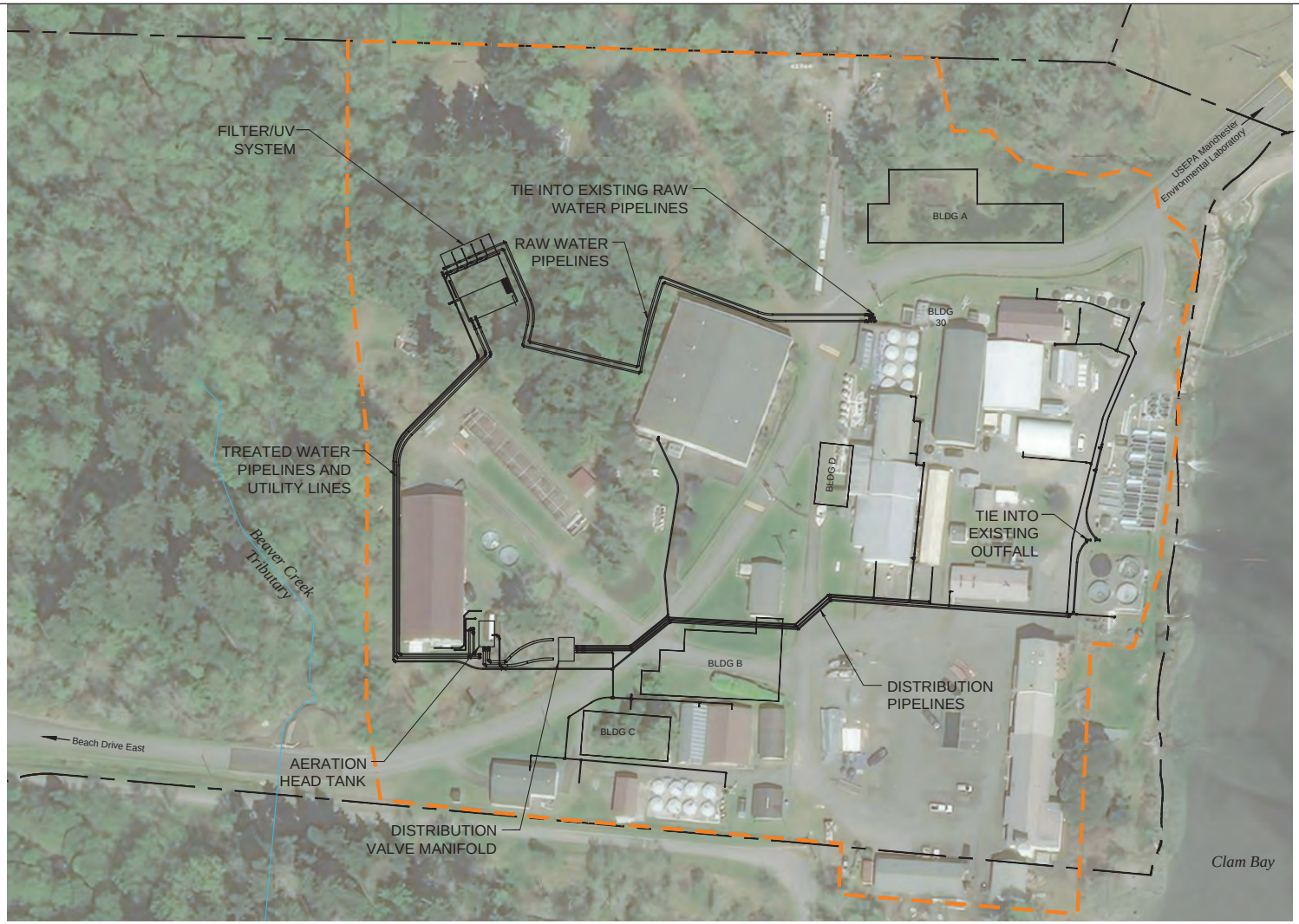

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SCALE IN FEET

LEGEND
- PROPERTY BOUNDARY
- AREA OF POTENTIAL EFFECT
- PROPOSED ACTION COMPONENTS

DRAWING SOURCE: HDR.
IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY

AECOM

AREA OF POTENTIAL EFFECT

NOAA NWFSC MANCHESTER RESEARCH STATION
SEAWATER SYSTEM REPLACEMENT AND CAMPUS ADDITION PROJECT
MANCHESTER, WASHINGTON

OCTOBER 2022
60680959

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

The Honorable Charles Guy Miller
Chair of Skokomish Tribal Council
80 N Tribal Center Rd
Shelton, WA 98584
Submitted by e-mail to gmiller@skokomish.org

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation

Dear Mr. Miller,

The National Oceanic and Atmospheric Administration (NOAA) is proposing to replace its Seawater System and expand its facilities at the National Marine Fisheries Service (NMFS) Manchester Research Station located at 7305 E. Beach Drive, Manchester, WA (NE ¼ of Section 16, T24N, R2E in the attached Map of Project Location). The Manchester Research Station is one element of the NMFS Northwest Fisheries Science Center (NWFSC) and is NOAA's premier marine culture and experimental research station, developing state-of-the-art technology for salmonid and marine fish culture.

Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act, and 36 CFR 800, NOAA has determined that the proposed project is a federal undertaking that has the potential to cause effects on historic and cultural resources and seeks to initiate consultation with you. We are also initiating consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP).

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We appreciate your dedication of time and attention to this matter. Thank you for your participation and assistance.

Sincerely,

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic & Atmospheric Administration

Cc: Brantley Bain, NOAA Facilities Engineering Office
John Battle, NOAA Federal Preservation Officer
Mark Benne, NOAA Facilities Engineering Office
Barry Berejikian, NWFSC Station Chief - Manchester Research Station
Hélène Scalliet, NOAA Northwest Fisheries Science Center, Tribal Liaison
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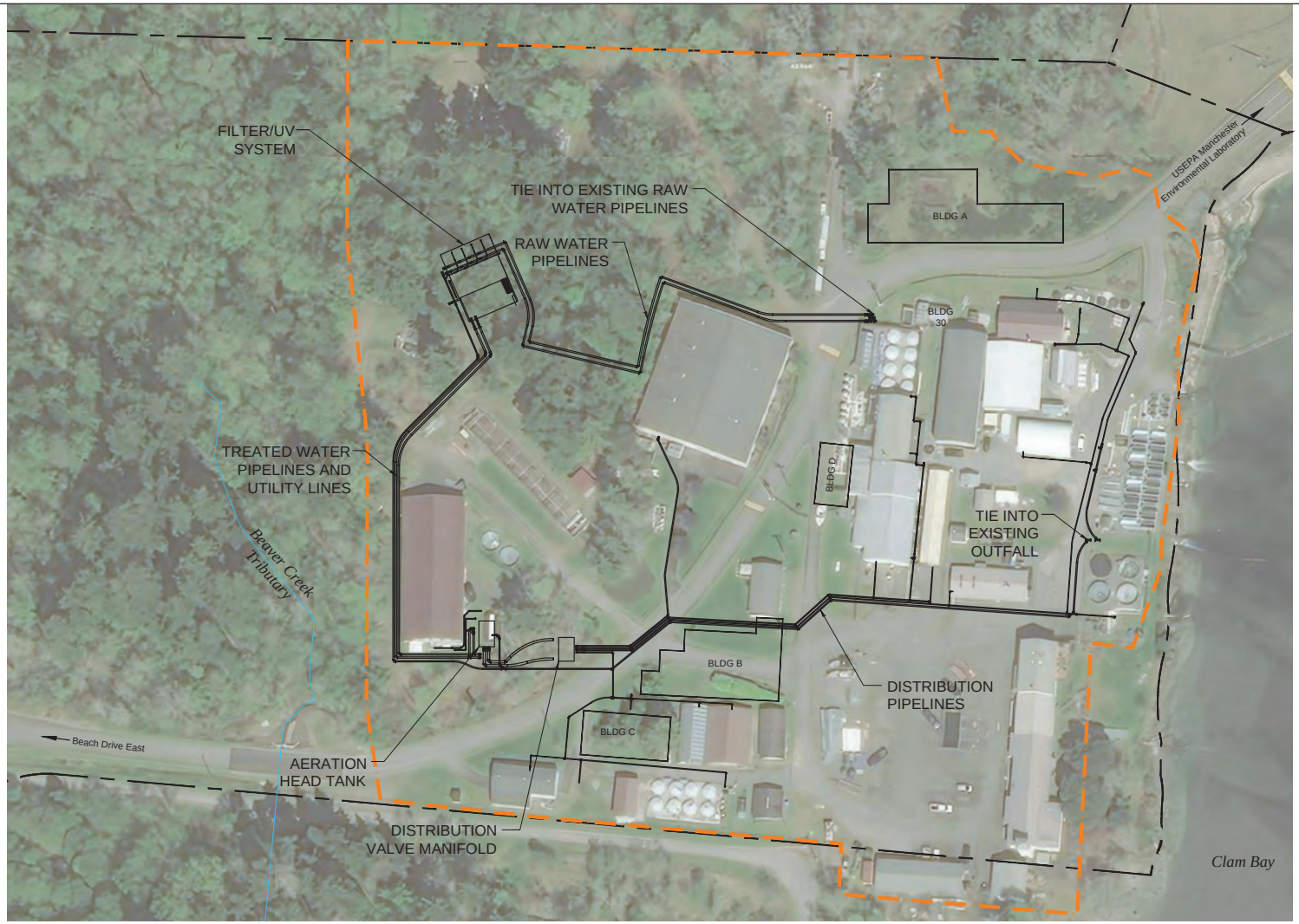

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

The Honorable Shawn E. Yanity
Chair of Stillaguamish Tribal Council
3322 236th Street NE
Arlington, WA 98223-0277
Submitted by e-mail to syanity@stillaguamish.com

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation

Dear Mr. Yanity,

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Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic & Atmospheric Administration

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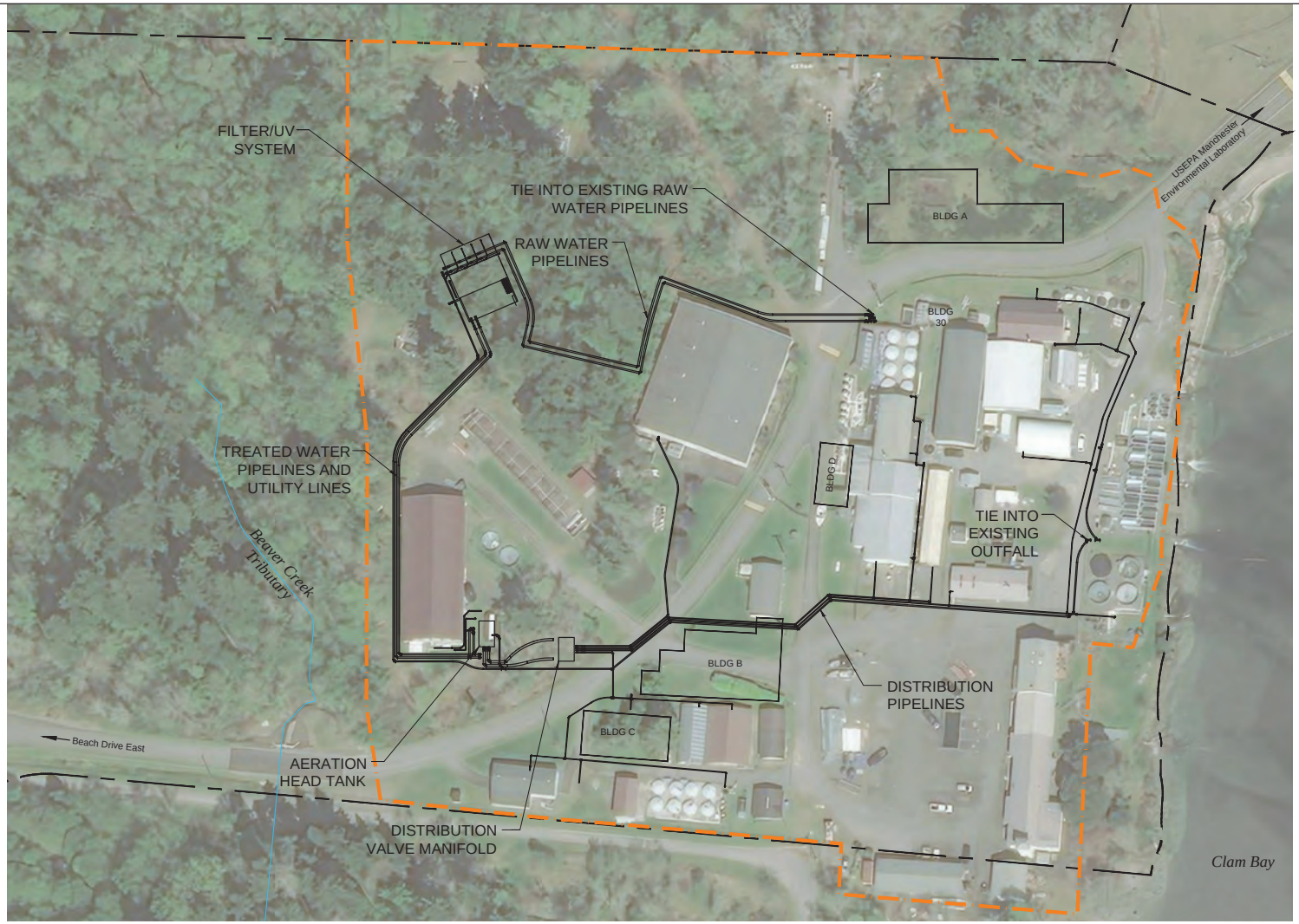

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

The Honorable Leonard Forsman
Chair of Suquamish Tribal Council
18490 Suquamish Way NE
Suquamish, WA 98392-0498
Submitted by e-mail to lforsman@suquamish.nsn.us

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation

Dear Mr. Forsman,

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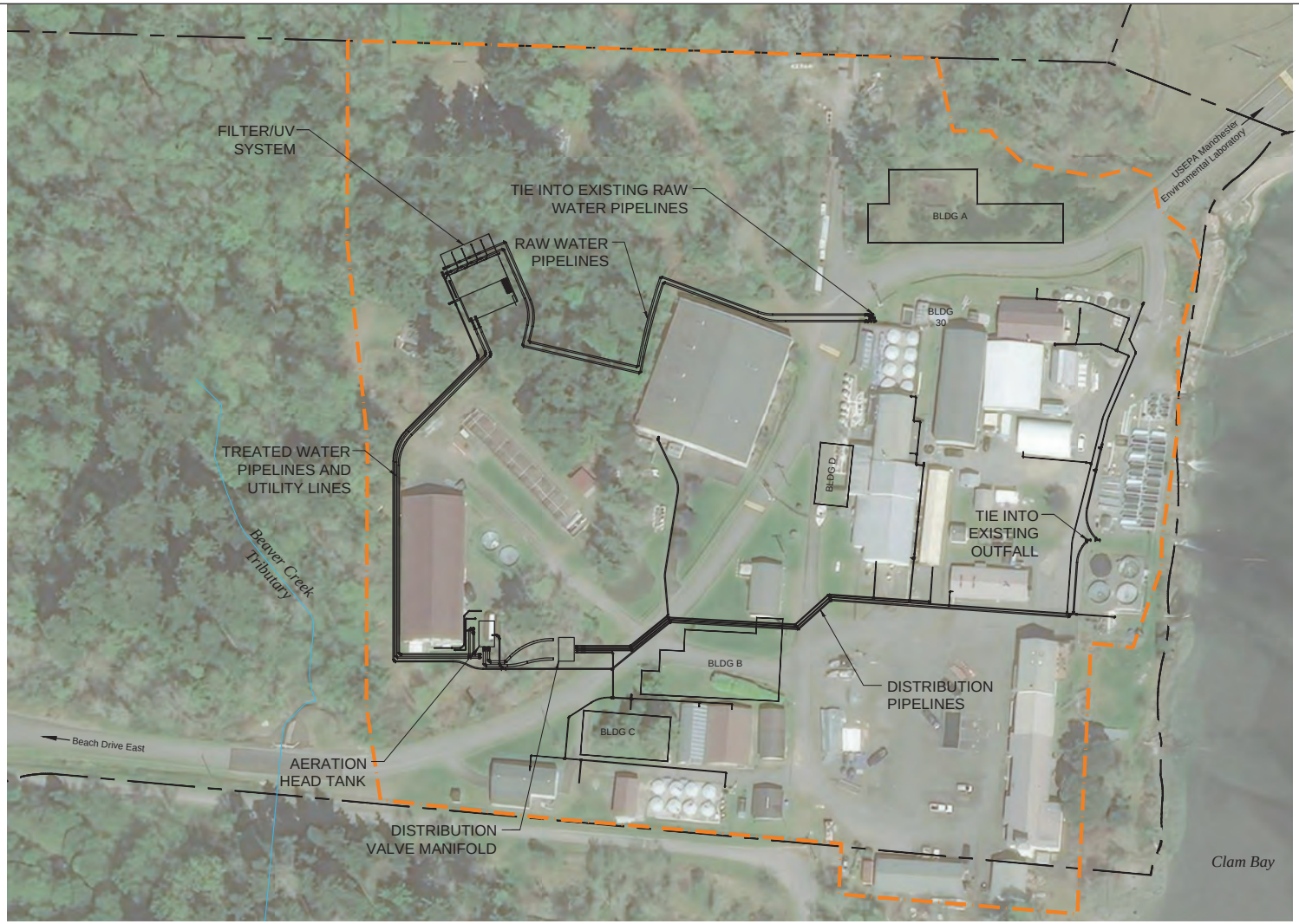

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CHIEF ADMINISTRATIVE OFFICER

October 10, 2022

The Honorable Teri Gobin
Chairwoman of Tulalip Board of Directors
6406 Marine Drive
Tulalip, WA 98271-9775
Submitted by e-mail to trgobin@tulaliptribes-nsn.gov

Re: NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation

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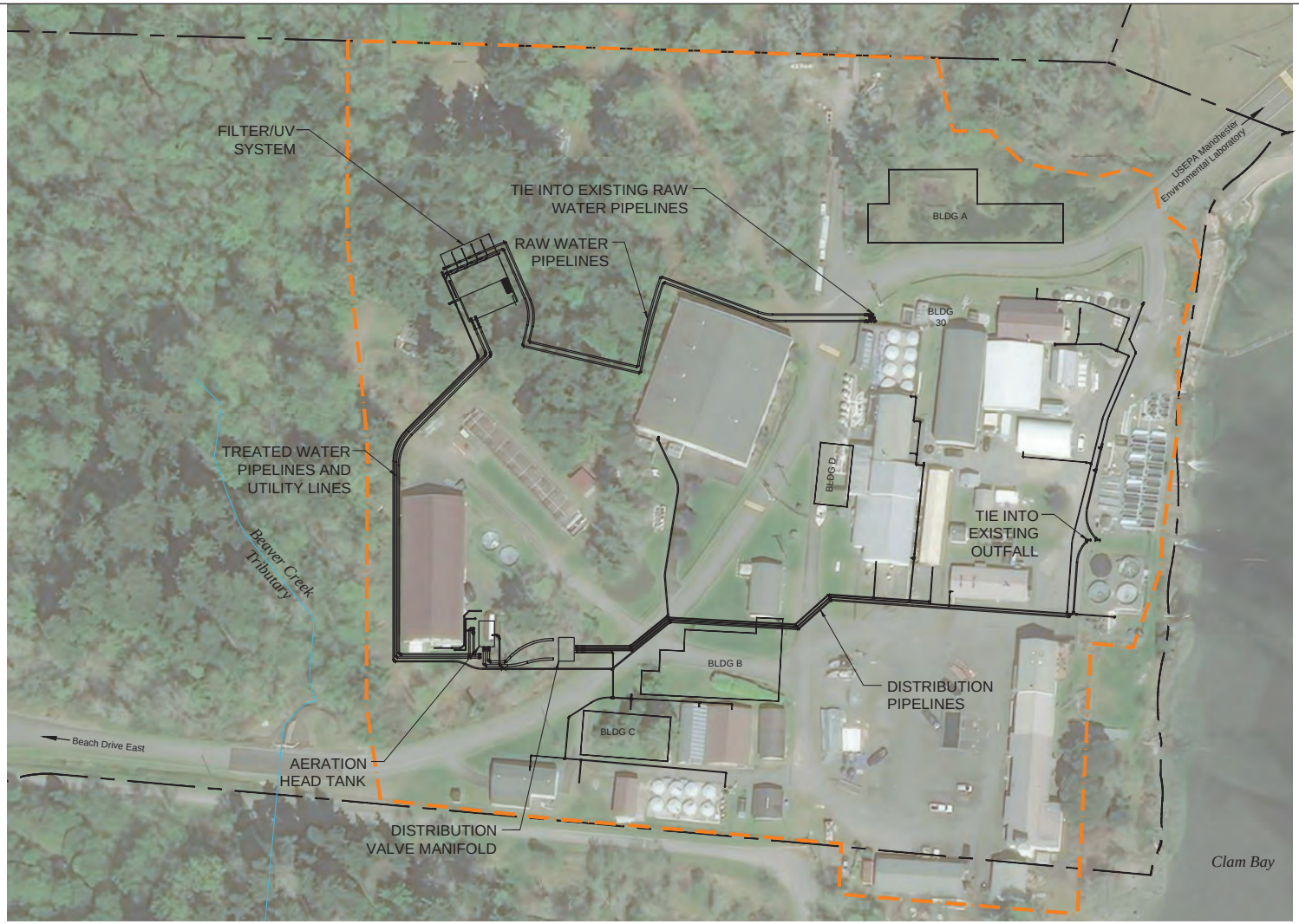

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4705 West Marginal Way SW
Seattle, WA 98106
Submitted by e-mail to info@duwamishtribe.org

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To accommodate the proposed new buildings, changes to the internal site circulation and parking areas would be required. Detailed design for these site changes has not yet been developed, however preliminary planning has indicated that modifications to the main parking lot access, driveways, and building access points would be needed.

Project effects to historic properties and cultural resources, if present, could include disturbance to soils holding cultural materials, alterations to buildings, structures, and/or landscape features that diminish their historical integrity, and/or changes to the historic settings of buildings and structures. Best management practices such as following standard protocols for inadvertent discoveries, if encountered, would be implemented in consultation with DAHP. We are reaching out early at this stage of the project because we would like to ensure there is enough time for meaningful engagement with you.

We are looking forward to receiving a response from you within 30 days so that we can plan adequate time for consultation within our project timeline. Any lack of response within 30 days will not preclude future opportunities to consult under Section 106 or engage in government-to-government consultation on this project. Please direct any comments or questions regarding the information in this letter to Ms. Hélène Scalliet, NOAA NWFSC Tribal Liaison at 206-462-8865; Helene.Scalliet@noaa.gov or me at 206-526-4912; Rachel.Chang@noaa.gov. In addition, we would be happy to set up a meeting to discuss this project.

We appreciate your dedication of time and attention to this matter. Thank you for your participation and assistance.

Sincerely,

Rachel Chang, PE
Environmental Engineer
Environmental Compliance Division
National Oceanic & Atmospheric Administration

Cc: Brantley Bain, NOAA Facilities Engineering Office
John Battle, NOAA Federal Preservation Officer
Mark Benne, NOAA Facilities Engineering Office
Barry Berejikian, NWFSC Station Chief - Manchester Research Station
Hélène Scalliet, NOAA Northwest Fisheries Science Center, Tribal Liaison
Minh Trinh, NWFSC Facilities Management Program Manager
Kevin Werner, NWFSC Science and Research Director
Kirk Ranzetta, AECOM Architectural Historian

Enclosure: Map of Project Location
Map of Area of Potential Effects

Bremerton East, Washington USGS Topographic 7.5' Series Quadrangle 2020.
Section 16, Township 24 North, Range 02 East, Willamette Principal Meridian, Washington.
Acreage of APE: 11.4 acres.
Approximate area of temporary disturbance within APE: 2.3 acres

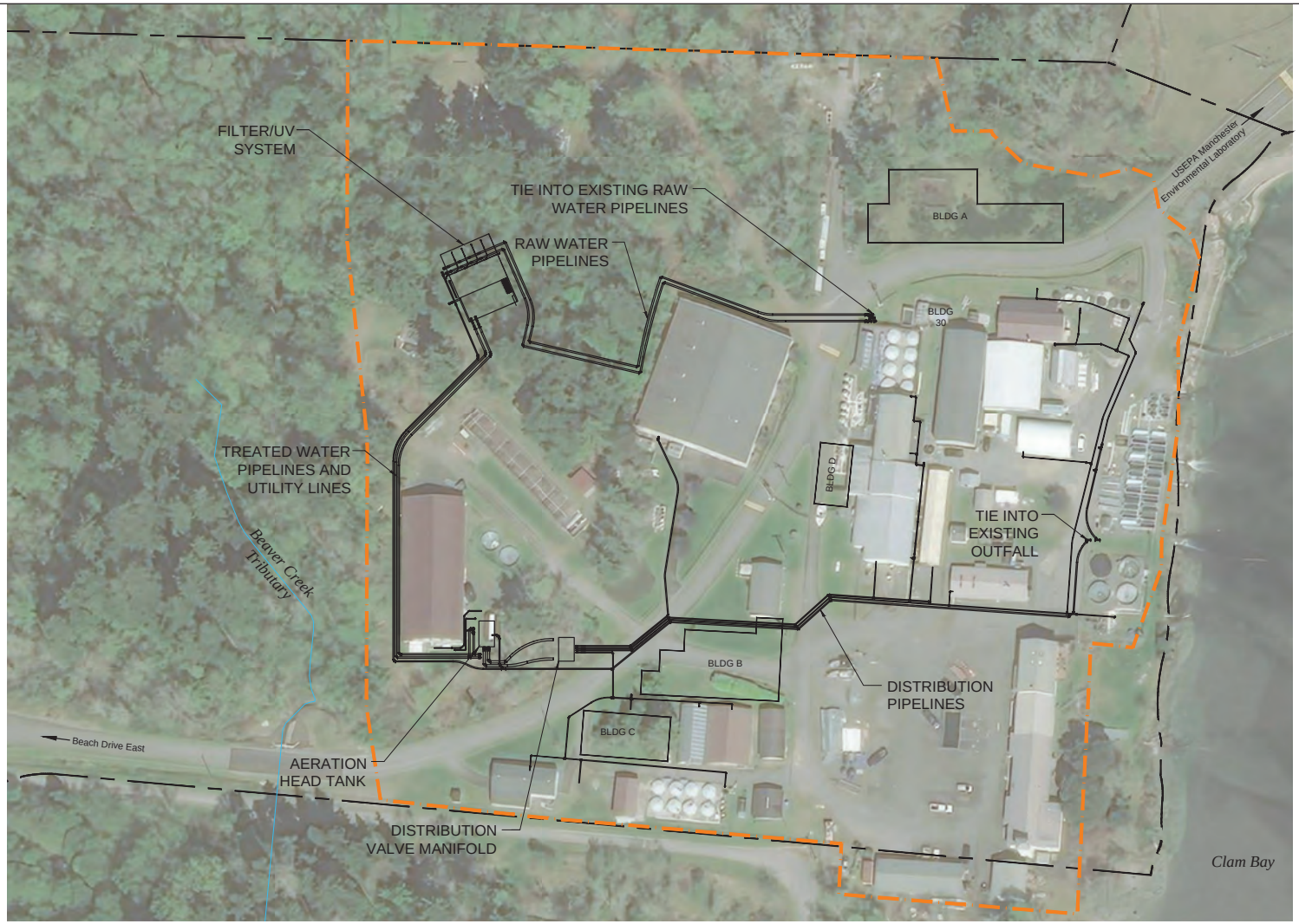
PROJECT LOCATION AND AREA OF POTENTIAL EFFECT

AECOM

AUGUST 2022
60680959

SEAWATER SYSTEM AND FACILITIES PROJECT
NWFSC MANCHESTER RESEARCH STATION
MANCHESTER, WASHINGTON

K:\Puget_Sound\ProjectLocation.mxd



50 0 50 100
SCALE IN FEET

LEGEND
- PROPERTY BOUNDARY
- AREA OF POTENTIAL EFFECT
- PROPOSED ACTION COMPONENTS

DRAWING SOURCE: HDR.
IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY

AECOM

AREA OF POTENTIAL EFFECT

NOAA NWFSC MANCHESTER RESEARCH STATION
SEAWATER SYSTEM REPLACEMENT AND CAMPUS ADDITION PROJECT
MANCHESTER, WASHINGTON

OCTOBER 2022
60680959

K:\Puget_Sound\VPE.dwg Oct 04, 2022 - 1:12pm

Helene Scalliet - NOAA Federal <helene.scalliet@noaa.gov>

RE: Section 106 - NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project

1 message

Kerry Lyste <klyste@stillaguamish.com> Tue, Oct 11, 2022 at 5:37 PM
To: Rachel Chang - NOAA Federal <rachel.chang@noaa.gov>, Helene Scalliet - NOAA Federal <helene.scalliet@noaa.gov>, Brantley Bain - NOAA Federal <brantley.bain@noaa.gov>
Cc: Eric White <ewhite@stillaguamish.com>, THPO Stillaguamish <THPO@stillaguamish.com>

Hi Rachel,

We would like to arrange a meeting to discuss this project. Please be advised that the new Stillaguamish Tribal Chair is Eric White (in the e-mail chain).

Best, Kerry

Kerry Lyste | THPO/GIS Database Administrator

Direct Line: 360-572-3072

Cultural Resources Department

3322 236th Street NE, Arlington, WA 98223

Mailing Address: PO Box 277, Arlington, WA 98223

haʔɬ sgʷədgʷádad ʔə ti stuləgʷabš: kʷədiid ti x̌əc̓usadad ʔə ti yəlabčəɬ

The good words of the Stillaguamish: To honor and care for cultural teachings.

STILLAGUAMISH TRIBE OF INDIANS

From: Rachel Chang - NOAA Federal <rachel.chang@noaa.gov>
Sent: Tuesday, October 11, 2022 2:12 PM
To: Shawn Yanity <syanity@stillaguamish.com>; Kerry Lyste <klyste@stillaguamish.com>; Helene Scalliet - NOAA Federal <helene.scalliet@noaa.gov>; Brantley Bain - NOAA Federal <brantley.bain@noaa.gov>
Subject: Section 106 - NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project

Hello,

NOAA is proposing to replace its seawater system and expand its facilities at the NMFS Manchester Research Center Station located in Manchester, WA. Attached is a letter containing information about the proposed project.

As stated in the letter, NOAA would like to offer consultation on this matter, if it is of interest to you. We are looking forward to receiving a response from you within 30 days. However, your lack of response within 30 days will not preclude future opportunities to consult under Section 106 or engage in government-to-government consultation on this project. Please direct any comments or questions regarding the information in this letter to Ms. Hélène Scalliet, NOAA Northwest Fisheries Science Center Tribal Liaison at 206-462-8865; helene.scalliet@noaa.gov or myself at 425-444-1142; rachel.chang@noaa.gov. In addition, we would be happy to set up a meeting to discuss this project.

Respectfully,

Rachel S. Chang, PE
Environmental Engineer
Environmental Compliance Division/SECO
US Department of Commerce
National Oceanic & Atmospheric Administration
7600 Sand Point Way NE
Seattle, WA 98115
(425) 444-1142 (cell)
(206) 526-4912 (office)

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APPENDIX A-3

COMMENTS RECEIVED ON DRAFT EA

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Rawnsley, Emma

From: Pucylowski, Teressa (ECY) <tpuc461@ECY.WA.GOV>
Sent: Monday, December 5, 2022 10:24 AM
To: Rawnsley, Emma; Rachel Chang - NOAA Federal
Cc: Howard, Linda; Hanlon Brown, Erin (ECY); Randall, Loree' (ECY)
Subject: ECY Comments for NOAA CZM Consistency (Manchester Research Sta.)
Attachments: NMFS_Manchester_DraftEA_ECY Comments_12.05.22.pdf

Attachment reduced to only pages containing comments, for brevity

Hi Emma & Rachel,

Please see the attached doc which captures all of our comments related to federal consistency requirements for the proposed project at Manchester Research Station.

Please don't hesitate to reach out if you have any additional questions or if you want to further coordinate on your submittal.

Best,

Teressa Pucylowski (she/her)
CZM Federal Consistency Manager
Environmental Review & Transportation
Washington State Department of Ecology
tpuc461@ecy.wa.gov | (360) 764-0546

to achieve population and employment targets established by the regional and local comprehensive plans. The Growth Management Act also specifies that transportation projects be identified and constructed concurrent with future development projects.

Coastal Zone Management Program

The Washington State Department of Ecology (Ecology) administers Washington's Coastal Zone Management Program, which applies to all lands and waters in Washington's coastal counties, including Snohomish County where the project is located. The coastal zone extends seaward from the shoreline three nautical miles. As a federal action, the proposed project is subject to the federal consistency provision of the Coastal Zone Management Act and the state's Coastal Zone Management Program, as discussed in Section 4.11, *Coastal Zone Management.*

Thought project was in Kitsap - LR

Washington State Shoreline Management Act

The state of Washington Shoreline Management Act was passed by the Washington Legislature in 1971 and adopted by voters in 1972. Its overarching goal is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." There are three basic policy areas: shoreline use, environmental protection, and public access. The Shoreline Management Act requires all counties and most towns and cities with shorelines to develop and implement Shoreline Master Programs. The law also defines Ecology's role in reviewing and approving local programs. Kitsap County has a state-approved Shoreline Master Program (SMP).

LOCAL

Puget Sound Regional Council VISION 2050

VISION 2050 is a long-range growth management strategy for the Puget Sound region (King, Kitsap, Pierce, and Snohomish counties) (Puget Sound Regional Council 2020). The policies described in VISION 2050 are carried forward in the comprehensive plans and policies of Kitsap County.

Kitsap County Comprehensive Plan 2016-2036

The Kitsap County Comprehensive Plan was adopted in June 2016 and amended through April 2020 (Kitsap County 2020a). The plan provides goals and policies to guide growth and development in the unincorporated areas of Kitsap County, as required by the Washington State Growth Management Act (RCW 36.70). The first Washington State Growth Management Act--compliant comprehensive plan for Kitsap County was adopted in February 1999. The comprehensive plan has a 20-year planning horizon, but is updated every 10 years. In-between updates, the County can adopt amendments.

Kitsap County Shoreline Master Program

The Shoreline Management Act is a state-mandated cooperative program of shoreline planning with local government and state responsibilities (RCW 98.58.050). Under the Shoreline Management Act, Kitsap County adopted an SMP in 1976. An SMP is a set of policies and regulations that encourage reasonable and appropriate development of shorelines, protect the natural resources and character of the shoreline,

4.5 WATER RESOURCES AND HYDROLOGICAL PROCESSES

This section describes the water resources that are present in the vicinity of the MRS, and potential effects of the Proposed Action on those resources. Water resources and hydrological processes refers to surface water (e.g., streams, creeks, rivers, etc.) and groundwater in the vicinity of the NOAA property.

4.5.1 Regulatory Setting

FEDERAL

Section 10 of the Rivers and Harbors Act

A USACE Individual Permit or Nationwide Permit under Section 10 of the Rivers and Harbors Act of 1899 is required prior to the accomplishment of any work in, over or under navigable waters of the U.S., or which affects the course, location, condition or capacity of such waters. Under Section 10, the limit of USACE jurisdiction is the mean high water line for tidal waters, or the ordinary high water line for non-tidal waters.

Section 404 of the Clean Water Act

A U.S. Army Corps of Engineers (USACE) Individual Permit or Nationwide Permit is required under Section 404 of the Clean Water Act prior to discharge of dredged or fill material into the waters of the U.S., including special aquatic sites such as wetlands (see Section 4.9, *Wetlands*). Under Section 404, the limit of USACE jurisdiction for waters of the U.S. is seaward of the mean higher high water line for tidal waters or the ordinary high water line for non-tidal waters (or to the delineated extent of adjacent coastal or freshwater wetlands, if present).

Section 401 of the Clean Water Act

Section 401 of the Clean Water Act requires that activities permitted under Section 404 meet state water quality standards. Ecology is designated by statute as the state agency responsible for issuing a Section 401 Water Quality Certification in Washington when the agency has reasonable assurance that the applicant's project will comply with state water quality standards and other aquatic resource protection requirements under Ecology's authority. The Section 401 Certification can cover both the construction and operation of a proposed project. Applying for a federal permit or license to conduct any activity that might result in a discharge of dredge or fill material into water or non-isolated wetlands or excavation in water or non-isolated wetlands triggers Section 401 review. Conditions of the Section 401 Certification become conditions of the Federal permit or license. Ecology must receive a copy of the USACE Permit or Nationwide Permit authorization letter prior to making a Section 401 Certification decision. The federal permit is not valid unless it has been certified by Ecology. A Joint Aquatic Resource Permit Application is typically used to apply for state water quality certification under Section 401 of the Clean Water Act.

This is incorrect and should be deleted.

New requirements per EPA Section 401 Rule - A Section 401 Water Quality Certification (WQC) request form along with a JARPA and other supporting documents would be required when a Section 401 WQC is needed.

4.5.3 Environmental Consequences

PREFERRED ALTERNATIVE

Construction

Construction of the Preferred Alternative would not require any discharge of dredged or fill material into the waters of the U.S. or any work in, over, or under any navigable water of the U.S. Therefore, an Individual or Nationwide Permit under Section 404 of the Clean Water Act or a permit under Section 10 of the Rivers and Harbors Act would not be required. Because no Section 404 or Section 10 permits would be required, no water quality certification under Section 401 of the Clean Water Act would be required either. Because construction will disturb more than one acre, the project will require a NPDES Construction Stormwater General Permit.

Phase 1 construction (seawater treatment and distribution system replacement) would involve grading and excavation of approximately 22,500 square feet associated with the Filter/UV System, Aeration Head Tank, and Distribution Manifold. Trenching to install the pipe system would require temporary disturbance of an additional approximately 36,000 square feet (see Table 2.1-3 in Section 2.1, *Preferred Alternative*). These ground-disturbing activities could indirectly affect water resources in the project vicinity, through discharge of sediment-laden stormwater runoff, or potentially through the re-mobilization of contaminants that could potentially be present (see Section 4.17, *Hazardous Materials* for more information regarding known and potential contamination). Trenching for pipelines would require excavation up to 6 feet below ground surface for the largest pipes (24-inch diameter), with shallower trenches being required for smaller pipes. It is unclear if groundwater would be encountered during trenching and other activities associated with Phase 1 construction, but if it were, then construction dewatering would be required. If dewatering water is not appropriately handled or discharged then contaminants and soil/sediment erosion could impact stormwater quality and potentially discharge into Clam Bay.

Phase 2 construction would involve the temporary disturbance of approximately 42,000 square feet for the proposed new buildings, driveways, new or expanded foundations for relocated tanks and storage, as well as associated minor ground disturbance for utility connections (see Table 2.1-4 in Section 2.1.3). The exact type and depth of the building foundations would be determined during design based on site-specific geotechnical conditions, but could require drilled concrete piles to a depth of approximately 9 feet, which could potentially encounter groundwater. Similar to Phase 1 construction, these ground-disturbing activities could result in indirect impacts to stormwater or Clam Bay from sediment erosion, discharge of dewatering water, and/or remobilization of contaminated soils.

The Aeration Head Tank and a portion of the pipeline route is within the 150-foot stream buffer and additional 15-foot building setback for the unnamed tributary to Beaver Creek that flows north-south through the property. However, a forested ridge separates the LOD from the stream, and these elements of the Preferred Alternative that are within the stream buffer and building setback areas are located within existing developed areas around an existing building (Building 22). Vegetation within the LOD in these areas consists predominantly of disturbed shrub and herbaceous plant communities. Because the stream is

conditions of the Federal permit or license. Ecology must receive a copy of the USACE Permit or Nationwide Permit authorization letter prior to making a Section 401 Certification decision. The federal permit is not valid unless it has been certified by Ecology. A Joint Aquatic Resource Permit Application is typically used to apply for state water quality certification under Section 401 of the Clean Water Act.

Same comments as above.

STATE

Washington State Department of Ecology

Ecology regulates wetlands and streams in Washington State under the authority of the State Water Pollution Control Act and the Shoreline Management Act. These two state laws collectively define and limit permitted actions for Waters of the State. A Joint Aquatic Resource Permit Application is typically used to apply for regulatory approval for projects that impact wetlands.

A WQC request and JARPA package are used for Section 401 WQC. For non jurisdictional wetlands a JARPA is required to obtain an authorization to work in those waters.

LOCAL

Kitsap County Critical Areas Ordinance

Under Kitsap County Critical Areas Regulations, Chapter 19.100, critical areas review is typically required to conduct work in critical areas and their buffers within unincorporated Kitsap County. Critical areas include: wetlands, fish and wildlife habitat conservation areas, geologically hazardous areas, frequently flooded areas, and critical aquifer recharge areas. As with all local permit processes, NOAA as a federal agency would comply with Kitsap County's critical areas regulations to the maximum extent practicable, in accordance with the federal consistency provision of the Coastal Zone Management Act.

4.9.2 Affected Environment

Wetlands are commonly defined by federal, state, and local regulatory agencies as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions."

No onshore wetlands are mapped at the NOAA property in the National Wetland Inventory (NWI), WDFW PHS data, or Kitsap County's Watercourse and Surface Water map (USFWS 2022; WDFW 2022; Kitsap County 2017). One onshore wetland was identified within the LOD during the July 14 site visit. Based on a limited, informal investigation of the wetland during the site visit by AECOM biologists familiar with regional wetland indicators, this wetland can be classified as an approximately 2,600 square-foot, temporarily or seasonally saturated, depressional, palustrine scrub-shrub/emergent wetland. The estimated wetland boundary is depicted on Figure 4.5-1 in Section 4.5, *Water Resources and Hydrological Processes*. The wetland appears to be hydrologically connected to a roadside ditch. A formal wetland delineation would need to be conducted to fully delineate the wetland boundary and determine if it is a jurisdictional wetland under Section 404 of the Clean Water Act.

The wetland would be considered a Water of the State and subject to regulation under the State Water Pollution Control Act. While NOAA, as a federal agency is not subject to compliance with the State Water Pollution Control Act, federal agencies are subject to compliance with the federal consistency provisions of the Coastal Zone Management Act (see Section 4.11, *Coastal Zone Management*), and the State Water Pollution Control Act is one of the enforceable policies of the State Coastal Zone Management Program.

The wetland would also be considered a critical area under Kitsap County's Critical Areas Ordinance. However, NOAA is not subject to compliance with the County's critical area ordinance, unless the critical area falls under the jurisdiction of Shoreline Management Act, which is also one of the enforceable policies of the State Coastal Zone Management Program (see Section 4.11, *Coastal Zone Management*). Because this wetland is not associated with a marine water (Clam Bay) and is outside the 200-foot shoreline jurisdiction, it is not subject to the Shoreline Management Act.

The MRS is located on the shoreline of Clam Bay. The NWI classifies Clam Bay as intertidal estuarine/marine wetland with "less than 75 percent aerial cover of stones, boulders, or bedrock" and "less than 30 percent areal cover of vegetation." No vegetated intertidal wetlands were observed in potentially affected areas adjacent to the MRS during the July 14 site visit, but may occur along the shoreline in the general project vicinity. However, any vegetated intertidal wetlands present outside the LOD are not considered part of the affected environment.

Beaver Creek flows west-east and discharges into the intertidal mudflats of Clam Bay south of the MRS. The creek includes an impoundment classified as a freshwater pond in the NWI just upstream of its tidally influenced segment. An unnamed tributary to Beaver Creek flows north-south through the western portion of the MRS site and crosses the main access road via a culvert west of the LOD. Upstream of the culvert crossing, this tributary stream flows through low-gradient upland forest habitat within the MRS property (WDFW 2008, 2011). Both Beaver Creek and the unnamed tributary are outside of the LOD and potentially affected areas and are not considered part of the affected environment.

4.9.3 Environmental Consequences

PREFERRED ALTERNATIVE

Potential impacts to wetlands can occur directly (e.g., vegetation removal, placement of fill, or excavation) or indirectly (e.g., stormwater runoff from upland areas). The Preferred Alternative has been designed to avoid direct impacts to the small onshore wetland shown in Figure 4.5-1. No components of the replacement seawater system or new buildings and associated site improvements would be located within or directly adjacent to the small wetland. The Aeration Head Tank would be approximately 30 feet upslope (northwest) of the wetland, and the associated piping between the Aeration Head Tank and Distribution Valve Manifold would be approximately 6 feet to the southwest. Proposed Buildings B and C would be approximately 30 feet from the wetland.

4.11 COASTAL ZONE MANAGEMENT

This section describes coastal uses and resources at the MRS and evaluates whether reasonably foreseeable effects of the Proposed Action on coastal uses and resources are consistent, to the maximum extent practicable, with the enforceable policies of the approved Washington State Coastal Zone Management Program. Coastal uses and resources include land and water uses and natural resources of the coastal zone.

4.11.1 Regulatory Setting

FEDERAL

Coastal Zone Management Act

The Coastal Zone Management Act was passed by Congress in 1972, as amended, and it authorizes certain coastal states to actively manage and protect coastal and shoreline resources from residential, recreational, commercial, and industrial uses. States have the primary role of managing coastal areas via an approved Coastal Zone Management Program, which describes how the state will manage coastal uses and resources in the coastal zone.

The federal consistency provision of the Coastal Zone Management Act provides that federal actions that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone (also referred to as coastal uses or resources should be consistent, to the maximum extent practicable, with the enforceable policies of a coastal state's federally approved Coastal Zone Management Program (discussed below). Known as the "effects test," a federal agency must determine whether there are such effects, and, if there are, the agency must submit a Federal Consistency Determination to the state. Federal consistency requirements are described in Section 307 of the Coastal Zone Management Act and at 15 CFR Section 930.

STATE

Coastal Zone Management Program

Ecology administers Washington's Coastal Zone Management Program. The program applies to all lands and waters in Washington's coastal counties, including Kitsap County where the Proposed Action is located, and extends from the shoreline seaward three nautical miles. While Federal and tribal lands are excluded from a state's coastal zone, the Proposed Action is subject to the federal consistency provision of the Coastal Zone Management Act as discussed below.

Coastal Zone Management Federal Consistency Review

The federal Coastal Zone Management Act authorizes states with approved Coastal Zone Management Programs to review the following federal actions: (1) federal activities; (2) projects which require a federal permit/license; or (3) projects utilizing federal funding proposed in a state's coastal zone. The state review process for these federal actions is known as federal consistency and serves as a tool to manage

coastal activities and resources and to facilitate coordination and cooperation with federal agencies. Generally, federal consistency requires that federal actions within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water) or natural resource of the coastal zone be consistent with the enforceable policies of a state's federally approved Coastal Zone Management Program. The specific type of federal action will determine whether a consistency determination or certification is required.

Under Washington's Coastal Zone Management Program, federal activities that could affect the coastal zone must comply with the enforceable policies within the following four state laws, the state Marine Spatial Plan (MSP), and their implementing regulations (Ecology 2020):

- State Shoreline Management Act (including local government shoreline master programs)
- State Water Pollution Control Act
- State Clean Air Act | Replace State with "Washington"
- State Ocean Resources Management Act

The enforceable policies within these four state laws and their implementing regulations, as applicable to the Proposed Action, are discussed below in Section 4.11.3, *Environmental Consequences*.

The Marine Spatial Plan applies within state waters off Washington's coast from Cape Flattery to the mouth of the Columbia River, including Grays Harbor and Willapa Bay. It does not apply to the Strait of Juan de Fuca or Puget Sound (Ecology et al 2018). As the Proposed Action is in Puget Sound, the Marine Spatial Plan is not applicable, and is not discussed further in this report.

LOCAL

Kitsap County Shoreline Management Plan

Washington's Shoreline Management Act is implemented within unincorporated Kitsap County through Kitsap County's current SMP contained in Title 22 (Shoreline Master Program) of the KCC. Elements of the Kitsap County SMP applicable to the Proposed Action are discussed below in Section 4.11.3, *Environmental Consequences.*

4.11.2 Affected Environment

The MRS is in Kitsap County, which lies within Washington's coastal zone. The Proposed Action involves the modification of existing nearshore facilities and development of new nearshore facilities in the Coastal Zone, is a federal activity, and has reasonably foreseeable coastal effects. Therefore, it would be subject to review under the federal consistency provisions of the Coastal Zone Management Program. Coastal resources in the vicinity of the MRS include the shoreline, intertidal, and deep water habitats of Clam Bay, coastal 100-year floodplain, Beaver Creek, and fish and aquatic species.

Existing structures at the MRS include upland, shoreline, and intertidal zone facilities. Upland facilities include buildings, roads and parking lots; raw and treated seawater distribution pipelines, pumps, and

treatment facilities; fish-rearing tanks; and kelp/algae tanks and associated equipment; and grass or landscaped areas. Shoreline facilities include seawater intake and discharge pipelines and outfalls. Seawater supply pipelines extends from upland facilities, across the intertidal mudflats, into the subtidal zone, and three outfalls for the existing seawater circulation system discharge onto the mudflats.

Clam Bay, west of the MRS, consists of extensive intertidal mudflats. The NWI classifies Clam Bay as intertidal estuarine/marine wetland. No vegetated intertidal wetlands were observed in Clam Bay adjacent to the MRS during the July 14, 2022, site visit, but may occur north or south of the site. Clam Bay is considered a Water of the State subject to regulation under the State Water Pollution Control Act. Clam Bay is also considered a Shoreline of the State, and areas within 200-feet of the ordinary high water line or high tide line are subject to regulation under the County's SMP. The Proposed Action does not include development below the high tide line of Clam Bay.

The shoreline jurisdiction extends 200-feet landward of the ordinary high water line. Where the ordinary high water line cannot be found, the ordinary high water line adjoining salt water is the mean higher high tide line (KCC 22.150.465). The shoreline jurisdiction includes associated wetlands, floodways, and up to 200 feet of floodplain. A portion of the affected environment for the Proposed Action is within the shoreline jurisdiction. The affected environment within the shoreline jurisdiction does not contain wetlands or mapped floodway, but is within the mapped coastal floodplain.

A small scrub-shrub/emergent wetland was identified in the upland portion of the site during the July 14, 2022 site visit (see Section 4.9, *Wetlands)*. The wetland is considered a Water of the State subject to regulation under the State Water Pollution Control Act. The wetland is also considered a critical area under Kitsap County's Critical Areas Ordinance. However, NOAA is not subject to compliance with the County's critical area ordinance, unless the critical area falls under the jurisdiction of Shoreline Management Act. Because the wetland is not within the shoreline jurisdiction, it is not subject to the Shoreline Management Act and not considered part of the affected environment for coastal resources.

The effective flood map indicates that the eastern edge and northeast corner of the MRS are within the mapped 100-year floodplain. The Proposed Action has been designed to avoid development within the mapped 100-year floodplain (see Section 4.10, *Floodplains*).

Beaver Creek flows west to east and discharges into the intertidal mudflats of Clam Bay south of the MRS. An unnamed tributary to Beaver Creek flows north to south through the western portion of the MRS property and crosses the main access road via a culvert west of the LOD. Both streams are outside of the LOD for the Proposed Action and potentially affected areas and are not considered part of the affected environment.

In summary, the affected environment for coastal resources includes areas within the shoreline jurisdiction and mapped coastal floodplain. However, the affected area for the Proposed Action does not include areas below the high tide line of Clam Bay, wetlands, or streams.

4.11.3 Environmental Consequences

PREFERRED ALTERNATIVE

Shoreline Management Act

The MRS is in unincorporated Kitsap County, and the County has adopted the Kitsap County SMP, consistent with the State Shoreline Management Act and approved by Ecology. As discussed in Section 4.1, *Land Use*, under KCC 22.100.120(B)(6), projects on shorelines under exclusive federal jurisdiction are not required to obtain shoreline permits or reviews. However, as specified in KCC 22.100.120(C) federal agency activities affecting the uses or resources subject to the Shoreline Management Act must be consistent to the extent practicable with the enforceable provisions of the Act and the County's SMP. As specified in KCC 22.100.120(G), Coastal Zone Management Act consistency review for sites within federal jurisdiction shall apply the shoreline environmental designation criteria in Chapter 22.200 that most closely correspond to the project site in order to determine applicable program policies.

The shoreline environmental designation that appears to correspond to the site most closely is Rural Conservancy. This shoreline environmental designation includes shorelines outside of the urban growth area or limited areas of more intensive rural development that support lesser-intensity resource base uses, including aquaculture (KCC 22.200.125). Management policies for the Rural Conservancy designation are listed and addressed below.

KCC 22.200.125(C). Management Policies:

1. Uses should be limited to those which sustain the shoreline area's physical and biological resources, and those of a nonpermanent nature that do not substantially degrade ecological functions or the rural or natural character of the shoreline area. Developments or uses that would substantially degrade or permanently deplete the physical and biological resources of the area should not be allowed.

The Preferred Alternative will not alter existing uses of the shoreline at the MRS. New impacts the shoreline area's physical and biological resources would be limited to trenching and associated backfill to original grade (i.e., no net fill) within the coastal floodplain required for installation of trunk lines, overflow pipelines, and drain connections to existing tanks and buildings. Most of the proposed pipeline installation within the shoreline jurisdiction would be within the existing, paved roadway or graveled areas, although a small amount of trenching in grassed areas would be required. The temporary disturbance of these areas, and permanent presence of underground water pipelines, would not substantially degrade or deplete the physical and biological resources of the area.

2. New development should be designed and located to preclude the need for shoreline stabilization. New shoreline stabilization or flood control measures should only be allowed where there is a documented need to protect an existing structure or ecological functions and mitigation is applied.

The Preferred Alternative would not require new shoreline stabilization or flood control measures.

3. Residential development standards shall ensure no net loss of shoreline ecological functions and should preserve the existing character of the shoreline consistent with the purpose of the "rural conservancy" environment.

The Preferred Alternative would not involve residential development.

4. Low-intensity, water-oriented commercial uses may be permitted in the limited instances where those uses have been located in the past or at unique sites in rural communities that possess shoreline conditions and services to support the development.

The Preferred Alternative would not include commercial uses.

5. Water-dependent and water-enjoyment recreation facilities that do not deplete the resource over time, such as boating facilities, angling, hunting, wildlife viewing trails and swimming beaches, are preferred uses, provided significant adverse impacts to the shoreline area are mitigated.

The Preferred Alternative would not include recreation facilities.

6. Agriculture, commercial forestry and aquaculture, when consistent with the program, may be allowed.

The Preferred Alternative would support the continuation of existing aquaculture research at the site.

NPDES Program

The Preferred Alternative would include the installation of new seawater treatment facilities and distribution system to replace the existing system. The existing seawater intake system in Clam Bay would not be altered. The Preferred Alternative includes abandoning (in place) two seawater discharge outfalls and directing all seawater discharge from the site into one existing outfall. This would not alter effluent volume or quality, but velocity at the new outfall may increase compared to the existing three outfalls.

At this time, MRS is not regulated under EPA's NPDES General Permit for Federal Aquaculture Facilities (Permit No. WAG130000) since it falls below the permitting thresholds for Concentrated Aquatic Animal Production (CAAP) facilities (EPA 2009). As with the current seawater treatment and distribution system, it is expected that EPA would not consider discharges from the seawater outfall to be a point source subject to regulation under EPA's NPDES General Permit for Federal Aquaculture Facilities.

The Preferred Alternative also includes the construction of new buildings, driveways, and parking areas. During operations, stormwater from roofs, roads, and parking areas would continue to be collected and discharged to Clam Bay in a similar manner to existing conditions. Precipitation falling on pervious surfaces, including landscaped areas, would infiltrate into the ground.

State Clean Air Act

The Washington State Clean Air Act (RCW 70.94) establishes the public policy to preserve, protect, and enhance the air quality for current and future generations, establishes rules to preserve acceptable air quality and levies penalties for violations. Enforceable policies of the State Clean Air Act include those contained in WAC 173.400 through WAC 173.495. Policies contained in WAC 173.400 through WAC 173.495 are not applicable to automobiles, trucks, or aircraft, or to nonroad engines that are self-propelled and/or perform another function or is intended to be propelled while performing its function, to nonroad engines with a cumulative maximum rated brake horsepower of 500 or less, or engines stored for dispatch to the field for use that do not provide back-up power, or to backup non-road engines having the same or lower emissions than the primary power non-road engine (WAC 173-400-035).

The Preferred Alternative would not result in any permanent new sources of air pollutant emissions, so a permit for a new source (Notice of Construction) would not be required.

Conclusion

Based on the analysis of impacts contained in this EA, the Preferred Alternative would be consistent to the maximum extent practicable with the enforceable policies of the Washington Coastal Zone Management Program. A Federal Consistency Determination in accordance with the Washington Coastal Zone Management Program will be submitted to Ecology stating that the project is consistent based on the findings in this EA. The impact to coastal resources from the Preferred Alternative would be *negligible*.

NO-ACTION ALTERNATIVE

The No-Action Alternative would involve no construction activities and no increase in staff numbers or intensity of site use. The No-Action Alternative assumes that no federal action would occur within the coastal zone. No new effects on coastal resources would result and a Federal Consistency Determination would not be required. There would be *no impact*.

ACTION ALTERNATIVE 1

Action Alternative 1 would have slightly lower impacts to coastal resources as it would not include the construction of new buildings. The impact to coastal resources from Action Alternative 1 would be *negligible*.

4.11.4 Mitigation Measures

No mitigation measures are required relevant to coastal zone management and coastal resources for the Preferred Alternative, No-Action Alternative, or Action Alternative 1.

Resources - Phase	Impacts of Preferred Alternative	Impacts of Action Alternative 1	Recommended Mitigation, Best Management Practices, and Anticipated Regulatory Compliance
Coastal Zone Management	Negligible	Negligible	None
Farmlands	No Impact	No Impact	None
Noise - Construction	Moderate	Moderate	**Mitigation Measure 4.13-1: Restrict construction hours**. Restrict noise-generating construction activities to between the hours of 7:00 a.m. to 10:00 p.m., where feasible. **Mitigation Measure 4.13-2: Preconstruction coordination and notification**. Minimize noise impacts at the Manchester State Park campground through preconstruction coordination and notification with the State Parks Department. **BMPs** for construction noise: • Route truck traffic away from residential areas and sensitive receptor locations such as schools or parks, to the extent practicable. • Turn off equipment when not in use and prohibit unnecessary idling of internal combustion engines. • Locate stationary noise-generating equipment such as air compressors or portable power generators as far as practicable from sensitive receptors. • Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that in are in good condition and appropriate for the equipment.
Noise - Operation	Negligible	Negligible	None
Transportation - Construction	Minor	Minor	**BMPs** for construction traffic control: • Construction-related truck traffic shall utilize the preferred haul route along Beach Drive East and Colchester Road to Mile Hill Road. • Provide early notification to staff and visitors about upcoming construction and expected disruptions to traffic flow. • Utilize signage to indicate detours or road closures, where applicable. • Minimize heavy construction vehicle and equipment movement during peak rush hours.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155, 14-D12
Seattle, WA 98101-3144

REGIONAL
ADMINISTRATOR'S
DIVISION

December 12, 2022

Ms. Emma Rawnsley
NOAA Manchester Research Station EA
C/O - AECOM Technical Services
888 SW 5th Avenue, Suite 600
Portland, Oregon 97204

Dear Ms. Rawnsley:

The U.S. Environmental Protection Agency has reviewed the National Oceanic and Atmospheric Administration's November 18, 2022, Draft Environmental Assessment for the Manchester Research Station Seawater System Replacement and Campus Addition Project (EPA Project Number 22-0064-NOAA). EPA has conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

The DEA analyzes potential environmental impacts from the proposed project at the National Marine Fisheries Service Northwest Fisheries Science Center Manchester Research Station in Manchester, Washington. The proposed project would include the replacement of the seawater treatment and distribution system, and construction of a new research laboratory, office buildings, and associated site improvements (Campus Addition). The DEA analyzes a Preferred Alternative (Seawater System and Campus Addition), an Action Alternative 1 (Seawater System Only), and the No Action Alternative.

EPA's review identified potentially significant environmental concerns and deficiencies in the analysis that should be addressed in the NEPA document. Included in EPA's detailed comments and recommendations (attached) are: recommendations for additional evaluation and characterization of the contaminants at the project site to minimize exposure risks to human health and the environment; construction stormwater considerations related to the EPA NPDES program for wastewater discharges that will be required for the federal aquaculture research facility; recommendations for evaluating greenhouse gas emissions; considerations for climate change resilience through green infrastructure and sustainable siting of federal buildings and facilities; environmental justice considerations; and mitigation measures and best management practices to reduce potential significant environmental impacts.

Thank you for the opportunity to review the DEA for this project. If you have questions about this review, please contact Mark Jen of my staff at (907) 271-3411 and jen.mark@epa.gov or contact me, at (206) 553-1774 or at chu.rebecca@epa.gov.

Sincerely,

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

U.S. Environmental Protection Agency
Detailed Comments on the Draft Environmental Assessment for the
Manchester Research Station Seawater System Replacement and Campus Addition Project
Manchester, Washington
December 2022

CERCLA - Superfund Site

The Marine Research Station includes approximately 22-acres of Department of Commerce/NOAA ("NOAA") property within the southern part of the Manchester Annex and is located along the shoreline of Clam Bay/Puget Sound in unincorporated Kitsap County, near Manchester, Washington.

EPA is a federal holding agency for the Manchester Annex and maintains an environmental laboratory northeast of the MRS. The Department of Defense is the lead agency for the Manchester Superfund Site (also known as Old Navy Dump/Manchester Laboratory) (CERCLIS ID Number WA 8680030931), which has been on the National Priorities List since 1994, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act.[1]

The site was previously owned by the U.S. Army and subsequently transferred to the U.S. Navy, which used the area for construction, repair, maintenance, and storage of submarine nets and boats, as well as for firefighting training and a landfill. These past activities and land uses have resulted in soils and sediments contaminated with dioxins and furans, polychlorinated biphenyls, metals, vinyl chloride, and asbestos.[2] Former remnant buried asbestos-clad pipelines associated with underground storage tanks were either removed and/or abandoned in place, but could still be present in the project area.[3] More recently, per- and polyfluoroalkyl substances (PFAS) has been identified in the groundwater.[4]

In 1997, a cleanup plan was issued to address contamination at the former firefighting training and landfill areas, and Clam Bay, which included removing contaminated soil and structures in the former fire fighter training area; constructing a landfill cap and shoreline embankment protection system; placing clean sediment in the nearshore area to enhance natural recovery of the sediments; and issuing a temporary ban on subsistence-level shellfish harvesting. The plan also included long-term monitoring of the seeps, sediment and shellfish. In 2004, a formal review concluded that the landfill cap, shoreline protection system, and remedial activities have achieved the intended goal of reducing risks to human health and the environment. Supplemental contaminant sampling and long-term monitoring at the site are required and ongoing, including formal reviews every five years.

<u>Contamination Sources and Contaminants</u>

EPA recommends the NEPA document evaluate both the context and intensity of the direct, indirect, and cumulative impacts of the proposed project to human health and the environment that includes existing contamination. While remedial investigations and studies have identified and characterized certain areas of known contamination, the full extent of the project area has not been characterized and evaluated for additional contamination sources and contaminants (e.g., dioxins, furans, heavy metals, PCBs, PFAS, etc.).The presence of PFAS has only been recently identified and its full extent within the CERCLA site boundaries is unknown. PFAS is an emerging contaminant and migrates quickly through groundwater. A February 2022 Site Inspection Report[5] indicated that PFAS was detected in groundwater

[1] EPA Superfund Site: Old Navy Dump/Manchester Laboratory (USEPA/NOAA), Manchester, WA. Accessible at: https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.Cleanup&id=1001134#bkground. Accessed on 12/8/2022.
[2] DEA; page 4-119.
[3] DEA: page 4-122.
[4] DEA (Figure 4.17-2); page 4-116.
[5] U.S. Army Corps of Engineers – Kansas City District (February 2022). Draft Final Site Inspection Report, Manchester Annex, Per- and Polyfluoroalkyl Substances, Old Navy Dump/Manchester Annex Site, Manchester, Washington, Section 5.0 Summary and Conclusions, page 17.

below applicable screening levels[6] at both the Northern Simulator Complex and the other Firefighter Training Infrastructure. In the Main Simulator Complex, PFAS was detected in groundwater at concentrations that exceed applicable screening values. A critical point to note is that the applicable screening levels have been updated as of July 2022.[7]

Additionally, PFAS disposal methods and options are limited. Improper handling and disposal could spread PFAS to non-PFAS contaminated areas. EPA recommends consideration of the *Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances*[8] to address future PFAS disposal activities. Project excavation, improper handling of PFAS contaminated soils, and incomplete characterization of the site may result in impacts to human health and the environment and substantially complicate future remedial investigations, designs, and activities.

Seawater Discharge Outfall

The DEA indicates that the location of the proposed combined single seawater outfall is in close proximity to the shoreline embankment where substantially high levels of PCBs were identified during a recent sampling event.[9] The increased volume and velocity of the wastewater effluent outfall discharges may contribute to increased erosion of the shoreline embankment and intertidal bed of Clam Bay, and result in an additional source vector of PCBs to Clam Bay.

EPA recommends the NEPA document include additional modelling, calculations, and engineering analysis to evaluate the potential outfall erosional impacts from increased outfall flow volumes and velocities to prevent additional erosion of the adjacent embankment and intertidal bed of Clam Bay. Supplemental sampling of the shoreline embankment is planned in January 2023 to better determine the extent of the embankment PCB contamination. EPA recommends that the results from the supplemental embankment sampling be included in the NEPA document.

Biological Assessment

The DEA identifies and discusses marine mammals in the Puget Sound area, which migrate through marine waters adjacent to the MRS. Endangered Species Act listed marine mammals include the "endangered" southern resident killer "Orca" whales and two distinct populations of humpback whales (Central America Segment – "endangered" and Mexico Segment – "threatened). These marine mammal species are also listed as "endangered" by the State of Washington. A number of other marine mammal species in the area are protected under the Marine Mammal Protection Act. Designated critical habitat for the southern resident killer "Orca" whales include marine waters immediately adjacent to the MRS.[10]

In addition, ESA listed marine fish species within the vicinity of Clam Bay/Puget Sound include the "threatened" Chinook salmon, steelhead trout, and yellow rockfish and the "endangered" Puget Sound/Georgia Basin Distinct Population Segments of bocaccio. ESA "critical habitat" for bocaccio and Chinook salmon has been designated in the marine waters immediately adjacent to the MRS.[11]

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[6] Office of the Assistant Secretary of Defense. Memorandum, September 2021: "Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program."

[7] Office of the Assistant Secretary of Defense. Memorandum, July 2022: "Investigating Per- and Polyfluoroalkyl Substances within the Department of Defense Cleanup Program."

[8] EPA *Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances* (December 18, 2020). Accessible at: https://www.epa.gov/system/files/documents/2021-11/epa-hq-olem-2020-0527-0002_content.pdf. Accessed on 12/8/2022.

[9] U.S. Army Corps of Engineers (June 16, 2022). Draft Final Quality Assurance Project Plan for Soil Sampling, Old Navy Dump/Manchester Annex, Manchester, Washington, FUDS Property F10WA011902, Kansas City and Seattle Districts.

[10] DEA; page 4-62.

[11] DEA: page 4-61.

EPA recommends the NEPA document include a Biological Assessment to evaluate the potential adverse impacts to Puget Sound marine mammals and fish species protected under ESA, and to their designated critical habitats. Identify conservation measures to ensure that ESA listed marine mammals, fish species, and their designated critical habitat have the necessary protections in place to mitigate for these impacts. In particular, the recent identification of PFAS and its potential to quickly migrate through groundwater requires further attention. The fate, persistence, bioavailability, and bioaccumulation of PFAS in the marine ecosystem are not known, and need to be fully characterized and evaluated in the BA.

Plan Development

As previously noted, the DEA does not fully evaluate and characterize the potential contamination sources and contaminants within the project area at the Manchester Annex Superfund Site. Best management practices based on strategically developed plans will reduce the significance of project impacts. EPA recommends the DEA include commitments to develop and implement a comprehensive and focused Sampling and Analysis Plan (SAP) and Soil Management Plan (SMP) to ensure applicable sampling, characterization, storage/stockpiling, and disposal of contaminated soils and other waste materials associated with construction of the seawater treatment and distribution system and campus additions. The proposed work will require attentive considerations and processes to minimize the risk of transferring contamination outside of the CERCLA site boundaries and exposure to human health and the environment. The SAP must ensure accurate and thorough soil and groundwater characterization of contamination sources prior to any excavation activities.

EPA recommends that NOAA consult and coordinate with the EPA Region 10 Remedial Project Manager, Patrick Hickey at (206) 553-6295 or hickey.patrick@epa.gov and the U.S. Army Corps of Engineers Project Manager, Ember Korver at (206) 764-3479 or ember.e.korver@usace.army.mil, in developing the SAP and SMP associated with the proposed project to ensure that appropriate steps are taken to protect the remedy and comply with existing institutional and land use controls defined in the CERCLA Record of Decision[12] for the Manchester Annex Superfund Site (Old Navy Dump/Manchester Laboratory).

Hazardous Materials

Excavation, trenching, construction, and other ground-disturbing activities for the new seawater treatment and buried pipeline distribution system (Phase 1), and campus addition (Phase 2) may result in unearthing, exposing, and/or releasing potential contaminants of concern from soils and/or groundwater on site. As previously mentioned, EPA is concerned that the proposed project may include activities which affect the remedy and/or deviate from the institutional controls and land use restrictions detailed in the CERCLA ROD to prevent releasing contamination. Once released, contaminants have the potential to migrate and distribute to adjacent off-site areas, such the Manchester State Park recreational areas, baseball fields, farmlands, etc. In the event the proposed project resulted in a release of contaminants from the CERCLA site in concentrations which exceed thresholds and pose risk to human health and the aquatic environment, future regulatory action could be required.

To evaluate, identify and appropriate minimize the risk of releasing hazardous waste and contaminants from the CERCLA site, EPA recommends the NEPA analysis include following:

- Description of how NOAA will conduct additional surveys, studies, and analysis to identify and delineate areas of potential contaminants of concern, hazardous and waste materials, and toxic substances, such as asbestos, lead-based paint, PCBs, dioxins, PFAS, etc. in soils and

[12] Record of Decision, Manchester Annex Superfund Site (September 1997). Prepared for the U.S. Army Corps of Engineers, Seattle, District under Contract No. DACA67-93-D-1004, Delivery Order No. 26. Accessible at: https://semspub.epa.gov/work/10/1063374.pdf. Accessed on 12/8/2022.

groundwater not previously known or identified within the project area. Disclose information regarding these materials in the environmental document;

- Describe mitigation measures and best management practices that will be used to abate and/or minimize the potential release and exposure of potential contaminants of concern, hazardous and waste materials, and toxic substances during construction, excavation, trenching and other ground-disturbing activities;
- Describe how hazardous and waste materials, and toxic substances generated during construction activities will be stored, handled, and disposed in accordance with local, state and federal requirements; and
- Assurances that all hazardous materials and toxic substances that are excavated, handled, stockpiled, stored, generated, and/or disposed on-site and/or off-site comply with state, local, and federal requirements, such as the Resources Conservation, and Recovery Act.

EPA recommends coordinating with the Remedial Project Manager for the CERLCA Site to minimize accidental release of contaminants from the site or impacting the remedy or ROD requirements of the cleanup within the project footprint.

NPDES Wastewater Discharges

Pursuant to the Clean Water Act § 402 and 40 CFR Part 122, EPA administers the National Pollutant Discharge Eliminations System program for wastewater discharges associated with industrial activities. Although the State of Washington has been delegated permitting authority, EPA is the NPDES permitting agency for federal facilities/operators, such as the MRS.

Construction Stormwater Discharges

Both the Preferred Alternative and Action Alternative 1 would result in land disturbance activities, such as clearing, grading, and excavating/trenching which would disturb one or more acres of land and result in discharges of construction stormwater to Waters of the United States and likely require coverage under the EPA NPDES Construction General Permit (CGP) for stormwater discharges.[13] For technical questions regarding the NPDES CGP, contact Margaret McCauley at (206) 553-1772 or mccauley.margaret@epa.gov.

To best align the regulatory processes of the Clean Water Act with the NEPA analysis, EPA recommends the NEPA document identify mitigation measures to ensure protection of water quality. For example, key requirements of the CGP include the development and implementation of a Stormwater Pollution Prevention Plan; erosion and sediment controls and pollution prevention practices; monitoring and inspections by qualified personnel to verify permit compliance; routine maintenance and taking corrective action to fix problems with controls or discharges; documentation of site inspections, dewatering inspections, and corrective actions; and certain other activities. EPA recommends the NEPA analysis include the CGP requirements as measures to minimize and mitigate potential impacts to the marine environment.

Federal Aquaculture Facility Discharges

EPA is reissuing the NPDES General Permit for federal aquaculture facilities and aquaculture facilities located in Indian Country within the boundaries of Washington State (No. WAG130000). EPA has been coordinating with NOAA Fisheries during the NPDES GP reissuance process, and similarly

[13] EPA NPDES Construction General Permit website. Accessible at: https://www.epa.gov/npdes-permits/npdes-general-permit-federal-aquaculture-facilities-and-aquaculture-facilities. Accessed on 12/8/2022.

recommends aligning the NPDES GP with this NEPA analysis as described further in this document. For technical questions regarding the NPDES GP (No. WAG130000), contact Martin Merz at (206) 553-0205 or merz.martin@epa.gov.

Characterization of Discharges

EPA's analysis for the NPDES GP identified certain pollutants of concern in the discharge effluent associated with aquaculture facilities. These pollutants include, five day biochemical oxygen demand (BOD5), total suspended solids (TSS), settleable solids, nutrients, ammonia, chlorine, temperature, dissolved oxygen, aquaculture drugs and chemicals, and PCBs.[14]

The significant sources of pollutants discharged from aquaculture facilities are solids from uneaten feed and feces, which are primarily organic matter with a high BOD5, and nutrients, including organic nitrogen and phosphorus. Residuals of drugs or chemicals used for maintenance or restoration of animal health, and residuals of chemicals used for cleaning equipment or for maintaining or enhancing water quality conditions are additional pollutants associated with aquaculture.

To evaluate the potential environmental impacts on the receiving waters and marine ecosystem of Clam Bay/Puget Sound, EPA recommends the NEPA document characterize the discharge effluent from the MRS. For example, develop facility process flow models for the aquaculture facility/seawater treatment systems and compare the model to the proposed new seawater treatment system. Identify and quantify in the process flow models the marine and freshwater inputs and outputs, additional facility inputs, such as feed, drugs and chemicals, etc. and outputs, such as uneaten feed, feces, organic matter, nutrients, chemicals, etc.

EPA recommends the NEPA document identify mitigation measures to protect water quality and human health. For example, the NPDES GP (No. WAG130000) maintains certain requirements to minimize the discharge of pollutants, such as the development of a Quality Assurance Plan and Best Management Practices Plan addressing solids control, facility maintenance, record keeping, and chemical storage. The effluent limits, disposal requirements, discharge prohibitions, record keeping, and reporting requirements were designed to reduce discharges of oxygen demanding materials, residual feed, and floating, suspended, and submerged matter, including fish mortalities. Identify the requirements of the NPDES GP and include them as measures to minimize and mitigate potential impacts to the marine environment.

The DEA indicates that all seawater outflow is proposed to discharge from one existing outfall, rather than from multiple outfalls, as currently occurs. The existing beach outfalls would be abandoned in-place.[15] EPA recommends capping and/or plugging all abandoned/inactive outfalls.

Wetlands and Floodplains

The DEA identifies several wetland areas along the southwest portion near the site entrance and east of the main access road west of Building 22.[16] In particular, a wetland area was identified as an intermittent or seasonally saturated, depressional, palustrine scrub-shrub/emergent wetland, which is hydrologically connected to a ditch. In order to evaluate the direct and indirect impacts to wetland resources, EPA recommends a formal determination be conducted to identify and delineate the wetlands, and evaluate the surface hydrological connections between the wetlands and other surface waters (upstream and

[14] EPA NPDES Permit Fact Sheet #WAG130000 (September 7, 2022). Federal Aquaculture Facilities and Aquaculture facilities Located in Indian Country within the Boundaries of Washington State. Accessible at: https://www.epa.gov/system/files/documents/2022-09/R10-NPDES-Washington-Aquaculture-GP-WAG130000-Fact-Sheet-2022.pdf. Accessed on 12/8/2022.
[15] DEA; page 2-19.
[16] DEA; page 3-1.

downstream), such as the unnamed tributary to Beaver Creek and/or Beaver Creek and the floodplain area.

EPA recommends consideration of additional mitigation measure to minimize sedimentation and turbidity into the wetlands, floodplains, natural drainages, and adjacent downstream waters that discharge into estuarine intertidal areas of Clam Bay, which should be protective of the coastal zone.

Air Quality

The Clean Air Act requires EPA to establish National Ambient Air Quality Standards (40 CFR part 50) for six "criteria" air pollutants for stationary, mobile, marine, and/or land-based sources. These standards establish threshold levels for criteria pollutants, including carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (2.5 and 10 microns), and sulfur dioxide to be protective of human health and the environment.

EPA recommends the NEPA document provide baseline estimates of the air quality criteria pollutants and their emission sources for the MRS (No Action Alternative) and compare this baseline information with air quality estimates for the Preferred Alternative and Action Alternative 1. In particular, construction activities would result in heavy earthmoving equipment operations, including crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, and tree removal equipment. Also evaluate mobile sources, such as light trucks and passenger vehicles, etc. Identify the sources and emissions of the six criteria pollutants and evaluate them in the NEPA document. EPA's Air Emissions Inventories website can be a useful tool in developing estimates for certain pollutant sources and their emissions.[17]

EPA recommends the NEPA document incorporate the estimated criteria air quality emissions information to support the development of mitigation measures, strategies, plans and/or programs for air quality emissions reductions and to ensure that proposed construction activities at the MRS attain and maintain the NAAQS, as well as state, regional, and local requirements in the Puget Sound area.

Fugitive Dust

Fugitive dust is an air pollutant which can be generated during construction activities from heavy earthmoving and ground disturbance operations for the seawater treatment and distribution system, as well the campus additions, wind-blown material from soil stockpiles and exposed soils, truck and vehicular traffic, etc. Elevated levels of fugitive dust may pose a risk to human health and the environment, particularly for individuals and children with pre-existing respiratory illnesses, such as bronchitis, asthma, etc. In particular, wind generation of dust particles can migrate into nearby surface waters, including wetlands and tributaries, where fish and other organisms, and aquatic communities, and vegetation may be negatively impacted. Beaver Creek supports several species of Pacific Salmon, such as coho and chum salmon, and cutthroat trout.

EPA has concerns regarding potential contaminants in the excavated soils and soil stockpiles being released into the air during construction activities and distributed by wind to adjacent surface waters. EPA recommends the NEPA document include a fugitive dust model/wind pattern analysis to identify potential sources of fugitive dust emissions, and determine the distribution and distances where dust may migrate either on and/or off site, such as the Manchester State Park – campground and trails; South Kitsap Eastern Little League baseball fields; farm and agricultural lands; rural communities and neighborhoods; etc. and evaluate the potential exposure risk to construction workers, MRS staff, children and vulnerable populations, and the aquatic environment.

[17] EPA Air Emissions Inventory website. Accessible at: https://www.epa.gov/air-emissions-inventories. Accessed on 12/8/2022.

EPA recommends the NEPA document include a Fugitive Dust Control Plan, which would include procedures to prevent, reduce, abate, and control dust during construction by implementing BMPs to protect the health of workers, MRS staff, the public and the environment. Identify and include BMPs, such as limiting exposed soil areas, wind barriers and cover tarps, applying dust suppression and vacuum control equipment, control traffic speed through the construction site, limit work on windy days, etc. Include training, work site monitoring, and corrective actions in the plan.

Transportation, Access and Parking

The proposed two phase, two year construction schedule for the project would result in new traffic volumes and patterns, and place additional stress on existing rural roads, which may introduce additional traffic hazards resulting in significant impacts, if not appropriately mitigated. The DEA indicates that roads near the MRS would need to accommodate heavy truck traffic related to delivery of heavy equipment and materials/supplies, and import of fill material and export of excess excavated spoils, and construction worker commute vehicle trips to access the MRS. In particular, parking for construction workers at the MRS will need to be evaluated as the current 45 parking spaces for staff and visitors at the MRS would not accommodate the proposed 50 construction workers. Additional temporary staging areas for spoil stockpiles and storage of construction equipment and materials would need to be considered in the NEPA document.

To address the potential significant impacts associated with construction-related traffic, access, and parking at the MRS, EPA recommends the NEPA document include a Transportation, Access, and Parking Plan with mitigation measures. In particular, the entrance to MRS on Beach Drive East provides access to EPA's Manchester Environmental Laboratory. The two facilities share the main driveway from Beach Drive East through the NOAA property. EPA would appreciate continued communication and coordination between our respective agencies regarding transportation, traffic, and access planning for the two year, two phase construction schedule proposed for this project. Contact Barry Pepich, Director, EPA Manchester Laboratory at (360) 871-8701 or pepich.barry@epa.gov to discuss transportation and access issues between the two facilities.

Environmental Consequences

The DEA evaluates the environmental consequences of each resource to include the intensity and levels of potential effects associated with the Preferred Alternative and the Action Alternative 1.[18] EPA recommends the NEPA document summarize the environmental consequences of the Preferred Alternative and the Action Alternative 1 in comparative form, such as a table, which depicts the overall magnitude of impact and consideration of duration, geographic extent and potential likelihood to occur.

Cumulative Impacts

When analyzing the project impacts, EPA recommends determining what the cumulative impacts of the proposed project will be on both human health and the environment. For example, include an evaluation of the proposed project's synergistic effects in the context of interacting with, and potentially exacerbating the effects of other projects in proximity (e.g., the timing of the work coinciding with other human or natural disturbances that are affecting the project area). Greenhouse gas (GHG) emissions associated with past, present, and reasonably foreseeable future actions may result in cumulative impacts to climate change and resilience.

[18] DEA; Page 4-2.

Greenhouse Gas

Executive Order 13990 on *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*[19] requires the review of federal actions that would further promote and protect public health and the environment, such as reducing GHG and bolstering resilience to the impacts of climate change. Consistent with E.O. 13990, EPA recommends the NEPA document include an evaluation of GHG emission reductions and measures to bolster resiliency of the proposed action to climate change.

Construction

EPA recommends the NEPA document include estimates of project level GHG emissions (e.g., carbon dioxide, methane, nitrous oxide, and fluorinated gases) for the Preferred Alternative and Action Alternative 1 associated with construction resulting from heavy earthmoving equipment operations. The DEA identifies heavy construction equipment to include a crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, tree removal equipment, etc. Include GHG estimates from operations and maintenance activities in the NEPA document.

EPA's *National Emissions Inventory*[20] provides a comprehensive and detailed estimate of air emissions for criteria pollutants and hazardous air pollutants from air emissions sources. This inventory may be a useful resource for this analysis. Report GHG emissions estimates for their global warming potential weighted in CO_2-equivalent units (CO_2-e). In addition, EPA's *Greenhouse Gas Equivalencies calculator*[21] may be a useful tool to convert emissions or energy data to the equivalent CO_2-e emissions for this project**.**

Operations

EPA recommends the NEPA document include estimates of the current baseline GHG emissions associated with operations of the MRS, which would represent the No Action Alternative. In addition, include GHG estimates for facility operations associated with the Preferred Alternative or Action Alternative 1. EPA recommends depicting this information into a summary table to compare estimates of GHG emissions associated construction and operations of both action alternatives to the No Action Alternative (baseline).

Social Costs of GHG

Executive Order 13990 emphasizes the importance for federal agencies to capture the full costs of GHG emissions, including consideration of global damages. The Interagency Working Group (IWG) on the Social Cost of Greenhouse Gases published a Technical Support Document[22] which included interim estimates for the Social Cost of carbon dioxide, methane, and nitrous oxide (referred to collectively as SC-GHG) for agencies to use "when monetizing the value of changes in GHG emissions resulting from regulations and other relevant federal agency actions until final values are published."

EPA recommends the NEPA document evaluate and disclose the monetized climate damages using the relevant SC-GHG for the respective net and gross emissions for carbon dioxide, methane, and nitrous oxide for the Preferred Alternative and Action Alternative 1, including the No Action alternative. Providing estimates of these emissions discloses the different environmental impacts associated with

[19] Executive Order 13990. *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*. Accessible at: https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf. Accessed on 12/8/2022.
[20] EPA National Emissions Inventory. Accessible at: https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei. Accessed on 12/8/2022.
[21] EPA Greenhouse Gas Equivalencies Calculator. Accessible at: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator. Accessed on 12/8/2022.
[22] Interagency Working Group on Social Cost of Greenhouse Gases, United States Government (February 2021). Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990. Accessible at: https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf. Accessed on 12/8/2022.

emissions for each of the GHGs.[23] This comparative analysis would illustrate the costs and benefits to society associated with each alternative, to inform the public, as well as federal agency decision-making.

GHG Reductions Goals

EPA recommends the NEPA document consider ongoing and projected regional and local climate change efforts to ensure robust climate resilience/adaption planning in the project design for construction, operations, and maintenance. Ongoing and projected regional and local climate impacts include, but are not limited to, sea-level rise, flooding, high intensity precipitation events, at-risk areas, increase temperatures and fire risk, etc. Consideration of these impacts would help avoid infrastructure investments in vulnerable areas and facilities, and unintended impacts on local communities. EPA recommends the NEPA document include consideration of relevant state, tribal, or local adaptation plans, if applicable.

Climate Change Resiliency and Adaptation

Green Infrastructure

Storm water runoff from impervious surfaces, such as parking lots, rooftops, roads and walkways represents a major source of water pollution carrying sediments, oil and grease, toxic substances, heavy metals, and other pollutants into adjacent wetlands, fish-bearing streams, and marine intertidal areas. The DEA estimates the replacement of the seawater treatment and distribution system (Phase 1) would result in net impervious surface area of 9,600 ft^2 (0.22 acres).[24] The campus addition (Phase 2) would include construction of four new research laboratory/office buildings and associated site improvements, which would result in 35,300 ft^2 (0.81 acres) of new impervious surfaces.[25]

In 2019, Congress enacted the Water Infrastructure Improvements Act. The Act defines Green Infrastructure as: *the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters.*

EPA recommends the NEPA document evaluate green infrastructure systems in the planning, design, construction and operations of the seawater treatment replacement (Phase 1) and campus additions and associated site improvements (Phase 2) to better manage stormwater runoff, as well as bolster resiliency and adaptation to climate change impacts. Green infrastructure elements (e.g., permeable, porous or aggregate pavers) can be integrated into parking lot, roads, and walkway designs to increase permeability for snow melt and rainwater to infiltrate, and thereby reducing runoff and promoting groundwater recharge to replenish adjacent wetlands and streams. Rain gardens and/or vegetated bioswales installed in medians and along the parking lot perimeter are other options to slow stormwater runoff and promote infiltration, trap sediments and treat pollutants. EPA recommends that new impervious surfaces be constructed using permeable pavers.

To minimize the volume of storm water runoff, EPA recommends collecting, harvesting, and/or storing water from rainfall for future alternative water uses, such as toilet flush water, hydronic radiant heating systems, etc. The variety of systems include rain barrels, commercial building cisterns, and ground level pits. In addition, runoff from storm water and snow melt collected on rooftops can be reduced and/or minimized by routing drainage pipes into rain barrels and cisterns for storage, and/or into permeable areas, including rain gardens and/or vegetated swales to infiltrate and recharge the ground water aquifer. Green rooftops covered with natural growing media and local native vegetation would enable rainfall infiltration and evapotranspiration of stored water and be considered in the new research laboratory/office buildings

[23] EPA Non-CO_2 Greenhouse Gas Emission Projections & Mitigation. Accessible at: https://www.epa.gov/global-mitigation-non-co2-greenhouse-gases. Accessed on 12/8/2022.
[24] DEA (Table 2.1-3); page 2-16.
[25] DEA (Table 2.1-4); page 2-19.

rooftop designs. For additional information and resources regarding green infrastructure designs, plans, and tools for this proposed project, please refer to EPA's Green Infrastructure website.[26]

Sustainable Siting and Building Resilience

In 2020, CEQ released *Guiding Principles for Sustainable Federal Buildings*[27] consistent with fundamental sustainable design practices, such as EPA's green infrastructure, CEQ's six guiding principles focus on ensuring that Federal buildings: (1) employ integrated design principles; (2) optimize energy performance; (3) protect and conserve water; (4) enhance the indoor environment; (5) reduce the environmental impact of materials; and (6) assess and consider building resilience.

EPA recommends incorporating CEQ's Guiding Principles into the planning, design, construction and operations of the seawater treatment system replacement (Phase 1) and campus addition and associated site improvements (Phase 2). In particular, integrated design principle for sustainable siting to support building resilience refers to identifying and mitigating current and projected site specific long-term risks through considerations that provide resilience due to anthropogenic and natural events, such as sea level rise, tsunamis, flooding, storm events, geological hazards (e.g., seismically active fault zones, erosion and landslide areas), contaminated areas, etc. Consider siting and locating the proposed infrastructure, buildings, and facilities to avoid these "at risk" areas to bolstering resilience of the MRS to the impacts of climate change.

In particular, EPA recommends that the pipelines for the seawater treatment distribution system (Phase 1) and the proposed new Building A and Building 13 (Phase 2) be sited, located, planned, and designed to avoid areas of known contaminated soils and groundwater, and remnant buried asbestos-clad pipelines associated with former underground storage tanks within the former firefighting training area, and geological hazards.

EPA recommends the NEPA document discuss energy innovations and sustainability features for the planning, design, construction, and operation of the campus addition based on the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED).[28] Incorporating green infrastructure and CEQ's sustainable design practices into the planning, design, construction, and operations of the campus addition may result in LEED Silver, Gold, or Platinum certification. EPA recommends incorporating green infrastructure and sustainable design practices to support LEED certification.

Environmental Justice

EPA recommends the NEPA document include an Environmental Justice analysis consistent with Executive Order 12898 on *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.[29] E.O. 12898 directs federal agencies to identify and address the disproportionately high and adverse human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. In addition, E.O. 13985 on *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*[30] be considered into the NEPA document because it includes a modern definition of equity that clarifies a broader approach.

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[26] EPA Green Infrastructure website. Accessible at: https://www.epa.gov/green-infrastructure. Accessed on 12/8/2022.
[27] CEQ *Guiding Principles for Sustainable Federal Buildings* (December 2020). CEQ-OFS-2020-1.
Accessible at: https://www.sustainability.gov/pdfs/guiding_principles_for_sustainable_federal_buildings.pdf. Accessed on 12/8/2022.
[28] U.S. Green Building Council website. Accessible at: https://www.usgbc.org/. Accessed on 12/8/2022.
[29] E.O. 12898. *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Accessible at: https://www.federalregister.gov/documents/1995/02/09/95-3256/executive-order-eo-12898-federal-actions-to-address-environmental-justice-in-minority-populations. Accessed on 12/8/2022.
[30] E.O. 13985. *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government* Accessible at: https://www.federalregister.gov/documents/2021/01/25/2021-01753/advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government. Accessed on 12/8/2022.

To identify potential project level EJ concerns, EPA recommends applying two interactive web-based tools: the Environmental Justice Screening and Mapping Tool (EJScreen,Version 2.1)[31] and the Washington Environmental Health Disparities Mapping Tool (WEHD, Version 2.0).[32] EPA considers a project to be in an area of potential EJ concern when an EJScreen analysis for the project area shows one or more of the twelve EJ Indices at or above the 80th percentile in the nation and/or state. At a minimum, EPA recommends conducting a baseline EJ analysis to identify minority and low income populations in the project area using the EJScreen Tool. In addition, the WEHD can assist Federal agencies compare communities across the state for environmental health disparities. WEHD displays measures, such as poverty, health risks and diseases, and exposures to certain types and sources of pollution. EJScreen and WEHD are complementary tools.

EPA recommends consideration of all areas impacted by the proposed action. For example, areas of impact can include a single block group, tract, city, county or span across several block groups and communities. When assessing large geographic areas, consider the individual block groups within the project area in addition to an area-wide assessment. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. As the screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location and/or proposed project, consider additional information in an EJ analysis to supplement EJScreen outputs. Further review or outreach may be necessary to evaluate EJ concerns associated with the proposed action.

To support the success of the project EJ analysis, EPA recommends the NEPA document describes continued efforts to provide meaningful public outreach, engagement, and involvement with affected EJ communities regarding potential disproportionate and adverse environmental impacts associated with this proposed project. For example, construction activities would result in increased noise levels, traffic congestion, fugitive dust, exposure to contaminants, etc.

Additionally, EPA recommends evaluating and including Traditional Ecological Knowledge and Indigenous Traditional Ecological Knowledge[33] when describing potential Environmental Justice concerns in the NEPA analysis.

ITEK is a body of observations, oral and written knowledge, practices and beliefs that promote environmental sustainability and responsible stewardship of natural resources through relationships between humans and environmental systems. ITEK is owned by Indigenous people—including, but not limited to, Tribal Nations, Native Americans, Alaska Natives, and Native Hawaiians.

The proposed project area may directly and/or directly impact areas of subsistence and cultural use by local indigenous and other users. The evaluation and incorporation of ITEK in the NEPA analysis provide a mechanism for further identifying those potential impacts and ways in which to avoid and mitigate them.

Consistent with the Promising Practices for EJ Methodologies in NEPA Reviews,[34] EPA provides the following recommendations and considerations when developing mitigations for impacts to communities with EJ concerns:

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[31] EPA EJScreen Tool. Accessible at: https://www.epa.gov/ejscreen. Accessed on 12/8/2022.
[32] Washington Environmental Health Disparities Map Tool. Accessible at: https://doh.wa.gov/data-and-statistical-reports/washington-tracking-network-wtn/washington-environmental-health-disparities-map. Accessed on 12/8/2022.
[33] White House Memorandum: Indigenous Traditional Ecological Knowledge and Federal Decision Making (November 15, 2021). Accessible at: https://www.whitehouse.gov/wp-content/uploads/2021/11/111521-OSTP-CEQ-ITEK-Memo.pdf. Accessed on 12/9/2022.
[34] Report of the Federal Interagency Working Group on EJ and NEPA Committee (March 2016). Promising Practices for EJ Methodologies in NEPA Reviews. Accessible at: https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. Accessed on 12/9/2022.

- The unique characteristics and conditions of minority populations and low-income populations in the affected environment may require adaptive and innovative mitigation measures to sufficiently address the specific circumstances and impacts presented by the proposed action. This includes mitigation of identified disproportionately high and adverse impacts, whenever feasible;
- Throughout the NEPA process, agencies may wish to (as appropriate) involve potentially affected minority populations and low-income populations as agencies develop and implement mitigation measures and monitoring. Establishing groups made up of community members can be an effective method of engaging minority and low-income populations as an agency develops mitigation measures;
- Agencies may wish to identify mitigation and monitoring measures designed specifically to address impacts to minority populations and low-income populations in the affected environment separately in the NEPA decision document and also separately in an environmental justice technical report; and
- If mitigation measures for impacts to minority populations and low-income populations in the affected environment have been identified in the NEPA document, agencies may wish to develop an adaptive management plan and conduct implementation and effectiveness monitoring. Monitoring implementation of mitigation measures can inform an agency and community whether the measures are on schedule and when they have been completed. Through the use of effectiveness monitoring, an agency and community can learn if the mitigation measures are providing the predicted outcomes. An adaptive management plan can provide agencies with a means for taking corrective action if mitigation implementation or effectiveness monitoring indicates the measures are not achieving the intended outcomes.

Tribal Consultation and Coordination

EPA encourages NOAA to consult with the Puget Sound Tribes and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the NEPA document describe the issues raised during the consultations and how those issues were addressed.

Rawnsley, Emma

From: Piazza, Katelynn (ECY) <kpia461@ECY.WA.GOV>
Sent: Monday, December 19, 2022 7:58 AM
To: Rawnsley, Emma
Cc: ECY RE TURBOWASTE (HWTR); Perkow, Tom (ECY)
Subject: RE: Draft EA available for public comment - NOAA Manchester Research Station
Attachments: DraftEA_MRS_Transmittal_Ecology_Lassiter.pdf

Hello Ms. Rawnsley,

Thank you for providing notice of the Draft EA for the proposed action at the National Marine Fisheries Service Northwest Fisheries Science Center Manchester Research Station.

As noted in the prepared Draft EA, the NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project will take place on a property considered part of the Old Navy Dump/Manchester Laboratory Superfund Site (EPA ID WA8680030931).

For the purposes of Dangerous Waste Annual Reporting, EPA ID/State ID WA8680030931 is attributed to the Manchester Laboratory, located at 7411 Beach Drive East, Manchester, WA 98353. The project site identified in the Draft EA is 7305 Beach Drive East, Port Orchard (Manchester), WA 98366.

If, in accordance with the Dangerous Waste Regulations (WAC 173-303), an EPA/State ID number is obtained for the this project location, a site-specific EPA/State ID number will need to be issued unless these properties are deemed contiguous.

If you have any questions, please feel free to reach out to me or our Dangerous Waste Annual Reporting Team at Turbowaste@ecy.wa.gov or 1-800-874-2022.

Katelynn Piazza (she/her)
Compliance Inspector
Hazardous Waste and Toxics Reduction Program
Mobile: (206) 518-3622 | katelynn.piazza@ecy.wa.gov

DEPARTMENT OF ECOLOGY
State of Washington

From: Rawnsley, Emma <emma.rawnsley@aecom.com>
Sent: Tuesday, November 22, 2022 8:31 AM
To: Lassiter, Katrina (ECY) <klas461@ECY.WA.GOV>

Cc: Rachel Chang - NOAA Federal <rachel.chang@noaa.gov>; Brantley Bain - NOAA Federal <brantley.bain@noaa.gov>; Mark Benne - NOAA Federal <mark.benne@noaa.gov>
Subject: Draft EA available for public comment - NOAA Manchester Research Station

Dear Ms. Lassiter,

A copy of the attached letter was mailed to you on Friday November 18, relating to the release of a Draft Environmental Assessment (EA) by the National Oceanic and Atmospheric Administration (NOAA) for their proposed action at the National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFSC) Manchester Research Station (MRS), at 7305 Beach Drive East in Manchester, Washington. More details are contained in the letter.

An electronic copy of the Draft EA is available at the following URL address: https://www.noaa.gov/administration/draft-nepa-environmental-assessment-public-notice-november-2022. Written comments on the Draft EA may be sent to the physical or electronic addresses provided below during a 30-day period ending December 22, 2022.

> Re: NOAA Manchester Research Station EA
> C/- AECOM Technical Services
> 888 SW 5th Avenue, Suite 600
> Portland, OR 97204
> Attn: Emma Rawnsley
> Emma.Rawnsley@aecom.com

Please reach out if you have any questions.

Kind regards, Emma

_____
Emma Rawnsley
She/Her/Hers

Environmental Planner | Project Manager
Environmental Planning and Permitting
Phone +1-971-323-6333
emma.rawnsley@aecom.com

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT
601 E. 12TH STREET, 635 FEDERAL BLDG
KANSAS CITY, MO 64106-2824

December 20, 2022

Environmental Programs Branch
Planning, Programs and Project Management Division

Re: NOAA Manchester Research Station EA
C/- AECOM Technical Services
888 SW 5th Avenue, Suite 600
Portland, OR 97204
Attn: Emma Rawnsley
Emma.Rawnsley@aecom.com

Dear Ms. Rawnsley & Ms. Chang,

The U.S. Army Corps of Engineers (USACE) is transmitting an electronic copy of comments on the National Oceanic and Atmospheric Administration Manchester Research Station Seawater System Replacement and Campus Addition Project Draft Environmental Assessment via email.

Thank you for the notification and opportunity to review. If there are any questions on our submitted comments, you may contact me at (206) 484-3478 or ember.e.korver@usace.army.mil.

Thank you,

Ember Korver, PE
Project Manager

Encl: USACE Comments

Re: NOAA Manchester Research Station EA
Enclosure 1: USACE Comments

Comment Number	Section #	Comment
1	2.1.3 Phase 1, Page 2-16	Request contractor contact USACE prior to commencing fieldwork. USACE may be conducting environmental field activities during the same timeframe.
2	4.7.2 Affected Environment - Inventory Results Page 4-51	"Second paragraph." The concrete foundation is a remnant of the former U.S. Navy northern fire training simulator building.
3	4.17 4-17-2 Affected Environment Page 4-115	Recommend adding to "In the event of future subsurface excavations in the control area:" bullet at bottom of page that Contractors may encounter petroleum contaminated soils and groundwater while trenching for seawater pipeline installation north of Building 1, south of Building 6 and east of Buildings 26 and 27 along the roadway.
4	1.1.1 Pg 1-1	Last paragraph of the page. Parenthesis missing after EA.
5	2.1.2. Pg 2-3	"Third paragraph of Seawater Treatment and Distribution System." There is a high concentration of PCBs in the bluff at the outfall locations. Abandoning these outfalls may impact those PBC-contaminated soils.
6	Figure 2.1-4	Suggest adding a note that only one existing outfall will be used in the preferred alternative and the remaining outfalls will be abandoned in place. Suggest adding a note that the maximum depth of piping as described in Section 2.1.3 (pg 2-17, 2nd paragraph).
7	Table 2.1-1	Suggest adding depths in the descriptions.
8	Table 2.1-3	Are these components all going to disturb the same depths? Suggest adding depths related to disturbance.
9	2.1.4	"1st paragraph, 4th sentence." This sentence states that increase in velocity of 5.8 feet per second. What is the existing velocity for this outfall? Please include.
10	4.2.2	"1st paragraph of Topography, Geology, Soil." The last sentence states, "Adjacent to the northeast (on EPA-owned property) is a capped landfill associated with the Manchester Superfund Site." The Former Fire Training Area on which the NOAA property is located is also part of the Manchester Superfund Site.
11	Figure 4.2-1	Per the 2019 USACE Manchester Annex Five Year Review, the shoreline is exhibiting erosion, as well, due to tidal forces. Is this included in the assessment? This may impact the existing outfall and the abandonment of the other outfalls.
12	4.3.2	Kitsap County published a Climate Change Resiliency Assessment in June 2020 that includes a sea level rise assessment. Suggest also including the results of that here in this discussion. https://www.kitsapgov.com/dcd/Kitsap_climate_assessment/KitsapCountyClimateAssessment_June2020%20-%202%20Full%20Assessment%20LowRes.pdf

13	4.17.1	"2nd paragraph of FEDRAL RCRA/CERCLA." Tier II requirements are part of EPCRA rather than RCRA. Agree that RCRA has been delegated to the States. However, it is my understanding that Federal Facilities still need to follow RCRA.
14	4.17.2	"Existing contamination." There is PCB contamination in the soils in the shoreline at the NOAA facility (Has the 2020 report been provided to NOAA?) Also there is PCB contamination in the sediments along the bluff that would be impacted by the higher velocity from the single outfall.
15	Figure 4.17-2	Recommend updating figure to the current federal PFAS screening levels.
16	4.17-3 Pg 4-121	There is PCB contaminated soils along the bluff and in the sediments of Clam Bay. While these aren't directly impacted by the new construction, the resulting increase in water velocity through the single outfall may change the locations of PCB in the sediment and the abandonment of the remaining outfalls will potentially impact the PCB-contaminated soils in the bluff/shoreline.
17	4.17-3 Pg 4-122	"2nd paragraph of the page." Recommend revising the PFAS concentrations and descriptions of exceedances need to include the updated DOD/Federal screening levels.

DUWAMISH TRIBE

dxʷdəwʔabš

12/20/2022

Re: NOAA Manchester Research Station EA
C/- AECOM Technical Services
888 SW 5th Ave, Suite 600
Portland, OR 97204

Dear Emma Rawnsley,

Thank you for reaching out to the Duwamish Tribe and for the opportunity to review and provide draft EA comments for the NOAA Manchester Research Station Seawater Replacement and Campus Addition project.

Overall the Tribe supports the National Marine Fisheries Service marine research station at Manchester and recognizes the work to maintain one of the most important staples of our diet and and its relationship to our lifestyle as well as to other tribes within the area. The Tribe supports the proposed action which, as we understand it, consists of two phases – the first being the replacement of the seawater treatment facility, and the second the addition of four new research buildings on site. We understand that the replacement and construction would be within the current footprint of the campus facility with excavation for trenching and excavation for the newly constructed buildings. The Tribe also notes from the virtual meeting held on 12/20/2022 with NOAA and AECOM that more than likely excavation of trenching would be approximately to a depth of 5 feet below ground surface (bgs) and to similar depths for building foundations. It was also noted that the trenching for the seawater replacement piping would be at about the same depth of other current buried utilites on site.

Based on the information provided and our understanding of the project and its APE, we would typically recommend an archaeological review performed for this project. This is in an area the Duwamish Tribe considers culturally significant and has a high probability to have unknown archaeological deposits, especially if excavation cuts below fill. The DAAP WISAARD predictive model indicates that an archaeological survey is highly recommended with a very high risk of encountering cultural resources. We understand and recognize that the Manchester Research Facility sits on disturbed ground. We also understand that shovel probe testing has been conducted in the area which yielded no pre-contact cultural artifacts as indicated by AECOM during the virtual meeting. Therefore the Tribe would accept an IDP (inadvertent discovery plan) to be put in place during excavation.

We also request that if any archaeological work or monitoring is performed, we would like notification. Cultural and archaeological resources are non-renewable and are best discovered prior to ground disturbance.

The Tribe would also like the opportunity to be present if or when an archaeologist is on site in the event that an artifact or cultural resource is encountered.

In addition the Tribe supports the containment of noxious weeds during construction and strongly recommends that only native vegetation be used in any proposed landscaping.

Please feel free to contact the Preservation Department with any updates of the Manchester Research Station replacement and addition project.

Thank you,

Nancy A. Sackman
Cultural Preservation
preservationdept@duwamishtribe.org

THE SUQUAMISH TRIBE
NATURAL RESOURCES DEPARTMENT
PO Box 498 Suquamish, WA 98392-0498

18 January 2023

Rachel Chang
Environmental Compliance Division/SECO
NOAA
7600 Sand Point Way NE
Seattle, WA 98115

SUBJECT: Draft Environmental Assessment for the "Manchester Research Station Seawater System Replacement and Campus Addition Project Manchester, Washington".

Dear Ms. Chang:

The Manchester Research Station (MRS) lies within the Suquamish Tribe's aboriginal homeland and treaty reserved fishing area. The Suquamish people have lived, gathered plants, collected ceremonial and spiritual items, hunted, and fished since time immemorial in what is now western Washington State. The Suquamish Tribe (Tribe) is a federally recognized Indian Tribe and pursuant to the 1855 Treaty of Point Elliott, the Tribe reserved the right to fish and gather shellfish at its "usual and accustomed" (U&A) fishing grounds and stations in Puget Sound. The Suquamish Tribe's U&A extends well beyond the Port Madison Reservation boundaries and includes the marine waters of Puget Sound from the northern tip of Vashon Island to the Fraser River in Canada, including Haro and Rosario Straits, the streams draining into the western side of Puget Sound and Hood Canal. The Tribe also reserved the right to hunt on all "open and unclaimed" lands throughout the Washington Territory. This letter transmits the Tribe's comments concerning the Draft Environmental Assessment for the "*Manchester Research Station Seawater System Replacement and Campus Addition Project Manchester, Washington*."

This comment will cover three main issues: (1) impacts from the proposed construction and operation; (2) undisclosed impacts that might arise from the expanded facilities that could interfere with the right to fish; (3) insufficient consideration given to the rights and interests of the Suquamish Tribe; and other issues .

The impact analysis must not only consider the impacts of the construction and operation of the buildings, which it has mostly done, but also the impacts that may arise from activities occurring in the new buildings as well as those from the existing facilities.

The proposed action is to install a new seawater treatment, distribution system and head tank to replace the existing system at the MRS, construct up to four additional single or two-story buildings to house hatcheries, laboratories and offices at the site. The proposed replacement seawater processing, distribution, and depuration system would be designed to deliver processed water to a common head tank capable of supplying existing and future NOAA fisheries and aquaculture operations within the MRS. The proposed action is also designed to reduce overall seawater system operation and maintenance costs and to increase reliability. The new buildings would provide laboratories, hatcheries, office space, and storage areas to serve the Environmental and Fisheries Science and Conservation

Biology Divisions or both[1] [2] with the purpose of building *"up space to accommodate expanded program requirements identified by NOAA as part of their 2022 Site Master Plan (Iron Horse Architects 2022) and to more reliably meet both the existing and future demand for the continuation of established MRS fisheries research that the existing seawater system cannot support."*[3]

I. Impacts from the proposed construction and operation

Construction

The site was formerly used by the Navy as a fire training facility (EA page 1-2). There are numerous statements in the EA (such as pgs. 2-22, 4-115, 4-120, 4-121, 4-122) about areas of known contamination as well as past, present or future sampling that has occurred or will occur at the site. In addition, the areas of known contamination shown in Figure 4.17-1, the EA needs to include a map showing the sampling locations, particularly as the EA (pg. 4-119) states:

> *"The vertical and horizontal extent of PFAS contamination at the site has not been well-delineated due to the limited sampling program, and USACE staff have indicated that additional sampling will be undertaken in the future (Korver, pers. comm. 2022)."*

The Tribe requests to be kept informed of all proposed current and/or future sampling efforts including a request to receive draft QAPP and sampling plans.

Operation

There are several statements to the effect that the proposed work on the seawater distribution system will not alter the amount of seawater taken in, or water effluent volume and quantity compared to existing conditions, or both[4]. The EA should provide a history of water intake over the last ten years as well as the maximum amount of water than can be taken in to determine how much water could be utilized in the future compared to past use.

There is an acknowledgement that due to the reduction of the number of outfalls that the velocity of the combined outfall will increase[5]. Though the EA (pg. 2-19) states, *"The velocity of discharge from the main outfall may increase slightly compared to existing conditions, to approximately 5.8 feet per second, due to the increased volume".* The EA (pg. 4-69) concluded (emphasis added):

> *"Discharge from the central outfall at a higher velocity than at present could alter conditions in the immediate vicinity of the outfall, but it is expected that effects on aquatic species would be negligible,* ***because the existing outfall discharges onto rip-rap rather than fine sediments that could increase***

1 EA page 1-3.

2 EA page 2-14.

3 EA page 1-3.

4 EA page 2-2. *"The proposed augmentations or replacements to the seawater distribute on system will not alter seawater intake quantities or water effluent volume and quality compared to existing conditions."*

5 EA page 2-2.

turbidity."

And on page 4-36 (emphasis added):

> *"Discharge from the proposed replacement seawater circulation system will connect to the existing seawater discharge outfall at a location upland from Clam Bay (approximately elevation of 18 feet MSL), with no change in total discharge volume or quality. The minor (15 to 20 percent) increase in volume and associated increase in discharge velocity from the main outfall (due to the proposed consolidation of all seawater discharge via one outfall) is not anticipated to cause water quality issues within Clam Bay, because the existing outfall discharges onto rip-rap, and therefore the* ***increased discharge velocity would not cause increased scour of fine sediments*** *that would increase turbidity."*

However, aerial imagery (Fig. 2) suggests discharge from these outfalls already erode the intertidal material. There is the potential that increased discharge could increase erosion, and though any impacts of turbidity may be considered discountable, any erosion occurring reduces habitat quality in the area.

In regard to water intake velocities, the EA (pg. 2-19) states, *"It is assumed that proposed revisions or replacements to the seawater distribution system will not alter seawater intake velocities and volumes and water effluent quality and volumes currently operating consistent with existing permit limitations."*

Fig. 2 Comparison of outfall locations (from EA Figure 2.1-3)and sediment erosion in the intertidal

General Construction comments

The EA (pg. 2-14) stated:

> *"Detailed design for the buildings has not commenced, therefore this section conservatively describes the changes based on conceptual design and represents a "maximum envelope of development" for each component, such that the analysis within this EA will still be valid, even if the exact details, number of buildings, dimensions, layout and/or footprint of the proposed buildings change during the design process."*

Considering the maximum potential construction impact that may arise is often not done, the inclusion in this EA is welcome. Unfortunately, this thought process was not carried through to the maximum potential impact that might be anticipated from operations or activities that would be supported or enabled by the proposed project. Please include additional details regarding any potential impacts to critical areas, and the location and details of proposed stormwater facilities.

II. Undisclosed impacts that might arise from the expanded facilities

The 2022 Site Master Plan was not included in the Draft EA. During the virtual meeting of 5 January 2023, the Tribe requested a copy and has not received one to date. A review of the Master Plan is essential to enable the Tribe to determine the potential for long-term operational impacts reasonably expected to occur at the site given the consolidation of other locations and the Draft EA wording (pg. 1-4) that notes the master planning process included the following goals and objectives:

- *Consider and meet near and long-term operational requirements for NMFS including expansion of the marine aquaculture program to include program space to be moved from NMFS Mukilteo and Montlake Research Stations, along with prospective future programs that include the NOAA Diving Center and Office of Marine and Aviation Operations Marine Operations Center – Pacific relocation.*
- *Plan and preserve areas on the MRS campus for the new seawater system including equipment and supply corridors while avoiding the existing system.*
- *Provide a cohesive site master plan that identifies strategic locations for future buildings to accommodate the expanded program requirements identified by NOAA.*

Expanding the facility will allow NOAA to enable or support more operations at the MRS, or in other areas. The EA should provide more detail regarding whether moving the operations or activities noted in the above bullets will result in: (1) any changes in the location, number or size of net-pens at the MRS; and (2) the training of divers or other in water work at or near the MRS. Both have the potential to interfere with Tribal treaty-reserved resources as well as the Tribe's treaty right to harvest.

III. Insufficient consideration given to the rights and interests of the federally recognized Suquamish Tribe

Treaty Rights

The EA does not acknowledge the Manchester Research Station lies within the Suquamish Tribe's aboriginal homeland and treaty-reserved fishing area, as noted in the first paragraph of this letter. There is no reference to treaty rights, no reference to Suquamish treaty fishing near the MRS, etc. This oversight is compounded by the erroneous statement on pages 4-49 that says *"The MRS and its vicinity lies within the traditional territory of the Snohomish, who represent but one of over 50 Southern Coast Salish tribal groups that traditionally frequented the Puget Sound Basin (Suttles and Lane 1990)."* Following this statement, there is a cursory review of "the Suquamish". To assist NOAA, the Tribe provides wording (see Appendix A) to correct and expand upon the information provided in the EA Ethnographic Context (pg. 4-49) section.

Duwamish Tribal Organization

The EA suggests the NOAA is confused about its responsibility to the federally recognized Indian tribes like the Suquamish Tribe versus the non-profit organization known as the Duwamish Tribal Organization (DTO), which the EA refers to as the Duwamish Tribe. There is no federal responsibility to consult with non-federally recognized tribes or tribal non-profit organizations.

Page 5-1 of the Tribal Consultation section of the EA indicates NOAA on October 10, 2022 initiated contact with federally recognized Tribes and that *"NOAA also reached out to the non-Federally recognized Duwamish Tribe on the same date."* The letter[6] to the DTO, similar to that sent to the federally recognized Tribes, was entitled *"NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation*". The body of the letter contained the wording (emphasis added):,

> *"Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act, and 36 CFR 800, NOAA has determined that the proposed project is a federal undertaking that has the potential to cause effects on historic and cultural resources and seeks to* ***initiate consultation with you****."*

Again, consultation is extended to federally recognized Tribes. NOAA has specific procedures for consultation with federally recognized Tribes found in *"NOAA Procedures for Government-to-Government Consultation With Federally Recognized Indian Tribal Governments."* Page 15 of the document states:

> *"E.O. 13175 and this Handbook apply only to federally recognized tribes. However, NOAA works with many non-federally recognized indigenous groups who are important partners in carrying out its mission and who have interests regarding NOAA's activities. Although NOAA recognizes the value of such partnerships, these communications and relationships do not constitute or require government-to-government consultation."*

Furthermore, the Advisory Council on Historic Preservation (ACHP), an independent federal agency comprised of 24 Presidentially appointed members from federal agencies, preservation organizations, Indian tribes, and expert private citizens, provides Section 106 consultation guidance to federal agencies. Page 3 of the Council's document, *"Guide to Working With Non-Federally Recognized Tribes in*

6 EA Appendix A-2 Tribal Outreach Correspondence

the Section 106 Process." states:

> *"In carrying out Section 106, a federal agency may invite state-recognized tribes or tribes with neither federal nor state recognition to participate in the review process as "additional consulting parties" based on a "demonstrated interest" in an undertaking's effects on historic properties."*

Though the ACHP Guide (pg. 3) states, *"The decision to invite a non-federally recognized tribe to participate in the Section 106 process is a discretionary decision by the federal agency"*, it is also very clear there are limitations to this discretion. A federal agency may invite non-federally recognized tribes *"to participate, as noted above, if they have a demonstrated interest in a project."* The DTO has no demonstrated interest in this project.

Again, the DTO is not a federally recognized Indian tribe and is not required to be treated as such by either the NOAA policy or federal law. The duty to consult in good faith and as a federal trustee is owed to the Suquamish Tribe and other federally recognized Indian tribes, not the DTO. As noted in the ACHP Guide (pg. 4), the DTO can provide views and information as members of the public. Further, DTO has not demonstrated interest in the project. DTO does not have treaty rights and Manchester is not in the aboriginal homeland of the historic Duwamish.

When referring to tribes by name, the EA must make a clear distinction between tribes at treaty times and present federally recognized tribes who are often successors-in-interest to those historic tribes. The same name can be used, but refer to completely different peoples. For example, the EA (pg. 4-50) refers to *"… the Duwamish, who lived further south near present-day Seattle and the Duwamish River valley…"* The DTO is not a federally recognized tribe and not a successor-in-interest to the historic Duwamish. There is no Duwamish Tribe today, but the lack of caveats in the EA wording on page 4-50 suggest a linkage between the Duwamish and the DTO which NOAA indicates it wishes to consult with.

As a reminder, regarding consultation with tribes, in numerous policy meetings in late 2022 with federal agencies (of which NOAA was a participant) tribes clearly communicated that Section 106 letters or letters to the Tribal chair were not considered adequate consultation. Federal agencies should continue to send those letters (and cc appropriate staff) but also reach out via telephone and email to ensure that the proper contacts at the Tribes are being notified.

IV. Other comments

The maps need clarification and consistency with the text provided. For example, page 2-18 refers to the relocation of some of the existing kelp/algae tanks, yet these tanks are not shown in the listing of buildings or features in Figures 2.1-3, 2.1-4, 2.1-5. Figure 2.1-6 listed in the narrative is the "Conceptual Site Circulation Layout". A map showing and labeling all the facilities (both current and proposed locations) listed in the narrative would be helpful.

The final EA should include the dimensions of the *"large floating marine net-pen complex for testing pilot-scale commercial aquaculture and understanding the impacts of commercial rearing activities."*[7]

When first introduced in the EA (pg. 3-1), Beaver Creek and the un-named tributary should be described as Type F streams (fish-bearing) upfront, rather than waiting to later (pg. 4-31). Additionally, the

7 EA page 3-1.

wording on page 4-31 should explicitly note that Beaver Creek is a Type F Stream, as it does already for the unnamed tributary, and has the same buffer requirements. Page 4-61 refers to fish passage barriers. Please include a map depicting their locations.

While most of the EA narrative describes the project being in Kitsap County, page 4-4 states, in error, that the MRS is located in Snohomish County (emphasis added): *"which applies to all lands and waters in Washington's coastal counties, including **Snohomish County** where the project is located."* This error may also be why the Snohomish people are referenced.

Page 4-15 states, *"The LOD for the Preferred Alternative is not within a mapped tsunami hazard zone, and therefore would not result in any increased hazard associated with tsunami. There would be no impact."* Maps from a recent report[8] suggest tsunami inundation at or near the site, or at best one can say, *"inundation is inferred but not quantified"*. See Figures 1a and 1b.

Fig. 1a. Inundation mapping (from Dolcimascolo et al. 2021)

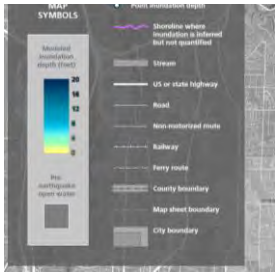

Fig. 1b. Legend for Figure 1a. (from Dolcimascolo et al. 2021)

Just as the reference to the stormwater manual on page 4-122 refers specifically to "*"Volume II, Chapter 2 of the County's Stormwater Design Manual, effective October 4, 2021 (Kitsap County 2021)",* the reference to the stormwater manual on page 4-36 should also.

Often documents lack a discussion of cavity nesting trees, it was good to see this was considered (pg. 4-62).

The MRS is located on the shoreline of Clam Bay. Imagery suggest the shoreline along the MRS is armored. Though the project did not envisage in-water work, since the required construction equipment[9] [10] will be on site, consideration should be given to replacing rock armoring with soft shoreline protection.

Page 5-1 states "*there were no concerns identified regarding the proposed action*". This statement is misleading and Suquamish had requested additional information which indicates that there may be concerns and comments forthcoming regarding the proposed action.

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8 Dolcimascolo, Alexander; Eungard, D. W.; Allen, Corina; LeVeque, R. J.; Adams, L. M.; Arcas, Diego; Titov, V. V.; González, F. I.; Moore, Christopher; Garrison-Laney, C. E.; Walsh, T. J., 2021, Tsunami hazard maps of the Puget Sound and adjacent waters—Model results from an extended L1 Mw 9.0 Cascadia subduction zone megathrust earthquake scenario: Washington Geological Survey Map Series 2021-01, 16 sheets, scale 1:48,000, 49 p. text.

9 EA pg. 2-16. Anticipated construction equipment for this phase would include crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, and tree removal equipment.

10 EA pg. 2-18. Anticipated construction equipment for this phase would include crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, and tree-removal equipment.

V. Conclusion

Thank you for the opportunity to comment on this EA. The Suquamish Tribe looks forward to working with NOAA on this project. Upon receipt and review of any updated documents or information, the Tribe may have additional comments. If there are any questions or discussions needed to better understand the Tribe's concerns please do not hesitate to contact me directly at 360-394-8449.

Sincerely,

Rod Malcom
Ecologist/Biologist
Suquamish Tribe

Attachments: Appendix A - – Replacement Wording for Ethnographic Context Area.

Appendix A - – Replacement Wording for Ethnographic Context Area.

The project area is in the heartland of the Suquamish People, the suq'ʷabš. The suq'ʷabš have an economic system focused heavily on marine resources, with ethnographic and historic period villages, camps, shellfish gathering localities, and fishing stations along the marine littoral of Kitsap County, including Clam Bay. Four pre-contact archaeological sites have been recorded in the project area vicinity. Suquamish Elders identified a multi-season camp site south of the project area that was used to fish, hunt, collect plant resources, and collect shellfish (Hilbert et al. 2001; Lane 1974). Suquamish Ancestors intensively used the shoreline of Clam Bay, Little Clam Bay, and Rich Passage. The project area has a high probability for unrecorded archaeological deposits in locations that have not been disturbed by previous construction and remediation activities.

References Cited

Hilbert, Vi, Jay Miller, and Zalmai Zahir

2001 Puget Sound Geography: Original Manuscript from Thomas T. Waterman. Lushootseed Press, Federal Way, Washington.

Lane, Barbara

1974 Identity, Treaty Status and Fisheries of the Suquamish Tribe of the Port Madison Indian Reservation. Prepared for the U.S. Department of the Interior and the Suquamish Tribe. 15 December 1974. On file at the Suquamish Tribe Archives, Suquamish, Washington.

APPENDIX A-4

NOAA'S RESPONSE TO COMMENTS

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Comment Letter 1: Washington Department of Ecology, Coastal Zone Management Program. December 5, 2022.

Summary of Comment	NOAA Response
Ecology met with NOAA staff on December 5, 2022 and provided a marked up copy of the Draft EA containing several comments and suggested edits they considered necessary to better demonstrate the Proposed Action's consistency with the Coastal Zone Management Act.	NOAA has prepared a standalone Coastal Consistency Determination to address Ecology's concerns, which has been included as Appendix B to the Final EA. Several edits have also been made to the EA in response to Ecology's comments, including: -Correction of County name in Section 4.1.1 -Clarification and use of Ecology's phrasing around WQC processes in Sections 4.5.1 and 4.9.1. -Clarification in introduction to Section 4.11 that a standalone CCD has been drafted and is attached as Appendix B. -Clarification that NOAA is not subject to the WPCA on federal lands in Section 4.9.2. -Clarification in Section 4.11 of how the Project demonstrates consistency with the SMA (i.e., through the use of the local SMP). -Clarification in Section 4.11 that the enforceable policies are addressed in more detail in the CCD, included as Appendix B of the EA. -Clarification in Section 4.11 of why the ORMA is not addressed in the EA. -Clarification in Section 4.11 of the role an NPDES permit plays in demonstrating consistency with the WPCA. -Inclusion of the development/submittal of the CCD in the Anticipated Regulatory Compliance column of Table 6-1 and in Table 6-2.

Comment Letter 2: United States Environmental Protection Agency, Region 10. December 12, 2022.

Comment	NOAA Response
The Marine Research Station includes approximately 22-acres of Department of Commerce/NOAA ("NOAA") property within the southern part of the Manchester Annex and is located along the shoreline of Clam Bay/Puget Sound in unincorporated Kitsap County, near Manchester, Washington. EPA is a federal holding agency for the Manchester Annex and maintains an environmental laboratory northeast of the MRS. The Department of Defense is the lead agency for the Manchester Superfund Site (also known as Old Navy Dump/Manchester Laboratory) (CERCLIS ID Number WA 8680030931), which has been on the National Priorities List since 1994, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act.[1] The site was previously owned by the U.S. Army and subsequently transferred to the U.S. Navy, which used the area for construction, repair, maintenance, and storage of submarine nets and boats, as well as for firefighting training and a landfill. These past activities and land uses have resulted in soils and sediments contaminated with dioxins and furans, polychlorinated biphenyls, metals, vinyl chloride, and asbestos.[2] Former remnant buried asbestos-clad pipelines associated with underground storage tanks were either removed and/or abandoned in place, but could still be present in the project area.[3] More recently, per- and polyfluoroalkyl substances (PFAS) has been identified in the groundwater.[4] In 1997, a cleanup plan was issued to address contamination at the former firefighting training and landfill areas, and Clam Bay, which included removing contaminated soil and structures in the former fire fighter training area; constructing a landfill cap and shoreline embankment protection system; placing clean sediment in the nearshore area to enhance natural recovery of the sediments; and issuing a temporary ban on subsistence-level shellfish harvesting. The plan also included long-term monitoring of the seeps, sediment and shellfish. In 2004, a formal review concluded that the landfill cap, shoreline protection system, and remedial activities have achieved the intended goal of reducing risks to human health and the environment. Supplemental contaminant sampling and long-term monitoring at the site are required and ongoing, including formal reviews every five years.	This comment provides background information relating to the Manchester Superfund Site, known contamination, previous cleanup actions, and monitoring requirements. This information is included in Section 4.17 of the EA. No changes to the EA are required in response to this comment.
EPA recommends the NEPA document evaluate both the context and intensity of the direct, indirect, and cumulative impacts of the proposed project to human health and the environment that includes existing contamination. While remedial investigations and studies have identified and characterized	The EA includes information relating to known contamination and acknowledges the potential for additional unknown contamination, particularly in relation

Comment	NOAA Response
certain areas of known contamination, the full extent of the project area has not been characterized and evaluated for additional contamination sources and contaminants (e.g., dioxins, furans, heavy metals, PCBs, PFAS, etc.). The presence of PFAS has only been recently identified and its full extent within the CERCLA site boundaries is unknown. PFAS is an emerging contaminant and migrates quickly through groundwater.	to PFAS, and includes mitigation measures to address potential impacts. Section 4.17 of the EA has been updated to incorporate the latest available information from the PFAS Site Inspection conducted by the USACE, and other changes in response to other comments as discussed below.
A February 2022 Site Inspection Report[5] indicated that PFAS was detected in groundwater below applicable screening levels[6] at both the Northern Simulator Complex and the other Firefighter Training Infrastructure. In the Main Simulator Complex, PFAS was detected in groundwater at concentrations that exceed applicable screening values. A critical point to note is that the applicable screening levels have been updated as of July 2022.[7]	The USACE released the Final Site Inspection Report and Addendum, both dated October 2022, to NOAA in February of 2023. The discussion of existing PFAS contamination within Section 4.17.2 of the EA (and accompanying Figure 4.17-2) has been revised to incorporate results of the Site Inspection Report relating to both groundwater and soil
Additionally, PFAS disposal methods and options are limited. Improper handling and disposal could spread PFAS to non-PFAS contaminated areas. EPA recommends consideration of the *Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances*[8] to address future PFAS disposal activities. Project excavation, improper handling of PFAS contaminated soils, and incomplete characterization of the site may result in impacts to human health and the environment and substantially complicate future remedial investigations, designs, and activities.	The EA acknowledges these potential effects and includes mitigation which requires NOAA to develop an EMMP to specified the required handling/disposal procedures for contaminated or potentially-contaminated soils encountered during construction. Mitigation Measure 4.17-1 has been updated to require consideration of the cited Interim Guidance document in determining these procedures.
The DEA indicates that the location of the proposed combined single seawater outfall is in close proximity to the shoreline embankment where substantially high levels of PCBs were identified during a recent sampling event.[9] The increased volume and velocity of the wastewater effluent outfall discharges may contribute to increased erosion of the shoreline embankment and intertidal bed of Clam Bay, and result in an additional source vector of PCBs to Clam Bay. EPA recommends the NEPA document include additional modelling, calculations, and engineering analysis to evaluate the potential outfall erosional impacts from increased outfall flow volumes and velocities to prevent additional erosion of the adjacent embankment and intertidal bed of Clam Bay.	Additional information regarding the known PCB contamination in the shoreline embankment and intertidal sediments has been added to Section 4.17.2 of the EA, based on the latest available information provided to NOAA. Additional information regarding the anticipated change in outfall volume/velocity, and resulting potential for increased erosion has been added to Section 4.5.3 and Section 4.17.3 of the EA.
Supplemental sampling of the shoreline embankment is planned in January 2023 to better determine the extent of the embankment PCB contamination. EPA recommends that the results from the supplemental embankment sampling be included in the NEPA document.	USACE has indicated that supplemental sampling of the shoreline embankment for PCBs is planned for March of 2023. Results will not be available until later part of 2023, likely after the EA has been finalized. No changes to the EA are required in response to this comment.
The DEA identifies and discusses marine mammals in the Puget Sound area, which migrate through marine waters adjacent to the MRS. Endangered Species Act listed marine mammals include the "endangered" southern resident killer "Orca" whales and two distinct populations of humpback whales (Central America Segment – "endangered" and Mexico Segment – "threatened). These marine mammal species are also listed as "endangered" by the State of Washington. A number of other marine mammal species in the area are protected under the Marine Mammal Protection Act. Designated critical habitat for the southern resident killer "Orca" whales include marine waters immediately adjacent to the MRS.[10] In addition, ESA listed marine fish species within the vicinity of Clam Bay/Puget Sound include the "threatened" Chinook salmon, steelhead trout, and yellow rockfish and the "endangered" Puget	Information relating to the presence of these protected species and their critical habitats is included within the EA, see Section 4.8.2 under subheadings "Fish and Other Aquatic Organisms" and "Marine Mammals". No changes to the EA are required in response to this comment.

Comment	NOAA Response
Sound/Georgia Basin Distinct Population Segments of bocaccio. ESA "critical habitat" for bocaccio and Chinook salmon has been designated in the marine waters immediately adjacent to the MRS.[11]	
EPA recommends the NEPA document include a Biological Assessment to evaluate the potential adverse impacts to Puget Sound marine mammals and fish species protected under ESA, and to their designated critical habitats. Identify conservation measures to ensure that ESA listed marine mammals, fish species, and their designated critical habitat have the necessary protections in place to mitigate for these impacts. In particular, the recent identification of PFAS and its potential to quickly migrate through groundwater requires further attention. The fate, persistence, bioavailability, and bioaccumulation of PFAS in the marine ecosystem are not known, and need to be fully characterized and evaluated in the BA.	Investigation of PFAS contamination at the site is ongoing by USACE. The EA acknowledges the potential for groundwater contamination, which has been revised based on the latest information provided to NOAA by USACE. As discussed in Section 4.17 of the EA, the proposed action, with implementation of recommended mitigation measures, including a contingency dewatering plan if groundwater is encountered during construction, is not anticipated to result in additional release or remobilization of PFAS from contaminated soils and/or groundwater compared to existing conditions. Although there may be existing impacts to the marine ecosystem from existing PFAS contamination at the project site, with implementation of the mitigation measures included in the EA, the proposed action would not exacerbate the existing conditions relating to mobilization of PFAS. Therefore, a biological assessment to evaluate impacts to marine mammals and fish is not considered necessary.
As previously noted, the DEA does not fully evaluate and characterize the potential contamination sources and contaminants within the project area at the Manchester Annex Superfund Site. Best management practices based on strategically developed plans will reduce the significance of project impacts. EPA recommends the DEA include commitments to develop and implement a comprehensive and focused Sampling and Analysis Plan (SAP) and Soil Management Plan (SMP) to ensure applicable sampling, characterization, storage/stockpiling, and disposal of contaminated soils and other waste materials associated with construction of the seawater treatment and distribution system and campus additions. The proposed work will require attentive considerations and processes to minimize the risk of transferring contamination outside of the CERCLA site boundaries and exposure to human health and the environment. The SAP must ensure accurate and thorough soil and groundwater characterization of contamination sources prior to any excavation activities. EPA recommends that NOAA consult and coordinate with the EPA Region 10 Remedial Project Manager, Patrick Hickey at (206) 553-6295 or hickey.patrick@epa.gov and the U.S. Army Corps of Engineers Project Manager, Ember Korver at (206) 764-3479 or ember.e.korver@usace.army.mil, in developing the SAP and SMP associated with the proposed project to ensure that appropriate steps are taken to protect the remedy and comply with existing institutional and land use controls defined in the CERCLA Record of Decision[12] for the Manchester Annex Superfund Site (Old Navy Dump/Manchester Laboratory).	The Draft EA acknowledges the potential contamination at the site and potential impacts of the proposed action relating to disturbance of contaminated areas (see Section 4.17.2) and includes mitigation measures to address potential impacts (see Section 4.17.4). The EMMP required by Mitigation Measure 4.17-1 would include a Sampling and Analysis Plan and Soil Management Plan. Additional information relating to the potential contamination has been added in response to EPA other comments. Mitigation Measure 4.17-1 has also been updated to require consultation and coordination with EPA Region 10 Remedial Project Manager and USACE staff during development of the EMMP, as requested.
Excavation, trenching, construction, and other ground-disturbing activities for the new seawater treatment and buried pipeline distribution system (Phase 1), and campus addition (Phase 2) may result in unearthing, exposing, and/or releasing potential contaminants of concern from soils and/or groundwater on site. As previously mentioned, EPA is concerned that the proposed project may include activities which affect the remedy and/or deviate from the institutional controls and land use restrictions detailed in the CERCLA ROD to prevent releasing contamination.	Mitigation Measure 4.17-2 requires that NOAA and its contactors shall implement and adhere to the institutional controls required by the CERCLA ROD. The EMMP prepared in accordance with Mitigation Measure 4.17-1 would set out the procedures to be followed to avoid the release or remobilization of contaminants during

Comment	NOAA Response
Once released, contaminants have the potential to migrate and distribute to adjacent off-site areas, such the Manchester State Park recreational areas, baseball fields, farmlands, etc. In the event the proposed project resulted in a release of contaminants from the CERCLA site in concentrations which exceed thresholds and pose risk to human health and the aquatic environment, future regulatory action could be required.	construction. Revisions have been made to Mitigation Measure 4.17-1 in response to this and other EPA comments to provide additional detail regarding the and require consultation and coordination with EPA and USACE staff during development of the EMMP.
To evaluate, identify and appropriate minimize the risk of releasing hazardous waste and contaminants from the CERCLA site, EPA recommends the NEPA analysis include following: Description of how NOAA will conduct additional surveys, studies, and analysis to identify and delineate areas of potential contaminants of concern, hazardous and waste materials, and toxic substances, such as asbestos, lead-based paint, PCBs, dioxins, PFAS, etc. in soils and groundwater not previously known or identified within the project area. Disclose information regarding these materials in the environmental document; Describe mitigation measures and best management practices that will be used to abate and/or minimize the potential release and exposure of potential contaminants of concern, hazardous and waste materials, and toxic substances during construction, excavation, trenching and other ground-disturbing activities; Describe how hazardous and waste materials, and toxic substances generated during construction activities will be stored, handled, and disposed in accordance with local, state and federal requirements; and Assurances that all hazardous materials and toxic substances that are excavated, handled, stockpiled, stored, generated, and/or disposed on-site and/or off-site comply with state, local, and federal requirements, such as the Resources Conservation, and Recovery Act. EPA recommends coordinating with the Remedial Project Manager for the CERLCA Site to minimize accidental release of contaminants from the site or impacting the remedy or ROD requirements of the cleanup within the project footprint.	Investigation of PFAS contamination at the site is ongoing by USACE. The Draft EA acknowledges the potential for soil and groundwater contamination based on the latest information that has been provided to NOAA by USACE. Additional information relating to PCB contamination has also been added to Section 4.17.2 in response to other comments. The Draft EA includes Mitigation Measure 4.17-1, which requires an EMMP be prepared for the project, which will include many of the details requested by EPA in this comment. Revisions have been made to Mitigation Measure 4.17-1 in response to this and other EPA comments to require coordination with the EPA Remedial Project Manager during development of the EMMP.
Pursuant to the Clean Water Act § 402 and 40 CFR Part 122, EPA administers the National Pollutant Discharge Eliminations System program for wastewater discharges associated with industrial activities. Although the State of Washington has been delegated permitting authority, EPA is the NPDES permitting agency for federal facilities/operators, such as the MRS.	The Draft EA includes acknowledgement that EPA administers the NPDES program (Section 4.5.1). An additional paragraph has been added to Section 4.5.1 to include discussion about EPA's NPDES General Permit for discharge of wastewater from federal aquaculture facilities.
Both the Preferred Alternative and Action Alternative 1 would result in land disturbance activities, such as clearing, grading, and excavating/trenching which would disturb one or more acres of land and result in discharges of construction stormwater to Waters of the United States and likely require coverage under the EPA NPDES Construction General Permit (CGP) for stormwater discharges.[13] For technical questions regarding the NPDES CGP, contact Margaret McCauley at (206) 553-1772 or mccauley.margaret@epa.gov.	The need for coverage under the NPDES CGP is identified in Section 4.5.4 and Table 6-2 of the EA. No changes to the EA are required in response to this comment.
To best align the regulatory processes of the Clean Water Act with the NEPA analysis, EPA recommends the NEPA document identify mitigation measures to ensure protection of water quality. For example, key requirements of the CGP include the development and implementation of a Stormwater Pollution Prevention Plan; erosion and sediment controls and pollution prevention practices; monitoring and inspections by qualified personnel to verify permit compliance; routine maintenance and taking corrective action to fix problems with controls or discharges; documentation of site inspections, dewatering inspections, and corrective actions; and certain other activities. EPA recommends the NEPA analysis include the CGP requirements as measures to minimize and mitigate potential impacts to the	Section 4.5.4 of the EA includes as BMPs for the project, the preparation of a SWPPP in accordance with EPA's CGP and outlines key requirements, such as an erosion and sediment control plan, maintenance and spill response procedures, that would be included in the SWPPP and permit conditions. These BMPs have been revised to include specific mention of monitoring and inspections by qualified personnel to verify permit compliance and

Comment	NOAA Response
marine environment.	documentation of inspections and corrective actions.
EPA is reissuing the NPDES General Permit for federal aquaculture facilities and aquaculture facilities located in Indian Country within the boundaries of Washington State (No. WAG130000). EPA has been coordinating with NOAA Fisheries during the NPDES GP reissuance process, and similarly recommends aligning the NPDES GP with this NEPA analysis as described further in this document. For technical questions regarding the NPDES GP (No. WAG130000), contact Martin Merz at (206) 553-0205 or merz.martin@epa.gov. EPA's analysis for the NPDES GP identified certain pollutants of concern in the discharge effluent associated with aquaculture facilities. These pollutants include, five day biochemical oxygen demand (BOD5), total suspended solids (TSS), settleable solids, nutrients, ammonia, chlorine, temperature, dissolved oxygen, aquaculture drugs and chemicals, and PCBs.[14] The significant sources of pollutants discharged from aquaculture facilities are solids from uneaten feed and feces, which are primarily organic matter with a high BOD5, and nutrients, including organic nitrogen and phosphorus. Residuals of drugs or chemicals used for maintenance or restoration of animal health, and residuals of chemicals used for cleaning equipment or for maintaining or enhancing water quality conditions are additional pollutants associated with aquaculture. To evaluate the potential environmental impacts on the receiving waters and marine ecosystem of Clam Bay/Puget Sound, EPA recommends the NEPA document characterize the discharge effluent from the MRS. For example, develop facility process flow models for the aquaculture facility/seawater treatment systems and compare the model to the proposed new seawater treatment system. Identify and quantify in the process flow models the marine and freshwater inputs and outputs, additional facility inputs, such as feed, drugs and chemicals, etc. and outputs, such as uneaten feed, feces, organic matter, nutrients, chemicals, etc. EPA recommends the NEPA document identify mitigation measures to protect water quality and human health. For example, the NPDES GP (No. WAG130000) maintains certain requirements to minimize the discharge of pollutants, such as the development of a Quality Assurance Plan and Best Management Practices Plan addressing solids control, facility maintenance, record keeping, and chemical storage. The effluent limits, disposal requirements, discharge prohibitions, record keeping, and reporting requirements were designed to reduce discharges of oxygen demanding materials, residual feed, and floating, suspended, and submerged matter, including fish mortalities. Identify the requirements of the NPDES GP and include them as measures to minimize and mitigate potential impacts to the marine environment.	EPA has not yet re-issued the NPDES General Permit. The MRS, under both existing conditions and with implementation of the Proposed Action is exempt from the existing NPDES General Permit as it falls below the permitting thresholds for Concentrated Aquatic Animal Production (CAAP) facilities (i.e., it would not produce more than 20,000 net pounds of fish a year, or more than 5,000 pounds of fish food during a calendar month). NOAA staff are aware of the proposed upcoming changes to the General Permit. If required, NOAA will apply for coverage under the new General Permit and comply with any applicable conditions and monitoring requirements once it is reissued. Additional discussion of the anticipated reissuance of the General Permit by EPA has been added to Section 4.5 in response to this comment.
The DEA indicates that all seawater outflow is proposed to discharge from one existing outfall, rather than from multiple outfalls, as currently occurs. The existing beach outfalls would be abandoned in-place. EPA recommends capping and/or plugging all abandoned/inactive outfalls.	Section 2.1.2 of the EA has been revised to clarify that the outfalls to be abandoned in place would be capped or plugged.
The DEA identifies several wetland areas along the southwest portion near the site entrance and east of the main access road west of Building 22. In particular, a wetland area was identified as an intermittent or seasonally saturated, depressional, palustrine scrub-shrub/emergent wetland, which is hydrologically connected to a ditch. In order to evaluate the direct and indirect impacts to wetland resources, EPA recommends a formal determination be conducted to identify and delineate the wetlands, and evaluate the surface hydrological connections between the wetlands and other surface waters (upstream and downstream), such as the unnamed tributary to Beaver Creek and/or Beaver Creek and the floodplain area.	Section 4.9.4 of the EA has been revised to include a new mitigation measure (Mitigation Measure 4.9-1) requiring that a formal wetland delineation be undertaken prior to construction, and formalizing and strengthening the previous BMPs as part of the mitigation measure.

Comment	NOAA Response
EPA recommends consideration of additional mitigation measure to minimize sedimentation and turbidity into the wetlands, floodplains, natural drainages, and adjacent downstream waters that discharge into estuarine intertidal areas of Clam Bay, which should be protective of the coastal zone.	
The Clean Air Act requires EPA to establish National Ambient Air Quality Standards (40 CFR part 50) for six "criteria" air pollutants for stationary, mobile, marine, and/or land-based sources. These standards establish threshold levels for criteria pollutants, including carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter (2.5 and 10 microns), and sulfur dioxide to be protective of human health and the environment. EPA recommends the NEPA document provide baseline estimates of the air quality criteria pollutants and their emission sources for the MRS (No Action Alternative) and compare this baseline information with air quality estimates for the Preferred Alternative and Action Alternative 1. In particular, construction activities would result in heavy earthmoving equipment operations, including crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, and tree removal equipment. Also evaluate mobile sources, such as light trucks and passenger vehicles, etc. Identify the sources and emissions of the six criteria pollutants and evaluate them in the NEPA document. EPA's Air Emissions Inventories website can be a useful tool in developing estimates for certain pollutant sources and their emissions. EPA recommends the NEPA document incorporate the estimated criteria air quality emissions information to support the development of mitigation measures, strategies, plans and/or programs for air quality emissions reductions and to ensure that proposed construction activities at the MRS attain and maintain the NAAQS, as well as state, regional, and local requirements in the Puget Sound area.	As described in Section 4.4.2 of the EA, the NOAA property is in an area that is in attainment for all criteria pollutants. As such, the General Conformity Rule de minimis levels, which were developed for nonattainment or maintenance areas, are not applicable to the proposed action area. Regardless, given the relatively small area of disturbance (approximately 1.1 acres during Phase 1 and less than 1 acre during Phase 2), and the short duration of construction (24 months total), construction emissions would not exceed the 100 tons per year for any criteria pollutant in a maintenance area. For example, using the general particulate emission factor equation recommended by EPA (Emissions = 1.2 tons/acre/month of activity), which describes that the amount of particulate emissions is proportional to the area of land being worked on and the level of construction activity, and conservatively assuming that the entire 1.1 acres during Phase 1 were disturbed in a single month, particulate matter emissions would be approximately 1.09 tons, Thus, particulate matter emissions would not approach the annual de minimis levels of 100 tons per year. Therefore, further quantitative analysis of construction emissions for criteria pollutants is not considered necessary. No changes to the EA are required in response to this comment.
EPA recommends the NEPA document include a Fugitive Dust Control Plan, which would include procedures to prevent, reduce, abate, and control dust during construction by implementing BMPs to protect the health of workers, MRS staff, the public and the environment. Identify and include BMPs, such as limiting exposed soil areas, wind barriers and cover tarps, applying dust suppression and vacuum control equipment, control traffic speed through the construction site, limit work on windy days, etc. Include training, work site monitoring, and corrective actions in the plan.	The proposed action would include standard BMPs for construction, such as dust control and vehicle idling limits, as discussed in Section 4.4.4 of the EA. The contractor specifications for the Phase 1 construction require the contractor to prepare and implement a Dirt and Dust Control Plan for NOAA approval prior to the commencement of construction. Similar specifications would also apply to Phase 2 construction. No changes to the EA are required in response to this comment.
The proposed two phase, two year construction schedule for the project would result in new traffic volumes and patterns, and place additional stress on existing rural roads, which may introduce additional traffic hazards resulting in significant impacts, if not appropriately mitigated. The DEA indicates that roads near the MRS would need to accommodate heavy truck traffic related to delivery of heavy equipment and materials/supplies, and import of fill material and export of excess excavated spoils, and construction worker commute vehicle trips to access the MRS. In particular, parking for construction	Section 4.14.4 has been revised to include new mitigation measures ((4.14-1 through 4.14-3) to address construction-related traffic disruption including requiring preconstruction coordination with EPA Manchester Laboratory.

Comment	NOAA Response
workers at the MRS will need to be evaluated as the current 45 parking spaces for staff and visitors at the MRS would not accommodate the proposed 50 construction workers. Additional temporary staging areas for spoil stockpiles and storage of construction equipment and materials would need to be considered in the NEPA document. To address the potential significant impacts associated with construction-related traffic, access, and parking at the MRS, EPA recommends the NEPA document include a Transportation, Access, and Parking Plan with mitigation measures. In particular, the entrance to MRS on Beach Drive East provides access to EPA's Manchester Environmental Laboratory. The two facilities share the main driveway from Beach Drive East through the NOAA property. EPA would appreciate continued communication and coordination between our respective agencies regarding transportation, traffic, and access planning for the two year, two phase construction schedule proposed for this project. Contact Barry Pepich, Director, EPA Manchester Laboratory at (360) 871-8701 or pepich.barry@epa.gov to discuss transportation and access issues between the two facilities.	
The DEA evaluates the environmental consequences of each resource to include the intensity and levels of potential effects associated with the Preferred Alternative and the Action Alternative 1.[18] EPA recommends the NEPA document summarize the environmental consequences of the Preferred Alternative and the Action Alternative 1 in comparative form, such as a table, which depicts the overall magnitude of impact and consideration of duration, geographic extent and potential likelihood to occur.	Table 6-1 of the EA summarizes the potential impacts of the Preferred Alternative and Action Alternative 1. This information is also included in Table ES-1 in the executive summary. No changes to the EA are required in response to this comment.
When analyzing the project impacts, EPA recommends determining what the cumulative impacts of the proposed project will be on both human health and the environment. For example, include an evaluation of the proposed project's synergistic effects in the context of interacting with, and potentially exacerbating the effects of other projects in proximity (e.g., the timing of the work coinciding with other human or natural disturbances that are affecting the project area). Greenhouse gas (GHG) emissions associated with past, present, and reasonably foreseeable future actions may result in cumulative impacts to climate change and resilience.	Cumulative impacts are addressed in Section 4.19 of the Draft EA (Section 4.20 in the Final EA due to renumbering). The analysis of potential impacts to climate change (including impacts from GHG emissions) in Section 4.3 is inherently cumulative in nature, as no single project is large enough to individually result in a measurable increase in global concentrations of GHG emissions or climate change. Revisions have been made to Sections 4.3 and Section 4.20.1 to clarify this.
Executive Order 13990 on *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*[19] requires the review of federal actions that would further promote and protect public health and the environment, such as reducing GHG and bolstering resilience to the impacts of climate change. Consistent with E.O. 13990, EPA recommends the NEPA document include an evaluation of GHG emission reductions and measures to bolster resiliency of the proposed action to climate change.	Analysis of impacts relating to GHG emissions is included in Section 4.3, Climate Change and Sea Level Rise of the EA. Section 4.3.4 includes recommendations to further reduce GHG emissions from the MRS and proposed action. No changes are required to the EA in response to this comment.
EPA recommends the NEPA document include estimates of project level GHG emissions (e.g., carbon dioxide, methane, nitrous oxide, and fluorinated gases) for the Preferred Alternative and Action Alternative 1 associated with construction resulting from heavy earthmoving equipment operations. The DEA identifies heavy construction equipment to include a crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, tree removal equipment, etc. Include GHG estimates from operations and maintenance activities in the NEPA document.	Given the relatively small area of grading (approximately 1.1 acres during Phase 1 and less than 1 acre during Phase 2), the amount and duration of heavy equipment operation during the 24 month construction period would be relatively small compared to other more typical construction or redevelopment projects. Quantitative analysis of GHG emissions associated with construction of the proposed action is therefore not considered necessary. No changes to the EA are required in response to this comment.

Comment	NOAA Response
EPA's *National Emissions Inventory* provides a comprehensive and detailed estimate of air emissions for criteria pollutants and hazardous air pollutants from air emissions sources. This inventory may be a useful resource for this analysis. Report GHG emissions estimates for their global warming potential weighted in CO2-equivalent units (CO2-e). In addition, EPA's *Greenhouse Gas Equivalencies calculator*[21] may be a useful tool to convert emissions or energy data to the equivalent CO2-e emissions for this project. EPA recommends the NEPA document include estimates of the current baseline GHG emissions associated with operations of the MRS, which would represent the No Action Alternative. In addition, include GHG estimates for facility operations associated with the Preferred Alternative or Action Alternative 1. EPA recommends depicting this information into a summary table to compare estimates of GHG emissions associated construction and operations of both action alternatives to the No Action Alternative (baseline). Executive Order 13990 emphasizes the importance for federal agencies to capture the full costs of GHG emissions, including consideration of global damages. The Interagency Working Group (IWG) on the Social Cost of Greenhouse Gases published a Technical Support Document[22] which included interim estimates for the Social Cost of carbon dioxide, methane, and nitrous oxide (referred to collectively as SC-GHG) for agencies to use "when monetizing the value of changes in GHG emissions resulting from regulations and other relevant federal agency actions until final values are published." EPA recommends the NEPA document evaluate and disclose the monetized climate damages using the relevant SC-GHG for the respective net and gross emissions for carbon dioxide, methane, and nitrous oxide for the Preferred Alternative and Action Alternative 1, including the No Action alternative. Providing estimates of these emissions discloses the different environmental impacts associated with emissions for each of the GHGs.[23] This comparative analysis would illustrate the costs and benefits to society associated with each alternative, to inform the public, as well as federal agency decision-making.	NOAA Administrative Order 216-6A Companion Manual, Section 6.F(i): Considering a Proposed Action's Contribution to Climate Change specifies that as long as tools, methodologies or data inputs are reasonably available, decision makers should quantify a proposed action's projected direct and indirect GHG emissions; or include a qualitative analysis and explain the basis for determining that quantification is not reasonably available. The introduction to Section 4.3 of the EA has been revised to provide additional clarification as to why a quantitative approach to GHG analysis has not been undertaken.
EPA recommends the NEPA document consider ongoing and projected regional and local climate change efforts to ensure robust climate resilience/adaption planning in the project design for construction, operations, and maintenance. Ongoing and projected regional and local climate impacts include, but are not limited to, sea-level rise, flooding, high intensity precipitation events, at-risk areas, increase temperatures and fire risk, etc. Consideration of these impacts would help avoid infrastructure investments in vulnerable areas and facilities, and unintended impacts on local communities. EPA recommends the NEPA document include consideration of relevant state, tribal, or local adaptation plans, if applicable.	The EA includes consideration of local adaption plans such as the Kitsap County Climate Change Resiliency Assessment (see Section 4.3.2), and analyzes the impacts of flooding (Section 4.10.3) as well as sea level rise and other climate change impacts (Section 4.3.3). Due to the nature of the research undertaken at the MRS, the proposed infrastructure improvements must be located in or near the coastal zone; however, the project has been designed to site new treatment infrastructure and new buildings away from the coastal edge of the property to the extent feasible. No changes are required to the EA in response to this comment.
Storm water runoff from impervious surfaces, such as parking lots, rooftops, roads and walkways represents a major source of water pollution carrying sediments, oil and grease, toxic substances, heavy metals, and other pollutants into adjacent wetlands, fish-bearing streams, and marine intertidal areas. The DEA estimates the replacement of the seawater treatment and distribution system (Phase 1) would result in net impervious surface area of 9,600 ft^2 (0.22 acres).[24] The campus addition (Phase 2) would include construction of four new research laboratory/office buildings and associated site improvements, which would result in 35,300 ft^2 (0.81 acres) of new impervious surfaces.[25] In 2019, Congress enacted the Water Infrastructure Improvements Act. The Act defines Green	Mitigation Measure 4.5-1 has been revised to require that design of new impervious surfaces utilize low-impact design and/or "green infrastructure" to avoid any direct discharge to surface waters.

Comment	NOAA Response
Infrastructure as: *the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspire stormwater and reduce flows to sewer systems or to surface waters.* EPA recommends the NEPA document evaluate green infrastructure systems in the planning, design, construction and operations of the seawater treatment replacement (Phase 1) and campus additions and associated site improvements (Phase 2) to better manage stormwater runoff, as well as bolster resiliency and adaptation to climate change impacts. Green infrastructure elements (e.g., permeable, porous or aggregate pavers) can be integrated into parking lot, roads, and walkway designs to increase permeability for snow melt and rainwater to infiltrate, and thereby reducing runoff and promoting groundwater recharge to replenish adjacent wetlands and streams. Rain gardens and/or vegetated bioswales installed in medians and along the parking lot perimeter are other options to slow stormwater runoff and promote infiltration, trap sediments and treat pollutants. EPA recommends that new impervious surfaces be constructed using permeable pavers. To minimize the volume of storm water runoff, EPA recommends collecting, harvesting, and/or storing water from rainfall for future alternative water uses, such as toilet flush water, hydronic radiant heating systems, etc. The variety of systems include rain barrels, commercial building cisterns, and ground level pits. In addition, runoff from storm water and snow melt collected on rooftops can be reduced and/or minimized by routing drainage pipes into rain barrels and cisterns for storage, and/or into permeable areas, including rain gardens and/or vegetated swales to infiltrate and recharge the ground water aquifer. Green rooftops covered with natural growing media and local native vegetation would enable rainfall infiltration and evapotranspiration of stored water and be considered in the new research laboratory/office buildings rooftop designs. For additional information and resources regarding green infrastructure designs, plans, and tools for this proposed project, please refer to EPA's Green Infrastructure website.[26]	
In 2020, CEQ released *Guiding Principles for Sustainable Federal Buildings*[27] consistent with fundamental sustainable design practices, such as EPA's green infrastructure, CEQ's six guiding principles focus on ensuring that Federal buildings: (1) employ integrated design principles; (2) optimize energy performance; (3) protect and conserve water; (4) enhance the indoor environment; (5) reduce the environmental impact of materials; and (6) assess and consider building resilience. EPA recommends incorporating CEQ's Guiding Principles into the planning, design, construction and operations of the seawater treatment system replacement (Phase 1) and campus addition and associated site improvements (Phase 2). In particular, integrated design principle for sustainable siting to support building resilience refers to identifying and mitigating current and projected site specific long-term risks through considerations that provide resilience due to anthropogenic and natural events, such as sea level rise, tsunamis, flooding, storm events, geological hazards (e.g., seismically active fault zones, erosion and landslide areas), contaminated areas, etc. Consider siting and locating the proposed infrastructure, buildings, and facilities to avoid these "at risk" areas to bolstering resilience of the MRS to the impacts of climate change. In particular, EPA recommends that the pipelines for the seawater treatment distribution system (Phase 1) and the proposed new Building A and Building 13 (Phase 2) be sited, located, planned, and designed to avoid areas of known contaminated soils and groundwater, and remnant buried asbestos-clad pipelines associated with former underground storage tanks within the former firefighting training area, and geological hazards.	As discussed in Sections 4.3.3 and 4.3.4 of the EA, best practices from CEQA's Guiding Principles for Sustainable Federal Buildings would be implemented, where feasible. The replacement seawater treatment and distribution system (Phase 1) has been designed to avoid the portion of the site (at the main parking lot) that is protected by institutional controls, and to avoid or minimize the areas of known TPH contamination remaining at the site or known existing/former UST areas (Figure 4.17-1). Information relating to PFAS contamination within the proposed pipeline corridor along the coastal roadway was not made available to NOAA until partway through the Phase 1 design, and the extent of PFAS contamination at the site is still not well defined (pending further testing from USACE planned for 2023). Similarly, the conceptual locations of Buildings A through D were chosen to avoid the areas of known TPH contamination to the extent practicable; however, a small area of Building A currently overlaps one such area, due to

Comment	NOAA Response
EPA recommends the NEPA document discuss energy innovations and sustainability features for the planning, design, construction, and operation of the campus addition based on the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED).[28] Incorporating green infrastructure and CEQ's sustainable design practices into the planning, design, construction, and operations of the campus addition may result in LEED Silver, Gold, or Platinum certification. EPA recommends incorporating green infrastructure and sustainable design practices to support LEED certification.	limited availability of suitable building space on the site and other constraints such as floodplains or steeper slopes. The EA contains mitigation measures to avoid or minimize adverse environmental impacts associated with the potential location of project components within potentially contaminated areas or if construction encounters remnant asbestos-clad pipes or USTs (see Section 4.17.4). No changes to the EA are required in response to this comment.
EPA recommends the NEPA document include an Environmental Justice analysis consistent with Executive Order 12898 on *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*.[29] E.O. 12898 directs federal agencies to identify and address the disproportionately high and adverse human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. In addition, E.O. 13985 on *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*[30] be considered into the NEPA document because it includes a modern definition of equity that clarifies a broader approach. To identify potential project level EJ concerns, EPA recommends applying two interactive web-based tools: the Environmental Justice Screening and Mapping Tool (EJScreen,Version 2.1)[31] and the Washington Environmental Health Disparities Mapping Tool (WEHD, Version 2.0).[32] EPA considers a project to be in an area of potential EJ concern when an EJScreen analysis for the project area shows one or more of the twelve EJ Indices at or above the 80th percentile in the nation and/or state. At a minimum, EPA recommends conducting a baseline EJ analysis to identify minority and low income populations in the project area using the EJScreen Tool. In addition, the WEHD can assist Federal agencies compare communities across the state for environmental health disparities. WEHD displays measures, such as poverty, health risks and diseases, and exposures to certain types and sources of pollution. EJScreen and WEHD are complementary tools. EPA recommends consideration of all areas impacted by the proposed action. For example, areas of impact can include a single block group, tract, city, county or span across several block groups and communities. When assessing large geographic areas, consider the individual block groups within the project area in addition to an area-wide assessment. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. As the screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location and/or proposed project, consider additional information in an EJ analysis to supplement EJScreen outputs. Further review or outreach may be necessary to evaluate EJ concerns associated with the proposed action. To support the success of the project EJ analysis, EPA recommends the NEPA document describes continued efforts to provide meaningful public outreach, engagement, and involvement with affected EJ communities regarding potential disproportionate and adverse environmental impacts associated with this proposed project. For example, construction activities would result in increased noise levels, traffic congestion, fugitive dust, exposure to contaminants, etc.	A new section 4.19, "Environmental Justice" has been added to the EA. No disproportionate effects to low-income or minority populations were identified from the Proposed Action.
Additionally, EPA recommends evaluating and including Traditional Ecological Knowledge and Indigenous Traditional Ecological Knowledge[33] when describing potential Environmental Justice concerns in the NEPA analysis.	As described in response to the previous comment, analysis of potential impacts to environmental justice communities has been added to Section 4.19 of the EA. No

Comment	NOAA Response
ITEK is a body of observations, oral and written knowledge, practices and beliefs that promote environmental sustainability and responsible stewardship of natural resources through relationships between humans and environmental systems. ITEK is owned by Indigenous people—including, but not limited to, Tribal Nations, Native Americans, Alaska Natives, and Native Hawaiians. The proposed project area may directly and/or directly impact areas of subsistence and cultural use by local indigenous and other users. The evaluation and incorporation of ITEK in the NEPA analysis provide a mechanism for further identifying those potential impacts and ways in which to avoid and mitigate them. Consistent with the Promising Practices for EJ Methodologies in NEPA Reviews,[34] EPA provides the following recommendations and considerations when developing mitigations for impacts to communities with EJ concerns: The unique characteristics and conditions of minority populations and low-income populations in the affected environment may require adaptive and innovative mitigation measures to sufficiently address the specific circumstances and impacts presented by the proposed action. This includes mitigation of identified disproportionately high and adverse impacts, whenever feasible; Throughout the NEPA process, agencies may wish to (as appropriate) involve potentially affected minority populations and low-income populations as agencies develop and implement mitigation measures and monitoring. Establishing groups made up of community members can be an effective method of engaging minority and low-income populations as an agency develops mitigation measures; Agencies may wish to identify mitigation and monitoring measures designed specifically to address impacts to minority populations and low-income populations in the affected environment separately in the NEPA decision document and also separately in an environmental justice technical report; and If mitigation measures for impacts to minority populations and low-income populations in the affected environment have been identified in the NEPA document, agencies may wish to develop an adaptive management plan and conduct implementation and effectiveness monitoring. Monitoring implementation of mitigation measures can inform an agency and community whether the measures are on schedule and when they have been completed. Through the use of effectiveness monitoring, an agency and community can learn if the mitigation measures are providing the predicted outcomes. An adaptive management plan can provide agencies with a means for taking corrective action if mitigation implementation or effectiveness monitoring indicates the measures are not achieving the intended outcomes.	disproportionate effects to low-income or minority populations were identified from the Proposed Action, therefore no additional mitigation measures, revisions to existing mitigation measures, or adaptive management plans are required.
EPA encourages NOAA to consult with the Puget Sound Tribes and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the NEPA document describe the issues raised during the consultations and how those issues were addressed.	See revisions made to Section 5.2 of the EA, which summarizes tribal consultation and other engagement undertaken to date regarding this proposed action.

Comment Letter 3: Washington Department of Ecology, Hazardous Waste and Toxic Reductions Program. December 19, 2022

Comment	Response
As noted in the prepared Draft EA, the NOAA Manchester Research Station Seawater System Replacement and Campus Addition Project will take place on a property considered part of the Old Navy Dump/Manchester Laboratory Superfund Site (EPA ID WA8680030931). For the purposes of Dangerous Waste Annual Reporting, EPA ID/State ID WA8680030931 is attributed to the Manchester Laboratory, located at 7411 Beach Drive East, Manchester, WA 98353. The project site identified in the Draft EA is 7305 Beach Drive East, Port Orchard (Manchester), WA 98366. If, in accordance with the Dangerous Waste Regulations (WAC 173-303), an EPA/State ID number is obtained for this project location, a site-specific EPA/State ID number will need to be issued unless these properties are deemed contiguous.	Comment noted. No revisions to the Draft EA are required in response to this comment.

Comment Letter 4: United States Army Corps of Engineers. December 20, 2022.

Comment	Response
Section 2.1.3 Phase 1 Page 2-16. Request contractor contact USACE prior to commencing fieldwork. USACE may be conducting environmental field activities during the same timeframe.	Comment noted. As acknowledged in Section 4.17.2 of the EA, the restrictive covenant for the site requires that the USACE be notified in writing prior to any construction, demolition, or excavation activities within the Former Fire Training Area. No changes to the EA are required in response to this comment.
Section 4.7.2 Affected Environment- Inventory Results Page 4-51 "Second paragraph." The concrete foundation is a remnant of the former U.S. Navy northern fire training simulator building.	Clarification has been added to this paragraph (second paragraph under subheading "Inventory Results" in Section 4.7.2 of the EA.
Section 4.17, 4-17-2 Affected Environment Page 4-115 Recommend adding to "In the event of future subsurface excavations in the control area:" bullet at bottom of page that Contractors may encounter petroleum contaminated soils and groundwater while trenching for seawater pipeline installation north of Building 1, south of Building 6 and east of Buildings 26 and 27 along the roadway.	The bulleted list referred to this comment is the exact wording of the institutional controls that are in place at the property. Adding additional text to this list would be misleading. The potential for construction to encounter petroleum-contaminated soils and groundwater in the referenced areas is identified as a potential impact of the proposed action and mitigation measures are included to reduce the impacts (see Section 4.17.4 of the EA).
Section 1.1.1 Pg 1-1. Last paragraph of the page. Parenthesis missing after EA.	Section 1.1.1 of the EA has been revised to correct this typographical error.
Section 2.1.2. Pg 2-3 "Third paragraph of Seawater Treatment and Distribution System." There is a high concentration of PCBs in the bluff at the outfall locations. Abandoning these outfalls may impact those PBC-contaminated soils.	Additional information regarding the known PCB contamination in the shoreline embankment and intertidal sediments has been added to Section 4.17.2 of the EA, based on the latest available information provided to NOAA.
Figure 2.1-4. Suggest adding a note that only one existing outfall will be used in the preferred alternative and the remaining outfalls will be abandoned in place. Suggest adding a note that the maximum depth of piping as described in Section 2.1.3 (pg 2-17, 2nd paragraph).	Figures 2.1-3 and 2.1-4 have been revised to indicate which outfalls would be abandoned in place and which would be retained.
Table 2.1-1. Suggest adding depths in the descriptions. Table 2.1-3. Are these components all going to disturb the same depths? Suggest adding depths related to disturbance.	Estimated depths of disturbance for Phase 1 are described in the text of Section 2.1.3, Site Preparation and Construction Activities. As noted in that section, the depth of disturbance would vary depending on pipeline diameter, number of pipelines in the particular trench, and required backfill and overburden. Revisions have been made to Table 2.1.3 to include the maximum depth of disturbance.
Section 2.1.4 "1st paragraph, 4th sentence." This sentence states that increase in velocity of 5.8 feet per second. What is the existing velocity for this outfall? Please include.	Additional information regarding the anticipated change in outfall volume/velocity has been added to Section 4.5.3 and Section 4.17.3 of the EA.
Section 4.2.2 "1st paragraph of Topography, Geology, Soil." The last sentence states, "Adjacent to the northeast (on EPA-owned property) is a capped landfill associated with the Manchester Superfund Site." The Former Fire Training Area on which the NOAA property is located is also part of the Manchester Superfund Site.	Comment noted. This paragraph of the EA has been edited to remove reference to the Superfund site as this is first time it is mentioned in the document. Revisions have been made to Section 4.17.2 to explain that landfill on adjacent property is also part of the Superfund site (in addition to the former fire training area on the NOAA property).
Figure 4.2-1. Per the 2019 USACE Manchester Annex Five Year Review, the shoreline is exhibiting erosion, as well, due to tidal forces. Is this included in the assessment? This may impact the existing outfall and the abandonment of the other outfalls.	Revisions made to Sections 4.2.2 and 4.3.2 to acknowledge reported coastal erosion. Potential impacts from outfall changes re contamination has been added in Section 4.17.3 of the EA.

Comment	Response
Section 4.3.2. Kitsap County published a Climate Change Resiliency Assessment in June 2020 that includes a sea level rise assessment. Suggest also including the results of that here in this discussion. https://www.kitsapgov.com/dcd/Kitsap_climate_assessment/KitsapCountyClimateAssessment_June2020%20-%202%20Full%20Assessment%20LowRes.pdf	The Kitsap County's 2020 Resiliency Assessment is mentioned in Section 4.3.1 (Regulatory Setting) of the Draft EA. Edits have been made to Section 4.3.2 (Affected Environment) to explain that the Resiliency Assessment presented sea level rise scenarios derived from an interactive sea-level rise visualization tool from the University of Washington Climate Impacts Group (Miller et al 2018). The anticipated sea level rise described in Section 4.3.2 is based on the same University of Washington Impacts Group study.
Section 4.17.1 "2nd paragraph of FEDRAL RCRA/CERCLA." Tier II requirements are part of EPCRA rather than RCRA. Agree that RCRA has been delegated to the States. However, it is my understanding that Federal Facilities still need to follow RCRA.	The heading for this subsection of Section 4.17.1 has been updated to include EPCRA. The subsection already includes discussion of both EPCRA and RCRA.
Section 4.17.2 "Existing contamination." There is PCB contamination in the soils in the shoreline at the NOAA facility (Has the 2020 report been provided to NOAA?) Also there is PCB contamination in the sediments along the bluff that would be impacted by the higher velocity from the single outfall.	Additional information regarding the known PCB contamination in the shoreline embankment and intertidal sediments has been added to Section 4.17.2 of the EA, based on the Final 2020 Data Analysis Report for Clam Tissue and Sediment Sampling (USACE 2021b).
Figure 4.17-2. Recommend updating figure to the current federal PFAS screening levels.	The EPA Screening Levels referred to in Figure 4.17-2 are the July 2022 EPA screening levels. Samples were also compared to the Washington state screening levels for informational purposes only.
Section 4.17-3, Page 4-121. There is PCB contaminated soils along the bluff and in the sediments of Clam Bay. While these aren't directly impacted by the new construction, the resulting increase in water velocity through the single outfall may change the locations of PCB in the sediment and the abandonment of the remaining outfalls will potentially impact the PCB-contaminated soils in the bluff/shoreline.	Additional information regarding the anticipated change in outfall volume/velocity, and resulting potential for increased erosion has been added to Section 4.5.3 and Section 4.17.3 of the EA.
Section 4.17-3, Page 4-122. "2nd paragraph of the page." Recommend revising the PFAS concentrations and descriptions of exceedances need to include the updated DOD/Federal screening levels.	The description of PFAS results has been updated to reflect the results and screening levels reported in the Addendum to the Final Site Inspection Report (USACE 2022b) provided to NOAA on February 6, 2023. Figure 4.17-2 has also been updated.

Comment Letter 5: Duwamish Tribal Organization. December 20, 2022

Comment	Response
Based on the information provided and our understanding of the project and its APE, we would typically recommend an archaeological review performed for this project. This is in an area the Duwamish Tribe considers culturally significant and has a high probability to have unknown archaeological deposits, especially if excavation cuts below fill. The DAAP WISAARD predictive model indicates that an archaeological survey is highly recommended with a very high risk of encountering cultural resources. We understand and recognize that the Manchester Research Facility sits on disturbed ground. We also understand that shovel probe testing has been conducted in the area which yielded no pre-contact cultural artifacts as indicated by AECOM during the virtual meeting. Therefore**,** the Tribe would accept an IDP (inadvertent discovery plan) to be put in place during excavation.	Section 4.7.4 of the EA contains standard protocols for inadvertent discoveries. No changes to the EA are required in response to this comment.

We also request that if any archaeological work or monitoring is performed, we would like notification. Cultural and archaeological resources are non-renewable and are best discovered prior to ground disturbance. The Tribe would also like the opportunity to be present if or when an archaeologist is on site in the event that an artifact or cultural resource is encountered.	The standard protocols for inadvertent discoveries in Section 4.7.4 have been modified to include notification of tribal representatives and other interested parties as appropriate, in the event of an inadvertent discovery. NOAA intends for this to apply to the Duwamish Tribal Organization as an interested party.
In addition, the Tribe supports the containment of noxious weeds during construction and strongly recommends that only native vegetation be used in any proposed landscaping.	Mitigation Measure 4.8-1 has been revised to require native species for new or replacement landscaping plantings wherever practicable.

Comment Letter 6: Suquamish Tribe. January 18, 2023

Comment	Response
The site was formerly used by the Navy as a fire training facility (EA page 1-2). There are numerous statements in the EA (such as pgs. 2-22, 4-115, 4-120, 4-121, 4-122) about areas of known contamination as well as past, present or future sampling that has occurred or will occur at the site. In addition, the areas of known contamination shown in Figure 4.17-1, the EA needs to include a map showing the sampling locations, particularly as the EA (pg. 4-119) states: "*The vertical and horizontal extent of PFAS contamination at the site has not been well-delineated due to the limited sampling program, and USACE staff have indicated that additional sampling will be undertaken in the future (Korver, pers. comm. 2022).*" The Tribe requests to be kept informed of all proposed current and/or future sampling efforts including a request to receive draft QAPP and sampling plans.	Sampling locations are shown on Figure 4.17-2 of the EA. NOAA does not have any future sampling efforts planned, but has passed on the tribe's request for results of future sampling to USACE, who are planning additional sampling in 2023. No changes to the EA are required in response to this comment.
There are several statements to the effect that the proposed work on the seawater distribution system will not alter the amount of seawater taken in, or water effluent volume and quantity compared to existing conditions, or both4. The EA should provide a history of water intake over the last ten years as well as the maximum amount of water than can be taken in to determine how much water could be utilized in the future compared to past use.	Additional information relating to pump rates for the existing seawater intake has been added to Section 2.1.2 "Seawater Treatment and Distribution System". Detailed water intake history for the last ten years is not available; however, NOAA staff have indicated that the pumps maintain a fairly constant volume of water, between 2,200 and 2,500 gallons per minute, 24-hours per day, 7days per week.
There is an acknowledgement that due to the reduction of the number of outfalls that the velocity of the combined outfall will increase5. Though the EA (pg. 2-19) states, *"The velocity of discharge from the main outfall may increase slightly compared to existing conditions, to approximately 5.8 feet per second, due to the increased volume"*. The EA (pg. 4-69) concluded (emphasis added): *"Discharge from the central outfall at a higher velocity than at present could alter conditions in the immediate vicinity of the outfall, but it is expected that effects on aquatic species would be negligible, because the existing outfall discharges onto rip-rap rather than fine sediments that could increase turbidity."* And on page 4-36 (emphasis added): *"Discharge from the proposed replacement seawater circulation system will connect to the existing seawater discharge outfall at a location upland from Clam Bay (approximately elevation of 18 feet MSL), with no change in total discharge volume or quality. The minor (15 to 20 percent) increase in volume and associated increase in discharge velocity from the main outfall (due to the proposed consolidation of all seawater discharge via one outfall) is not anticipated to cause water quality issues within Clam Bay, because the existing outfall discharges onto rip-rap, and therefore the increased discharge velocity would not cause increased scour of fine sediments that would increase turbidity."*	Additional information regarding the anticipated change in outfall volume/velocity, and resulting potential for increased erosion has been added to Section 4.5.3 and Section 4.17.3 of the EA.

Comment	Response
However, aerial imagery suggests discharge from these outfalls already erode the intertidal material. There is the potential that increased discharge could increase erosion, and though any impacts of turbidity may be considered discountable, any erosion occurring reduces habitat quality in the area. In regard to water intake velocities, the EA (pg. 2-19) states, *"It is assumed that proposed revisions or replacements to the seawater distribution system will not alter seawater intake velocities and volumes and water effluent quality and volumes currently operating consistent with existing permit limitations."*	
The EA (pg. 2-14) stated: *"Detailed design for the buildings has not commenced, therefore this section conservatively describes the changes based on conceptual design and represents a "maximum envelope of development" for each component, such that the analysis within this EA will still be valid, even if the exact details, number of buildings, dimensions, layout and/or footprint of the proposed buildings change during the design process."* Considering the maximum potential construction impact that may arise is often not done, the inclusion in this EA is welcome. Unfortunately, this thought process was not carried through to the maximum potential impact that might be anticipated from operations or activities that would be supported or enabled by the proposed project. Please include additional details regarding any potential impacts to critical areas, and the location and details of proposed stormwater facilities.	The exact location and specific details of the proposed stormwater facilities to serve the four new buildings has not yet been determined, as that phase of the Proposed Action has not been through detailed design. Mitigation Measure 4.5-1 requires that the future design of these systems shall maintain the pre-development hydrology, and revisions have also been made to this mitigation measure to require that low-impact design features be used to avoid any direct discharge of stormwater to waterbodies from new impervious surfaces.
The 2022 Site Master Plan was not included in the Draft EA. During the virtual meeting of 5 January 2023, the Tribe requested a copy and has not received one to date. A review of the Master Plan is essential to enable the Tribe to determine the potential for long-term operational impacts reasonably expected to occur at the site given the consolidation of other locations and the Draft EA wording (pg. 1-4) that notes the master planning process included the following goals and objectives: *Consider and meet near and long-term operational requirements for NMFS including expansion of the marine aquaculture program to include program space to be moved from NMFS Mukilteo and Montlake Research Stations, along with prospective future programs that include the NOAA Diving Center and Office of Marine and Aviation Operations Marine Operations Center – Pacific relocation.* *Plan and preserve areas on the MRS campus for the new seawater system including equipment and supply corridors while avoiding the existing system.* *Provide a cohesive site master plan that identifies strategic locations for future buildings to accommodate the expanded program requirements identified by NOAA.* Expanding the facility will allow NOAA to enable or support more operations at the MRS, or in other areas. The EA should provide more detail regarding whether moving the operations or activities noted in the above bullets will result in: (1) any changes in the location, number or size of net-pens at the MRS; and (2) the training of divers or other in water work at or near the MRS. Both have the potential to interfere with Tribal treaty-reserved resources as well as the Tribe's treaty right to harvest.	No changes are proposed to the location, number, or size of net-pens at the MRS, and no other in-water changes are proposed as part of the Proposed Action. The Proposed Action also does not include built space for potential future relocation of activities from NOAA's Montlake or Mukilteo Research Stations, Diving Center, or Marine Operations Center -Pacific. Clarification has been added to Section 2.1.2 of the EA, following Table 2.1-2. A copy of the Site Master Plan is being provided to the tribe, as requested.
The EA does not acknowledge the Manchester Research Station lies within the Suquamish Tribe's aboriginal homeland and treaty-reserved fishing area, as noted in the first paragraph of this letter. There is no reference to treaty rights, no reference to Suquamish treaty fishing near the MRS, etc. This oversight is compounded by the erroneous statement on pages 4-49 that says *"The MRS and its vicinity lies within the traditional territory of the Snohomish, who represent but one of over 50 Southern Coast Salish tribal groups that traditionally frequented the Puget Sound Basin (Suttles and Lane 1990)."* Following this statement, there is a cursory review of "the Suquamish". To assist NOAA, the Tribe provides wording (see Appendix A) to correct and expand upon the information provided in the EA Ethnographic Context (pg. 4-49) section.	NOAA apologizes for the incorrect reference to the Snohomish and omission of information relating to the Suquamish, and thanks the Tribe for the additional information provided. Revisions have been made throughout the EA, particularly in Sections 4.7 and 5.2.

Comment	Response
The EA suggests the NOAA is confused about its responsibility to the federally recognized Indian tribes like the Suquamish Tribe versus the non-profit organization known as the Duwamish Tribal Organization (DTO), which the EA refers to as the Duwamish Tribe. There is no federal responsibility to consult with non-federally recognized tribes or tribal non-profit organizations. Page 5-1 of the Tribal Consultation section of the EA indicates NOAA on October 10, 2022 initiated contact with federally recognized Tribes and that *"NOAA also reached out to the non-Federally recognized Duwamish Tribe on the same date."* The letter[6] to the DTO, similar to that sent to the federally recognized Tribes, was entitled *"NOAA Fisheries and NWFSC Manchester Research Station Seawater System Replacement and Campus Addition Project - Section 106 Consultation*". The body of the letter contained the wording (emphasis added):, *"Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act, and 36 CFR 800, NOAA has determined that the proposed project is a federal undertaking that has the potential to cause effects on historic and cultural resources and seeks to* ***initiate consultation with you****."* Again, consultation is extended to federally recognized Tribes. NOAA has specific procedures for consultation with federally recognized Tribes found in *"NOAA Procedures for Government-to-Government Consultation With Federally Recognized Indian Tribal Governments."* Page 15 of the document states: *"E.O. 13175 and this Handbook apply only to federally recognized tribes. However, NOAA works with many non-federally recognized indigenous groups who are important partners in carrying out its mission and who have interests regarding NOAA's activities. Although NOAA recognizes the value of such partnerships, these communications and relationships do not constitute or require government-to-government consultation."* Furthermore, the Advisory Council on Historic Preservation (ACHP), an independent federal agency comprised of 24 Presidentially appointed members from federal agencies, preservation organizations, Indian tribes, and expert private citizens, provides Section 106 consultation guidance to federal agencies. Page 3 of the Council's document, *"Guide to Working With Non-Federally Recognized Tribes in the Section 106 Process."* states: *"In carrying out Section 106, a federal agency may invite state-recognized tribes or tribes with neither federal nor state recognition to participate in the review process as "additional consulting parties" based on a "demonstrated interest" in an undertaking's effects on historic properties."* Though the ACHP Guide (pg. 3) states, *"The decision to invite a non-federally recognized tribe to participate in the Section 106 process is a discretionary decision by the federal agency"*, it is also very clear there are limitations to this discretion. A federal agency may invite non-federally recognized tribes *"to participate, as noted above, if they have a demonstrated interest in a project."* The DTO has no demonstrated interest in this project. Again, the DTO is not a federally recognized Indian tribe and is not required to be treated as such by either the NOAA policy or federal law. The duty to consult in good faith and as a federal trustee is owed to the Suquamish Tribe and other federally recognized Indian tribes, not the DTO. As noted in the ACHP Guide (pg. 4), the DTO can provide views and information as members of the public. Further, DTO has not demonstrated interest in the project. DTO does not have treaty rights and Manchester is not in the aboriginal homeland of the historic Duwamish. When referring to tribes by name, the EA must make a clear distinction between tribes at treaty times and present federally recognized tribes who are often successors-in-interest to those historic tribes. The same name can be used, but refer to completely different peoples. For example, the EA (pg. 4-50) refers to *"… the Duwamish, who lived further south near present-day Seattle and the Duwamish River valley…"* The DTO is	NOAA apologizes for the incorrect use of terminology within the EA and in letters to non-federally recognized tribal organizations. Revisions have been made throughout the EA, particularly in Sections 4.7 and 5.2, to correct the terminology. Care will be taken during future NOAA actions to use the correct terminology when referring to non-federally recognized organizations, requirements of Section 106, and use of tribal names in historic contexts (e.g., treaty times) and present-day.

Comment	Response
not a federally recognized tribe and not a successor-in-interest to the historic Duwamish. There is no Duwamish Tribe today, but the lack of caveats in the EA wording on page 4-50 suggest a linkage between the Duwamish and the DTO which NOAA indicates it wishes to consult with.	
As a reminder, regarding consultation with tribes, in numerous policy meetings in late 2022 with federal agencies (of which NOAA was a participant) tribes clearly communicated that Section 106 letters or letters to the Tribal chair were not considered adequate consultation. Federal agencies should continue to send those letters (and cc appropriate staff) but also reach out via telephone and email to ensure that the proper contacts at the Tribes are being notified.	Comment noted. NOAA's tribal liaison has updated their contact list for the Suquamish Tribe to include additional staff telephone and email contacts.
The maps need clarification and consistency with the text provided. For example, page 2-18 refers to the relocation of some of the existing kelp/algae tanks, yet these tanks are not shown in the listing of buildings or features in Figures 2.1-3, 2.1-4, 2.1-5. Figure 2.1-6 listed in the narrative is the "Conceptual Site Circulation Layout". A map showing and labeling all the facilities (both current and proposed locations) listed in the narrative would be helpful.	Revisions have been made to Figures 2.1-3 through 2.1-5 to reference existing facilities mentioned in the text, and cross-references to these figures have been added to appropriate locations within Sections 2 and 3.
The final EA should include the dimensions of the *"large floating marine net-pen complex for testing pilot-scale commercial aquaculture and understanding the impacts of commercial rearing activities."*[7] [7] EA page 3-1.	Section 3 has been revised to include dimensions and location of the existing net-pen complex and to clarify that no changes to it would occur as part of the proposed action.
When first introduced in the EA (pg. 3-1), Beaver Creek and the un-named tributary should be described as Type F streams (fish-bearing) upfront, rather than waiting to later (pg. 4-31). Additionally, the wording on page 4-31 should explicitly note that Beaver Creek is a Type F Stream, as it does already for the unnamed tributary, and has the same buffer requirements. Page 4-61 refers to fish passage barriers. Please include a map depicting their locations.	Sections 3 and 4.5.2 of the EA have been revised to clarify that both Beaver Creek and the unnamed tributary are fish-bearing. The location of the barriers has been added to Figure 4.5-1.
While most of the EA narrative describes the project being in Kitsap County, page 4-4 states, in error, that the MRS is located in Snohomish County (emphasis added): *"which applies to all lands and waters in Washington's coastal counties, including **Snohomish County** where the project is located."* This error may also be why the Snohomish people are referenced.	Section 4.1.1 (subheading Coastal Zone Management Program) has been revised to correct this typographical error.
Page 4-15 states, *"The LOD for the Preferred Alternative is not within a mapped tsunami hazard zone, and therefore would not result in any increased hazard associated with tsunami. There would be no impact."* Maps from a recent report[8] suggest tsunami inundation at or near the site, or at best one can say, *"inundation is inferred but not quantified"*. (Copy of map provided with comment).	Section 4.2.4 (subheading Geological Hazards) has been revised to include details from the more recent study by Dolcimascolo et al. Section 4.3.2 (subheading Tsunamis) has been revised to clarify that the shoreline of the MRS may be subject to inundation during a large tsunami event, per the findings of the study.
Just as the reference to the stormwater manual on page 4-122 refers specifically to ""*Volume II, Chapter 2 of the County's Stormwater Design Manual, effective October 4, 2021 (Kitsap County 2021)",* the reference to the stormwater manual on page 4-36 should also.	Section 4.5.3 (subheading Operation) has been revised to specifically reference the specific volume.
Often documents lack a discussion of cavity nesting trees, it was good to see this was considered (pg. 4-62).	Comment noted. No changes to EA are required in response to this comment.
The MRS is located on the shoreline of Clam Bay. Imagery suggest the shoreline along the MRS is armored. Though the project did not envisage in-water work, since the required construction equipment[9] [10] will be on site, consideration should be given to replacing rock armoring with soft shoreline protection. [9] EA pg. 2-16. Anticipated construction equipment for this phase would include crane, backhoes, grader,	NOAA notes the commenter's request; however, the requested changes to the shoreline embankment are outside the scope of the Proposed Action currently being undertaken. Future replacement of the armored shoreline with soft shoreline protection may be

Comment	Response
dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, and tree removal equipment. [10] EA pg. 2-18. Anticipated construction equipment for this phase would include crane, backhoes, grader, dozer, vibratory or sheepsfoot roller, concrete trucks, concrete pumps, and tree-removal equipment.	considered as a separate, future action, but would require substantial consultation with USEPA and USACE in relation to the PCB-contaminated soils and sediments in this area. No changes to EA are required in response to this comment.
Page 5-1 states "*there were no concerns identified regarding the proposed action*". This statement is misleading and Suquamish had requested additional information which indicates that there may be concerns and comments forthcoming regarding the proposed action.	Revisions have been made to Section 5.2 to clarify that no concerns were identified by the Stillaguamish during the October 31, 2022, meeting with NOAA, prior to release of the Draft EA. Additional revisions to the section have also been made to this section to summarize consultation with Suquamish tribal representatives that occurred after publication of the Draft EA.
Appendix A - – Replacement Wording for Ethnographic Context Area. The project area is in the heartland of the Suquamish People, the suq'^{w}abš. The suq'^{w}abš have an economic system focused heavily on marine resources, with ethnographic and historic period villages, camps, shellfish gathering localities, and fishing stations along the marine littoral of Kitsap County, including Clam Bay. Four pre-contact archaeological sites have been recorded in the project area vicinity. Suquamish Elders identified a multi-season camp site south of the project area that was used to fish, hunt, collect plant resources, and collect shellfish (Hilbert et al. 2001; Lane 1974). Suquamish Ancestors intensively used the shoreline of Clam Bay, Little Clam Bay, and Rich Passage. The project area has a high probability for unrecorded archaeological deposits in locations that have not been disturbed by previous construction and remediation activities.	NOAA thanks the Tribe for the additional information provided. Revisions have been made to Section 4.7.2 to incorporate this additional information.

APPENDIX B

COASTAL CONSISTENCY DETERMINATION

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COASTAL CONSISTENCY DETERMINATION

National Oceanic and Atmospheric Administration

National Marine Fisheries Service

Manchester Research Station Seawater System Replacement and Campus Addition Project

Manchester, Washington

Prepared for:

National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northwest Fisheries Science Center

Prepared by:

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February 2023

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Table of Contents

Appendix

Figures

Tables

Acronyms and Abbreviations

BMP	Best Management Practices
C.F.R.	Code of Federal Regulations
CAAP	Concentrated Aquatic Animal Production
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CMP	Coastal Management Program
CO_2e	carbon dioxide equivalent
CUP	Conditional Use Permit
CWA	Federal Clean Water Act
CY	cubic yards
CZMA	federal Coastal Zone Management Act
DAHP	Department of Archaeology & Historic Preservation
EA	Environmental Assessment
Ecology	Washington Department of Ecology
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	greenhouse gas
HASCE	historic, archaeological, cultural, scientific and educational
KCC	Kitsap County Code
LED	light-emitting diode
MRS	Manchester Research Station
MSL	mean sea level
MSP	Washington Marine Spatial Plan for Marine Waters
NAVD88	North American Vertical Datum of 1988
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NWFSC	Northwest Fisheries Science Center
OHWM	ordinary high water mark
ORMA	Ocean Resources Management Act
PFAS	perfluoroalkyl substances
PHS	Priority Habitats and Species
PROS	Parks, Recreation and Open Space
PSNERP	Puget Sound Nearshore Ecosystem Restoration Project
RACT	Reasonably available control technology
RCW	Washington Revised Code
SDAP	Site Development Activity Permit
SDP	Shoreline Development Permit
SF	square feet
SMA	Shoreline Management Act
SMP	Shoreline Master Plan
SWPPP	Stormwater Pollution Prevention Plan
TAPs	toxic air pollutants
TDM	Transportation Demand Management
U.S.	United States
UGA	Urban Growth Area
USACE	U.S. Army Corps of Engineers
UV	ultraviolet
VOCs	volatile organic compounds
WAC	Washington Administrative Code
WCAA	Washington Clean Air Act
WCZMP	Washington’s Coastal Zone Management Program
WPCA	Water Pollution Control Act

1. Introduction

The federal Coastal Zone Management Act (CZMA) authorizes states with approved Coastal Zone Management Programs to review projects with a federal nexus if a proposal is in, or has the potential to effect, that state's coastal waters. The federal nexus, or "federal action" can be: a federal activity and/or development project; a project requiring a federal license or permit, or a project receiving federal financial assistance. States review such projects for consistency with their approved Coastal Zone Management Program's "enforceable policies." Only those enforceable policies which the National Oceanic and Atmospheric Administration (NOAA) has approved for incorporation into a state's Coastal Program may be applied when states review federal activities for consistency.

NOAA's Office of Coastal Management describes an enforceable policy as "a state policy that is legally binding under state law (e.g., through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions), and by which a state exerts control over private and public coastal uses and resources, and which are incorporated in a state's federally approved Coastal Management Program (CMP)." CZMA § 304(6a) and 15 Code of Federal Regulations [C.F.R.] § 930.11(h).

Washington's Coastal Zone Management Program (WCZMP) includes enforceable policies[1] that are found in the following state laws, regulations, and plan:

- The Shoreline Management Act (SMA) (Washington Revised Code [RCW] 90.58) and implementing regulations (Washington Administrative Codes [WACs] 173-15 through 26).
- The Water Pollution Control Act (WPCA) (RCW 90.48) and implementing regulations (WACs 173-40 through 270, and 372-52 through 68).
- The Washington Clean Air Act (WCAA) (RCW 70.94) and implementing regulations (WACs 173-400 through 495).
- The Ocean Resources Management Act (ORMA) (RCW 43.143) Ocean Management Guidelines (WAC 173-26-360).
- The Washington Marine Spatial Plan for Marine Waters (MSP): Important, Sensitive, and Unique Areas and Fisheries Protection Standards.

[1] Not every single section or provision of each state law, regulation, or plan qualifies as an enforceable policy – only those sections or provisions that NOAA's Office of Coastal Management has approved as "enforceable."

2. Federal Coastal Consistency Determination Process

Any development project or other activity performed by or for a federal agency that may affect coastal uses or resources within Washington state is subject to state review to determine if the proposed activity is consistent with the enforceable policies of the WCZMP. The federal agency must determine if its project or activity has any reasonably foreseeable direct or indirect effects on Washington's coastal uses or resources. If the federal agency determines that the project will have such effects, then it must prepare a "consistency determination" and submit it to the Washington Department of Ecology (Ecology).

In its consistency determination, the federal agency must describe the potential coastal effects and explain how the project or activity is consistent to the maximum extent practicable with WCZMP's enforceable policies.

3. Proposed Action

3.1 Overview

The National Marine Fisheries Service (NMFS) is one of several Line Offices within NOAA, a branch of the United States (U.S.) Department of Commerce. NMFS is informally known as NOAA Fisheries. NMFS has six science centers and five regional headquarters nationally and is responsible for the stewardship and management of the nation's living marine resources and their habitat within the U.S. exclusive economic zone.

The NMFS Northwest Fisheries Science Center (NWFSC) conducts leading-edge data acquisition, research and analyses that provide the foundation for management decisions to protect, recover, restore, and sustain ecosystems and living marine resources in the Pacific Northwest. It also supports the NMFS West Coast Regional Office and other agencies in managing more than 90 commercially important fish species; recovering over 30 threatened and endangered fish and marine mammal species; and identifying coastal and ocean health risks. In addition to the NWFSC regional headquarters located in the Montlake neighborhood of Seattle, Washington, there are five research stations throughout the Pacific Northwest. One of these five stations is the NWFSC Manchester Research Station (MRS or the research station), located at 7305 Beach Drive East, Port Orchard, WA 98366, on the western shoreline of Clam Bay in Puget Sound, approximately one mile north of Manchester, Washington.

NMFS and NWFSC are proposing to install a replacement seawater treatment and construct up to four new research laboratory/office buildings at the MRS in two phases. Phase 1 would include the design and installation of a replacement seawater processing, distribution, and depuration system and deliver processed water to a common head tank capable of supplying existing and future fisheries and aquaculture operations for the entire facility. The proposed design is intended to reduce overall seawater system operation and maintenance costs and to make the system more reliable. Phase 2 would include the construction of up to four new buildings on the site to accommodate expanded program requirements identified by NOAA as part of their 2022 Site Master Plan. The new buildings would provide laboratories, hatcheries, office space, and storage areas to serve the Environmental and Fisheries Science and Conservation Biology Divisions or both.

Detailed designs for the seawater system have not been completed, and design for the proposed buildings has not yet commenced, therefore, the exact details, number of buildings, dimensions, layout and/or footprint of the proposed components may change during the design process. The following discussion is based on currently available design details.

3.2 Need

The NWFSC is a leader in the development of aquaculture for salmon and steelhead as well as new marine species for commercial aquaculture. Core research at the MRS includes both restoration and commercial aquaculture of shellfish and anadromous and marine finfish. All of this research depends on seawater systems for source water intake, treatment, distribution and depuration. With expansion of marine aquaculture under directives of NOAA and NMFS Strategic Plans as well as the Executive Order 13921 Promoting American Seafood Competitiveness and Economic Growth, the facilities needed for marine aquaculture research need to increase. In 2022, a master planning process was undertaken for the MRS (Iron Horse Architects 2022) by NOAA with the following goals and objectives:

- Consider and meet near and long-term operational requirements for NMFS including expansion of the marine aquaculture program to include program space to be moved from NMFS Mukilteo and Montlake Research Stations, along with prospective future programs that include the NOAA Diving Center and Office of Marine and Aviation Operations Marine Operations Center – Pacific relocation.
- Plan and preserve areas on the MRS campus for the new seawater system including equipment and supply corridors while avoiding the existing system.

- Provide a cohesive site master plan that identifies strategic locations for future buildings to accommodate the expanded program requirements identified by NOAA.

The current seawater distribution system at the site is only minimally able to meet the current needs of the MRS and is not sufficient for anticipated future use. The pumping, filtering and distribution systems are a mixture of components that were installed in an ad-hoc fashion, and do not provide a coherent, reliable system to meet current or future needs. The Proposed Action will restore the integrity of the flowthrough water supply and discharge system that is vital for this laboratory and the success of its research mission.

3.3 Location

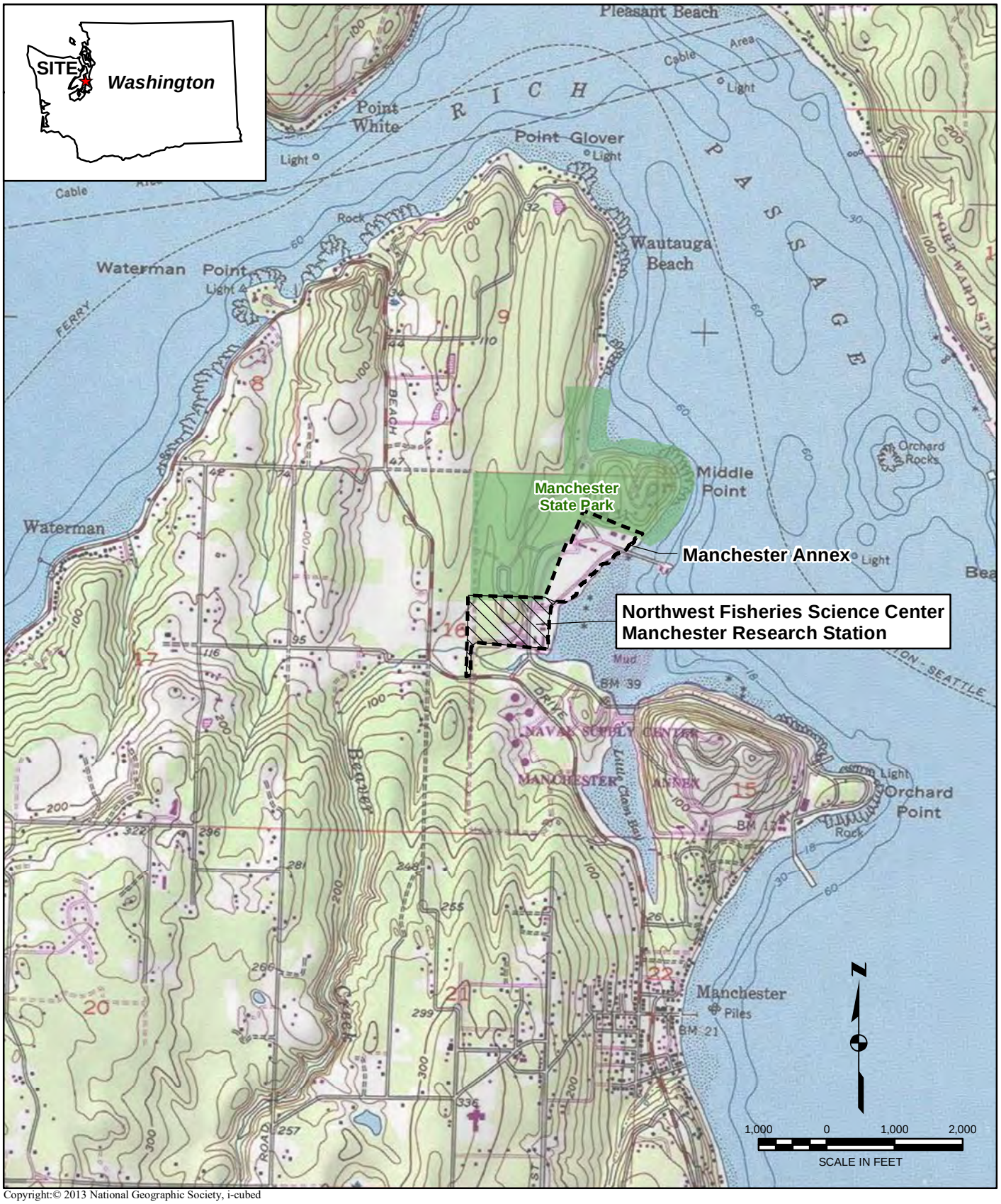
The NOAA property supporting the NWFSC MRS is in unincorporated Kitsap County, approximately one mile north of Manchester, Washington. The property is a part of the 31-acre Manchester Annex (Assessor's Parcel Number 162402-1-001-2005) and located in a rural industrial complex on the western shore of Clam Bay in Puget Sound (see Figure 1, Project Area and Vicinity). The Annex is within Section 16, Township 24 North, Range 02 East, Willamette Principal Meridian, Washington. The Annex is owned by the US federal government, with the U.S. Environmental Protection Agency (EPA) and the Department of Commerce NOAA as holding agencies. The southern 22.5-acre portion of the Annex is occupied by NWFSC's MRS laboratory facilities. The northern portion of the Annex (to the northeast of the MRS) is currently occupied by EPA's Manchester Environmental Laboratory. The street address of the MRS is 7305 Beach Drive East, Manchester, Washington, 98353.

The southeastern portion of the NOAA property is largely developed with various buildings, laboratories, parking and hardscaping areas and landscaping. The northwestern portion of the NOAA property is heavily vegetated with limited structures. The adjacent property to the south is owned by the Navy, which leases two buildings (Buildings 4 and 5) to the NWFSC MRS. Components of the project would be installed within an approximately 11-acre portion of the NOAA property (see Figure 2).

3.4 Project Components

3.4.1 Seawater Treatment and Distribution System

Phase 1 of the project would include the installation of seawater distribution pipelines throughout the upland areas of the site. The seawater distribution pipelines would connect the existing seawater intake facilities to a proposed new filter/UV system, an aeration head tank, and a distribution valve manifold; and would distribute treated seawater to existing laboratories and other buildings throughout the site. Most of the pipelines would be underground, except in the vicinity of the Filter/ultraviolet (UV) system, head tank, distribution valve manifold, and near Buildings 6 and 12. Below-grade pipelines would be constructed of high-density polyethylene material, whereas above-grade pipelines would be of Schedule 80 polyvinyl chloride. All proposed actions will be upland of the higher high water level (or 11 feet North American Vertical Datum of 1988 [NAVD88]). The finished grade elevation of the proposed facilities and pipeline routes range from 68 feet mean sea level (MSL) to 18 feet MSL. The existing seawater intake system in Clam Bay would not be altered by the Proposed Action – the new pipeline would tie into existing raw water intake pipelines at an upland location to the east of Building 13 at an elevation of approximately 17 feet MSL. No new outfalls would be constructed--discharge from the proposed replacement seawater circulation system will connect to the existing seawater discharge outfall at a location upland from Clam Bay, specifically at an elevation of approximately 18 feet MSL. Other existing outfalls would be abandoned in place. The proposed augmentations or replacements to the seawater distribution system will not alter seawater intake quantities or water effluent volume and quality compared to existing conditions.



PROJECT AREA AND VICINITY MAP

AECOM

FEBRUARY 2023
60680959

NOAA NWFSC MANCHESTER RESEARCH STATION
SEAWATER SYSTEM REPLACEMENT AND CAMPUS ADDITION PROJECT
MANCHESTER, WASHINGTON

FIGURE 1

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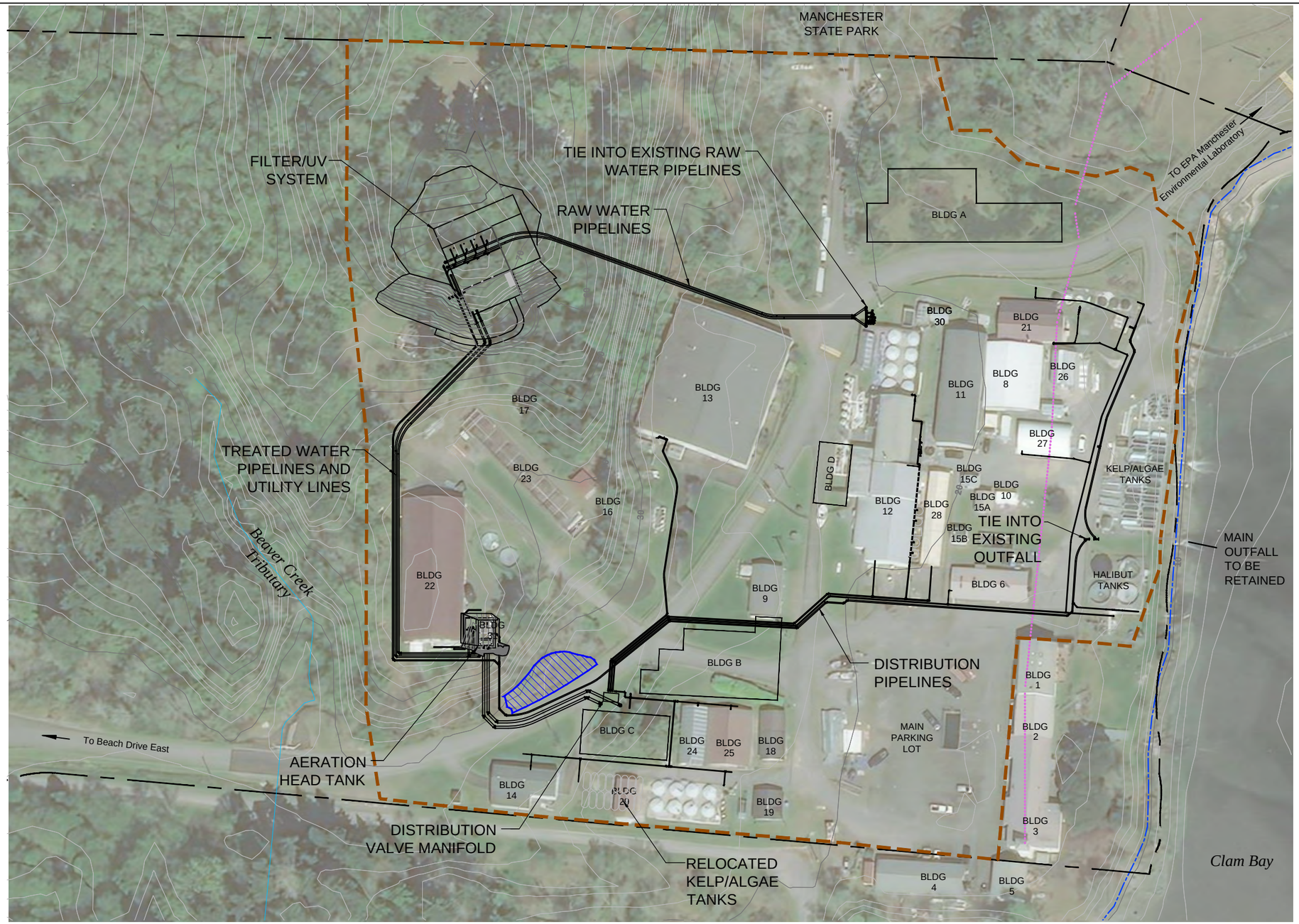

50 0 50 100

SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- LIMITS OF DISTURBANCE
- PROPOSED ACTION COMPONENTS
- 200' SHORELINE MANAGEMENT ACT JURISDICTION
- APPROXIMATE ASTRONOMICAL HIGHEST TIDE (11' NAVD 88)
- 2' ELEVATION CONTOURS (NAVD88)
- FIELD IDENTIFIED WETLAND

EXISTING BUILDINGS KEY

1 - MAIN BUILDING
2 - MAIN BUILDING
3 - MAIN BUILDING
4 - NAVY ANNEX I
5 - NAVY ANNEX II
6 - PATHOLOGY LAB
8 - WAREHOUSE
9 - EMERGENCY POWER GENERATOR
10 - CHEMICAL STORAGE CONTAINER
11 - FISH REARING
12 - SALTWATER MARINE LAB
13 - BPA
14 - FISH BEHAVIOR LAB
15A - OZONE GENERATOR
15B - OXYGEN GENERATOR
16 - ELECTRICAL SUPPORT STREAM CHANNEL
17 - SUPPORT FOR STREAM CHANNEL
18 - RECIRCULATION FOR B14
19 - MARINE FISH
21 - KENNETH CHEW CENTER
22 - NOOKSACK
23 - SALMON STREAM
24 - STORAGE & KELP LAB
25 - BEHAVIOR ECOLOGY - COVERED TANKS
26 - ALGAE GROWING BUILDING
27 - ALBALONE AND SEA CUCUMBER NURSERY
28 - TARP COVERED WORK AREA
29 - COVERED STORAGE
30 - QUONSET HUT PUMP HOUSE
31 - TEMPORARY OCEAN ACIDIFICATION FACILITY

DRAWING SOURCE: HDR.
IMAGERY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY
CONTOURS FROM USGS NATIONAL ELEVATION DATASET, 2015.

AECOM

SITE PLAN AND MAXIMUM LIMITS OF DISTURBANCE (LOD)

NOAA NWFSC MANCHESTER RESEARCH STATION
FEBRUARY 2023 SEAWATER SYSTEM REPLACEMENT AND CAMPUS ADDITION PROJECT
60680959 MANCHESTER, WASHINGTON

FIGURE 2

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The proposed Filter/UV System, Aeration Head Tank, and Distribution Valve Manifold would be supplied electricity from new electrical panelboards and stepdown transformers. This new infrastructure would connect with existing on-site electrical utilities near Building 22, via underground connections alongside the proposed pipeline corridor. The proposed facilities would also be connected to the existing diesel engine back-up generator in Building 9 which has sufficient capacity to handle additional load from these components (Burns McDonnell 2022). All UV filter equipment would be connected to an uninterruptible power supply capable of powering the equipment for 15 minutes until the standby generator comes online during an outage event. New pole/stanchion mounted light-emitting diode (LED) lights would be installed to illuminate these three proposed facilities. Seawater treatment and distribution components are described in Table 1.

Table 1: Proposed Seawater Treatment and Distribution System Components

Component	Location	Description
Raw water (RW) Pipelines	Originates at the existing seawater intake pipeline (~100 feet west of Building 30) then runs along the north of Building 13, then up the slope to connect to proposed Filter/UV System	Two 16-inch diameter HDPE pipelines. Approximately 350 linear feet.
Filter/UV System	Approximately 150 feet west of Building 13	Approximately 50 x 68 feet two-tiered concrete pad with screens and filters on upper level (50 x 44 feet) and ultraviolet (UV) disinfection equipment on lower level (50 x 24 feet). A gravel pad would be constructed to the east (approximately 30 feet wide) and north (approximately 20 feet wide) of the concrete pad, to facilitate crane access to allow for filter swap out and other maintenance activities. An approximately 15-foot-wide gravel driveway would provide access to the pad from the existing dirt road to the north. Aboveground components would extend up to approximately 5 feet above the pad.
Treated Water (TW) Pipelines	From south of Filter/UV System, along western and southern edges of Building 22 to connect with aeration head tank	Two 16-inch diameter treated water (TW) HDPE pipelines. Approximately 425 linear feet.
Aeration Head Tank	Approximately 11 feet east of Building 22 (Nooksack Pole Building)	Approximately 24 x 14 feet concrete tank extending approximately 14 feet above grade, with aerators extending up to 6 feet above the tank. A 3.5-foot steel perimeter guard rail would be installed around the top of the tank. The existing gravel driveway would be extended to the northern and western sides of the tank, and a 3-foot-wide gravel pathway would be along the eastern and southern sides.
Treated Water (TW) Pipelines	Between Aeration Head Tank and Distribution Valve Manifold.	Two 24-inch diameter treated water pipelines. Approximately 175 linear feet.
Distribution Valve Manifold	To east of main driveway, approximately 80 feet west of Building 24.	Approximately 14 x 8 feet concrete pad with above-ground valves and meters extending up to approximately 5 feet above grade.
Trunk Line (TL) Pipelines	Main TL corridor heads north from Manifold along main driveway then turns to pass south of Building 9 and along northern edge of main parking lot then north along eastern (coastal) driveway. Branch lines connect to various existing and proposed buildings and structures.	Five HDPE pipelines of 8- or 10-inches diameter, with branch lines of 6-, 4-, or 3-inches for building connections. Approximately 2,500 linear feet

Component	Location	Description
Overflow (OF) Pipelines	Primary OF pipeline runs from Filter/UV pad along same path as main TW and TL corridor to connect with existing Ozone Treatment Outfall just north of existing halibut tanks. Secondary OF pipeline runs from just east of Building 26 (with connections from existing drains from several Buildings) along eastern (coastal) driveway to connect to existing Ozone Treatment Outlet.	HDPE pipelines of 12-inch diameter. Existing building and tank waste drains would tie into the new OF pipe. Primary OF is approximately 1,200 linear feet. Secondary OF is approximately 250 linear feet.

Acronyms:
HDPE = High-Density Polyethylene; OF = Overflow; RW = Raw water; TL = Trunk Line; TW = Treated Water; UV = ultraviolet

3.4.2 Campus Addition

Phase 2 of the project would include the construction of up to four new buildings on the site to accommodate expanded program requirements identified by NOAA as part of their Site Master Plan (see Figure 2). The new buildings would provide laboratories, hatcheries, office space, and storage areas to serve the NWFSC's Environmental and Fisheries Science and Conservation Biology Divisions or both. Table 2 describes each of the proposed buildings. Detailed designs for the buildings do not yet exist, therefore this section conservatively describes the changes based on conceptual design and represents a "maximum envelope of development" for each component, such that the analysis within this document will still be valid, even if the exact details, number of buildings, dimensions, layout and/or footprint of the proposed buildings change during the design process.

Table 2: Proposed Campus Addition Components

Proposed Components	Location	Description	Function
Building A – RAS hatcheries	To the north of the existing road in northeast of the MRS.	Approximately 9,000 SF single story metal-framed building with concrete foundation. Approximately 150 x 60 feet, up to 25 feet maximum height.	Hatcheries, laboratories, storage, and office space serving the EFS Physiology and Feeds and Nutrition programs
Building B – Laboratories and Offices	In area between Buildings 9 and Buildings 18, 24, and 25.	Approximately 6,000 SF single story metal-framed building with concrete foundation. Approximately 120 x 50 feet, up to 25 feet maximum height	Laboratories and office space serving both EFS and CB Divisions.
Building C – OA, Physiology, Ecotox hatcheries	Immediately east of Building 24	Approximately 3,000 SF single story metal-framed building with concrete foundation. Approximately 75 x 40 feet, up to 25 feet maximum height.	Hatcheries and storage areas serving both EFS and CB Divisions.
Building D – Feed Development	Immediately east of Building 12	Approximately 1,500 SF single story metal-framed building with concrete foundation. Approximately 30 x 50 feet, up to 25 feet maximum height.	Laboratories and storage areas for research and development into algae-based fish food pellets.

Acronyms: CB = Conservation Biology Division; Ecotox = Ecological Toxicity; EFS = Environmental and Fisheries Science Division; OA = Ocean Acidification; RAS = Recirculated Aquatic System; SF = square feet

The four proposed buildings would be connected to existing on-site services including electricity, potable water, sanitary sewer, and communications. The exact location of proposed utility connections for these buildings has not yet been determined; however, given their proximity to existing development within the

site, it is anticipated that utility connections would be limited to previously disturbed areas of the site and would not require substantial vegetation clearance other than minor landscaping.

To accommodate the proposed new buildings, changes to the internal site circulation and parking areas would be required. Detailed design for these site changes has not yet been developed, however preliminary planning has indicated that the following changes would be required:

- The two existing driveway connections between the main roadway and northeast corner of the main parking lot would be removed and a new entrance-only driveway would be constructed to the north of Building 9.
- The existing no-exit driveway between buildings 18 and 19 would be extended as an exit-only connection from the main parking lot to the main roadway.
- Additional building accesses/driveways from the main roadway would be provided to serve proposed Buildings B and C, existing Building 9, proposed Building D, and proposed Building A.
- Three additional parking spaces would be provided, near Building A.

3.4.3 Site Preparation and Construction

Construction of the project would occur in phases, with the replacement seawater treatment and distribution system being installed during the first year of construction, and proposed buildings and associated hardscaping and landscaping changes occurring in the second year. Construction staging is anticipated to be confined to the immediate vicinity of the component footprints and other previously disturbed areas of the site (e.g., the main parking lot) to the extent feasible and are not anticipated to require substantial additional vegetation clearance beyond that required for construction.

Construction of the replacement seawater treatment and distribution system is anticipated to begin in approximately August 2023 and would last approximately 12 months. Construction of the new buildings would not commence until after the new seawater treatment system has been completed, in approximately August 2024 and is anticipated to take approximately 12 months.

3.4.3.1 Phase 1 – Seawater Treatment and Distribution System

The temporary Ocean Acidification facility (Building 31) that is currently east of Building 22 would be removed to make space for the proposed Aeration Head Tank. Grading would be required in the vicinity of the Filter/UV System, Aeration Head Tank, and Distribution Valve Manifold, including construction of retaining walls up to 10 feet in height near the Filter/UV System. Trenching would be required for pipeline installation. Based on conservative assumptions the estimated net impervious surface area is roughly 9,600 square feet (SF), the total area of temporary disturbance is 48,000 SF, and the approximate area of vegetation removal is 25,000 SF.

The maximum depth of pipeline trenching would be up to 6 feet below ground surface for the largest pipelines (24-inch diameter). The width of trenching would vary depending on the number and size of pipelines to be installed within the same trench but is not expected to exceed 5 feet. Trenches would be backfilled with imported gravel and suitable stockpiled on-site excavated soils. Smaller pipelines would require shallower/narrower trenching – for example, a single 4- to 10-inch trunk line would typically require a trenching width of approximately 16- to 22-inches and a depth of 24 inches.

An estimated 1,800 cubic yards (CY) of cut and 600 CY of fill would be required for the Filter/UV System, Head Tank, and Distribution Valve manifold, based on 90 percent design (Entitlement and Engineering Solutions, 2022). For pipeline trenching within unpaved areas (e.g., raw water and treated water pipelines between the existing system tie-in and manifold) most of the excavated soil is anticipated to be reused to backfill the trench and/or would be spread in the immediate vicinity of the trench so that no excess spoils are generated.

For pipeline trenching within paved areas (e.g., trunk lines and overflow pipeline downstream of the manifold), there would be limited potential for reuse of excavated soils, and it is anticipated that up to

1,500 CY yards of excess spoils could be generated from these areas. Approximately 600 CY of construction-grade fill may also need to be imported for backfilling the trenches if excavated materials are not suitable for re-use. For the purposes of the analysis within this document, and to allow flexibility during final design, it is conservatively assumed that Phase 1 construction may generate up to twice these estimated volumes, i.e., up to 6,600 CY of excess spoils and up to 2,400 CY of imported fill.

Upon completion of construction activities, disturbed areas would be repaved or hydroseeded, as appropriate. In previously paved areas of the site, the amount of saw cutting, and pavement removal needed for pipe installation would be minimized, and the pavement would be repaired to match the existing surface.

The existing treatment and distribution system would be operational throughout construction to ensure continued supply of seawater to meet facility needs. Once the new treatment and distribution system is operational, the obsolete components of the existing seawater treatment and distribution system would be disconnected. Underground components and existing beach outfalls would be abandoned in-place, while sand filters and other aboveground components to the east of Building 12 would be removed and disposed of.

3.4.3.2 Phase 2 – Campus Addition

The removal or relocation of some existing structures will be necessary prior to construction of new buildings at the site, including:

- Relocation of existing covered storage from current location east of Building 14 to new location west of Building 19, to accommodate relocation of kelp tanks (see next bullet). This would require a new approximately 800 SF concrete foundation.
- Relocation of 16 existing kelp/algae tanks from current location near shoreline to new location on existing covered storage foundation (see previous bullet). Existing foundation would be expanded by approximately 1,000 SF. Eight of the tanks would remain in their current location.
- Removal of existing seawater treatment and distribution system components currently to east of Building 12 to facilitate construction of Building D.

In addition to the buildings and structures that would be relocated or removed to facilitate construction, removal of landscaping and hardscaping would be required within building footprints and utilities may need to be rerouted. Approximately 0.26 acres of vegetation would be removed to accommodate Building A. None of the features to be removed are of an age where hazardous building materials such as lead based paint or asbestos would be a concern. Based on conservative estimates, the estimated net impervious surface area is 35,300 SF, the total area of temporary disturbance is 42,025 SF, and the approximate area of vegetation removal is 11,025 SF.

The proposed buildings would be single-story, metal-frame construction with concrete foundations. The exact type and depth of foundation would be determined during design based on site-specific geotechnical conditions but based on recent building construction projects at the site, may require drilled concrete piles to a depth of approximately 9 feet. Based on conservative assumptions regarding average excavation depths (3 feet average depth for building foundations and 2 feet average depth for other site improvements) the total estimated cut volume would be approximately 3,700 CY.

3.4.4 Operations

3.4.4.1 Seawater Treatment and Distribution System

Expansion of existing facilities or property use is not proposed. The proposed alterations and/or replacement of seawater treatment and distribution system components will not alter seawater intake velocities and volumes and water effluent quality and volumes currently operating consistent with existing permit limitations.

The proposed action would result in all seawater from the system discharging from the main (ozone treatment) seawater outfall, with the other outfalls being abandoned in place. The main seawater outfall currently discharges approximately 88 percent of seawater from the system (2,200 gallons per minute), which would increase to 100 percent (2,500 gallons per minute) once the new distribution system is operational. The velocity of discharge from the main outfall may increase slightly compared to existing conditions, from approximately 4.9 feet per second to approximately 5.6 feet per second, due to the increased volume. The new seawater treatment and distribution system would not require any additional staffing, deliveries, or other changes to site operations.

Typical maintenance activities for the new system would include:

Supply Piping and piping between the Filter/UV structure and the Head tank will be flushed and the active piping changed per the current flushing schedule.

- Check and clean debris from debris screen daily.
- Every two weeks run a hot water backwash of the filters.
- Every two weeks check filter backwash nozzles and screens and replace or clean defective components.
- Every two weeks clean the backwash strainers
- Every two months remove the filter screens and replace with clean screens. The dirty screens will be left to dry to kill biological growth and then pressure washed to ready them for the next cleaning cycle.
- Twice a year remove the active aerators and replace with clean aerators. Dirty aerators will be left to dry to kill biological growth and then pressure washed to ready them for the next cleaning cycle.
- Twice a year remove drums from the filters and clean accumulated biological growth from inside the filter tanks.
- Normal equipment maintenance as recommended by the equipment supplier

3.4.4.2 Campus Addition

The proposed site improvements would allow an increase of approximately 6 additional permanent staff at the MRS, as well as up to ten additional temporary (daily or weekly) visitors on an occasional basis. Deliveries to the site would increase slightly, relative to the size of the new facilities, but the types of deliveries are not anticipated to change substantially.

Many of the research activities that would be undertaken in the new buildings would be similar in nature to the existing research activities undertaken at the MRS. For example, the new research hatcheries in Buildings A and C would be similar to existing activities undertaken in Buildings 6, 11, 12, 18 and 22, except that Building C would also support new research on ocean acidification and ecotoxicology to support programs moved from the former NOAA research station at Mukilteo. Ocean acidification research is currently undertaken in a temporary structure (Building 31) at the MRS. The new laboratories and office space in Buildings A and B would be similar to existing activities currently occurring in Buildings 1, 6, and 12. The new feed development laboratory in Building D would provide a larger, dedicated area for research and development of algae-based fish food pellets, which is currently undertaken at a smaller scale within Buildings 9 and 12.

The new buildings and related campus improvements included as part of the Preferred Alternative would not include built space to accommodate potential future relocation of other activities not listed above from the Montlake or Mukilteo Research Stations, NOAA Diving Center or OMAO Marine Operations Center - Pacific, as such future relocations have not been confirmed at this time. Any future relocation of these activities, if they were to occur, would require additional redevelopment at the MRS which would be a separate federal action subject to its own review under NEPA.

Operation of the Preferred Alternative would not result in any changes to the existing offshore facilities, e.g., the number, location, size, or use of the fish-pens.

4. Jurisdiction and Consistency Requirements

The WCZMP defines the State's coastal zone to include the 15 counties with marine shorelines, which includes Kitsap County within which the NOAA project is located. Primary responsibility for implementation of the SMA is assigned to local government. Kitsap County, in which the proposed NOAA action will occur, fulfilled this requirement via the provisions of Chapter 22 of the Kitsap County Code (KCC) which contains the Kitsap County Shoreline Master Plan.

As specified in KCC 22.200, the jurisdiction of the Shoreline Master Plan (SMP) includes all marine waters (in addition to other aquatic features) and shorelands adjacent to these water bodies, typically within two hundred feet of the ordinary high water mark (OHWM). As the project would occur within the marine waters of Dogfish Bay, the policies contained within the Kitsap County SMP are applicable. As specified in KCC 22.100.120(G), the Coastal Zone Management Act consistency review for sites within federal jurisdiction shall apply the shoreline environmental designation criteria in Chapter 22.200 that most closely correspond to the project site in order to determine applicable program policies. Shorelines in the vicinity of the project location are designated Rural Conservancy, "to protect ecological functions, conserve existing natural resources and valuable historic and cultural areas in order to provide for sustained resource use, achieve natural floodplain processes, and provide recreational opportunities".

NOAA is seeking state concurrence with the CZMA Consistency Determination from Ecology for its proposed seawater system replacement and campus addition at its Manchester Research Station. Under Washington's program, Federal projects that would affect land use, water use, or natural resources shall strive to demonstrate consistency with the enforceable policies[2] found in the following state laws, regulations, and plan:

- The Shoreline Management Act (SMA) (RCW 90.58)
- The Water Pollution Control Act (WPCA) (RCW 90.48)
- The Washington Clean Air Act (WCAA) (RCW 70.94)
- The Ocean Resources Management Act (ORMA) (RCW 43.143)
- The Washington Marine Spatial Plan for Marine Waters (MSP): Important, Sensitive, and Unique Areas and Fisheries Protection Standards

The enforceable policies within each of these regulations/plans are described in detail in the following sections, along with a description of how NOAA's proposed action is consistent with these policies.

4.1 Washington Water Pollution Control Act (WCPA)

Adopted in 1972, the Federal Clean Water Act (CWA) broadly regulates the discharge of pollutants into the nation's surface waters, including lakes, rivers, streams, wetlands, and coastal areas. The CWA specifically addresses the management of coastal development to improve, safeguard, and restore the quality of the nation's waters coastal waters, and to protect the natural resources and existing uses of those waters. Under the CWA, it unlawful to discharge any pollutant into navigable waters without a permit.

Ecology is responsible for participating fully in and meeting the requirements of the Federal CWA through the Washington State Water Pollution Control Act (RCW 90.48) and its implementing regulations. Ecology issues Section 401 Water Quality Certifications, which indicate that a project meets the State's water quality standards, and Section 402 National Pollutant Discharge Elimination System (NPDES) permits.

[2] Not every single section or provision of each state law, regulation, or plan qualifies as an enforceable policy – only those sections or provisions that NOAA's Office of Coastal Management has approved as "enforceable."

However, Ecology NPDES Permits do not apply to federal actions within the State of Washington. Stormwater discharges from federal actions in Washington require coverage under the EPA Region 10 NPDES permits, and Ecology issues Section 401 water quality certifications for those permits once issued by the EPA.

Receipt of a Section 401 Water Certification decision, NPDES Permit, or other state water quality permit, may demonstrate consistency with the enforceable policies. However, if a water quality permit or certification is not required, federal consistency applicants still must demonstrate consistency with the WPCA.

4.1.1 Consistency of Proposed Action

Construction of the proposed action would not require any discharge of dredged or fill material into the waters of the U.S. or any work in, over, or under any navigable water of the U.S. Therefore, an Individual or Nationwide Permit under Section 404 of the Clean Water Act or a permit under Section 10 of the Rivers and Harbors Act would not be required. Additionally, at this time, MRS is not regulated under EPA's NPDES General Permit for Federal Aquaculture Facilities (Permit No. WAG 130000) since it falls below the permitting thresholds for Concentrated Aquatic Animal Production (CAAP) facilities (EPA 2009). As with the current seawater treatment and distribution system, it is expected that EPA would not consider discharges from the seawater outfall to be a point source subject to regulation under EPA's NPDES General Permit for Federal Aquaculture Facilities. Although the EPA intends to reissue an updated General Permit in the near future (EPA 2023), such provisions are not yet in effect. If the MRS facility requires coverage under the future General Permit, NOAA would apply for coverage at that time and adhere to any required conditions.

Because no Section 404 or Section 10 permits would be required, no water quality certification under Section 401 of the Clean Water Act would be required either. However, as the proposed action would disturb over an acre of land, NOAA's construction contractor will obtain an EPA Region 10 Construction General Permit, including preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that outlines required erosion and sediment controls used to meet permit conditions.

While receipt of a NPDES Construction General Permit would be required for construction of the proposed action, no NPDES Permit is required for operation of the upgraded facilities. Consequently, NOAA must demonstrate that operation of the upgraded facility is consistent with the WPCA.

Potentially applicable policies of the Washington Water Pollution Control Act are detailed in Ecology's CZMA guidance document (Ecology 2020). An assessment of the proposed action's consistency with those applicable policies and/or regulations is provided in Table 3 below.

Table 3: Consistency with Applicable Washington Water Pollution Control Act Policies

Regulation Title and Relevant Provisions	Consistency Determination
WPCA RCW Section 90.48.039 The procedural requirements of this chapter do not apply to any person conducting a remedial action at a facility.	**Not applicable**. The proposed action is not a remedial action.
WPCA RCW Section 90.48.080 It is unlawful for any person to throw, drain, run, or otherwise discharge into any of Washington's waters matter that shall cause or tend to cause pollution of such waters.	**Consistent**. Seawater used for aquaculture research at the MRS is currently treated and discharged via multiple separate outfalls to Clam Bay. Discharges of seawater under the proposed action would be similar in nature to existing discharges in terms of water quality, because the types of laboratory research and seawater use at the site would be similar to existing research uses at the site. Under the proposed action, seawater discharge would be consolidated into a single outfall, with other existing outfalls abandoned in place. The existing MRS facility falls below the permitting

Regulation Title and Relevant Provisions	Consistency Determination
	thresholds for Concentrated Aquatic Animal Production (CAAP) facilities (EPA 2009) and therefore the facility is not required to obtain coverage under EPA's current NPDES General Permit (Permit No. WAG130000) for Federal Aquaculture Facilities. This status would not change as a result of the proposed action.
WPCA RCW Section 90.48.110 All engineering reports, plans, and specifications for the construction of new sewer systems, sewage treatment or disposal plants or systems, or for improvements or extensions to existing sewer systems or sewage treatment or disposal plants, and the proposed method of future operation and maintenance of said facility or facilities, must be submitted to and be approved by Ecology before construction may begin.	**Not applicable**. The proposed action does not include the construction of new sewer systems, sewage treatment or disposal systems. New buildings associated with the proposed action would be connected to existing the County sewer system.
WPCA RCW Section 90.48.160 Any person who conducts a commercial or industrial operation of any type which results in the disposal of solid or liquid waste material into the waters of the state shall get a permit.	**Not applicable.** The proposed action does not involve the disposal of waste materials into waters of the state. Discharges are limited to treated seawater, as described in response to RCW Section 90.48.080. Furthermore, the facility is not a commercial or industrial operation.
WPCA RCW Sections 90.48.162, 165, 170, 180, 190, 195, 200 These provisions apply to counties, municipalities, and public corporations, and they explain the process to obtain Waste disposal permits.	**Not applicable.** These provisions either directly pertain to sewage systems/disposal (RCW 90.48.162, 165), or pertain to the process for obtaining and issuing waste disposal permits. The proposed action does not include any sewage system/disposal and would not require disposal permits.
WPCA RCW Section 90.48.270 Gives Ecology authority to delineate and establish sewage drainage basins in the state for the purpose of developing and/or adopting comprehensive plans for the control and abatement of water pollution within such basins.	**Not applicable.** This section pertains to Ecology's authority and is not applicable to the proposed action.
WPCA RCW Section 90.48.280 This section addresses the plans discussed in the section above (RCW Section 90.48.270).	**Not applicable.** This section pertains to Ecology's authority and is not applicable to the proposed action.
WPCA RCW Section 90.48.310 This provision provides the requirements needed to use barley straw for the purposes of water clarification without obtaining a state waste discharge permit.	**Not applicable.** The proposed action does not incorporate the use of barley straw.
WPCA RCW Section 90.48.364 For the purposes of this chapter, "technical feasibility" or "technically feasible" means that given available technology, a restoration or enhancement project can be successfully completed at a cost that is not disproportionate to the value of the resource before the injury.	**Not applicable.** This RCW section defines the terms "technical feasibility" and "technically feasible" and does not pertain to the proposed action.
WPCA RCW Section 90.48.445 Ecology can issue or approve water quality permits for use by federal, state, or local governmental agencies and licensed applicators for aquatic noxious weed control.	**Not applicable.** No aquatic noxious weed control is proposed as a component of the proposed action.
WPCA RCW Section 90.48.448 This section applies to a government entity seeking to control a limited infestation of Eurasian water milfoil using the pesticide 2,4-D.	**Not applicable.** No aquatic noxious weed control is proposed as a component of the proposed action.
WPCA RCW Section 90.48.455	**Not applicable.** The proposed action does not pertain to pulp mills or paper mills.

Regulation Title and Relevant Provisions	Consistency Determination
This provision requires pulp mills and paper mills to conduct and submit an engineering report on the cost of installing technology designed to reduce the amount of chlorinated organic compounds.	
WPCA WAC 173-50 Upon notification by Ecology's director, commercial operations (including industrial), which discharge wastes, other than sanitary sewage, into waters of the state and/or into the air of the state, shall file annually, no later than January 31, reports on forms Ecology provides.	**Not applicable.** This provision applies to those materials on the Critical Materials Registry (WAC 173-40-040), none of which would be discharged into Washington's waters in association with the proposed action. Furthermore, the facility is not a commercial or industrial operation.
WPCA WAC 173-100 This chapter stablishes guidelines, criteria, and procedures for the designation of groundwater management areas and sets forth a process for developing groundwater management programs. These programs will be implemented through state regulations and local ordinances.	**Not applicable.** The proposed action does not include designation of groundwater management areas or development of groundwater management programs.
WPCA WAC 173-200 This chapter applies to all ground waters of the state that occur in a saturated zone or stratum beneath the surface of land or below a surface water body (except for 090 - Special Protection Areas). This chapter also does not apply to some ag practices, land-treatment constituents or CERCLA sites. It also establishes maximum contaminant concentrations for the protection of a variety of beneficial uses of Washington's groundwater.	**Consistent.** This policy outlines maximum contaminant concentrations for the protection of groundwater. The proposed action would not include any discharges to groundwater or otherwise degrade ground water quality in the project vicinity. Mitigation measures require the preparation of a contingency dewatering plan, in case groundwater is encountered during construction of the proposed action, in order to avoid the remobilization of existing contaminants that are present at in groundwater at the site due to historic activities prior to NOAA acquiring the site. See Sections 4.5 and 4.17 of the EA for additional discussion.
WPCA WAC 173-201A This chapter establishes water quality standards for surface waters of Washington consistent with public health and public enjoyment of the waters and the propagation and protection of fish, shellfish, and wildlife, pursuant to the provisions of chapter 90.48 RCW.	**Consistent.** The proposed action does not include discharging any materials into Clam Bay that would pose a threat to public health or wildlife use of the waters. However, historic use of the property (prior to NOAA acquisition of the site) has resulted in contamination of intertidal sediments at the site. Flow of seawater being discharged from existing outfalls at the MRS has potential to remobilize these contaminated sediments. The proposed action would abandon four of these outfalls in place (with no ground disturbance) and would consolidate seawater discharge into one remaining outfall, which is in area of the shoreline with the least contaminated sediments (USACE 2021). Consequently, the proposed action would not substantially increase the potential for remobilization of contaminated sediments compared to existing operational conditions and therefore would not exacerbate water quality conditions within Clam Bay.
WPCA WAC 173-204 This chapter establishes marine, low salinity and freshwater surface sediment management standards for Washington to reduce and ultimately eliminate adverse effects on biological resources and human health from contaminated sediments.	**Consistent.** The proposed action does not include discharging any materials into Clam Bay that would pose a threat to human health or biological resources. See also the response for WAC 173-201A, above.
WPCA WAC 173-216 This chapter implements a state permit program, applicable to the discharge of waste materials from industrial, commercial,	**Consistent.** New buildings associated with the proposed action would be connected to existing on-site sewer systems, which connect to the

Regulation Title and Relevant Provisions	Consistency Determination
and municipal operations into ground and surface waters of the state and into municipal sewer systems. However, this regulation does not apply to the following: A. The point source discharge of pollutants into navigable waters of the state which are regulated by the National Pollutant Discharge Elimination System (NPDES) Permit Program, chapter 173-220 WAC. B. The discharge of pollutants into waters of the state which are regulated by the Waste discharge general permit program, chapter 173-226 WAC.	Kitsap County Public Works Division sewer system. Permits to connect to the County sewer system would be obtained, if applicable. Note that the facility is not an industrial, commercial, or municipal operation.
WPCA WAC 173-218 This chapter protects groundwater quality by: Preventing groundwater contamination by regulating the discharge of fluids into Underground Injection Control (UIC) wells; and satisfies the intent and requirements of Part C of the Federal Safe Drinking Water Act and the Water Pollution Control Act, chapter 90.48 RCW.	**Not applicable.** The proposed action does not include any discharge of fluids through injection control wells.
WPCA WAC 173-221 This chapter sets discharge standards which represent "all known, available, and reasonable methods" of prevention, control, and treatment for domestic wastewater facilities of the state. • 040 Domestic wastewater facility discharge standards • 050 Alternative domestic wastewater facility discharge standards and effluent limitations	**Not applicable.** The proposed action does not include a domestic wastewater facility. Domestic wastewater from the MRS currently discharges to the Kitsap County Public Works Division sewer system and new domestic wastewater connections from the proposed laboratory buildings would also connect to the County system.
WPCA WAC 173-221A This chapter sets minimum discharge standards which represent “known, available, and reasonable methods” of prevention, control and treatment for industrial wastewater facilities, including finfish facilities, that discharge to water of the state.	**Not applicable.** The operation of the proposed action would not produce more than 20,000 net pounds of fish a year, more than 5,000 pounds of fish food during a calendar month, and is not designated a significant contributor of pollution. Consequently, the facility would not require a wastewater discharge permit.
WPCA WAC 173-224 This chapter establishes a fee system for state waste discharge and NPDES permits.	**Consistent.** The proposed action would comply and pay appropriate fees, where applicable.
WPCA WAC 173-226 This chapter establishes a state general permit program that applies to the discharge of pollutants, wastes, and other materials to waters of the state, including discharges to municipal sewerage systems.	**Consistent.** See response to WPCA RCW Section 90.48.080
WPCA WAC 173-230 Operators must meet minimum standards to ensure they are competent to operate and maintain wastewater treatment plants	**Not applicable.** The proposed action does not include a wastewater treatment plant.
WPCA WAC 173-240 This chapter implements RCW 90.48.110 by providing an interpretation of “plans and specifications” and includes provisions for review and approval of proposed methods of operation and maintenance for wastewater facilities.	**Not applicable.** This WAC section details procedures for plan submittal/review for domestic and industrial wastewater treatment plants. The proposed action does not include the development/alteration of any wastewater treatment plant.

Source: EPA 2009

Acronyms: CAAP = Concentrated Aquatic Animal Production; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; EPA = U.S. Environmental Protection Agency; MRS = Manchester Research Station; NOAA = National Oceanic and Atmospheric Administration; NPDES = National Pollutant Discharge Elimination System; RCW = Washington Revised Code; UIC = Underground Injection Control; WAC = Washington Administrative Code; WPCA = Washington’s Coastal Zone Management Program

4.2 Washington Clean Air Act (WCAA)

The WCAA sets forth the state law regarding outdoor air pollution and establishes a system of regional air pollution control authorities to implement federal and state air pollution control regulations. Air pollution control regulations cover the emission of air contaminants that are injurious to health or that unreasonably interfere with the enjoyment of life and property.

Pursuant to WCAA, an air quality permit is required if a new project or a modification of an existing permitted business releases emissions exceeding the thresholds in WAC 173-400-110 or WAC 173-460-040 for emissions of toxic air pollutants. If an air quality permit is not obtained for a proposed action, the federal agency must demonstrate that the proposed action is consistent with each of the enforceable policies.

4.2.1 Consistency of Proposed Action

No permits related to air quality are anticipated to be required for project implementation because the proposed action would not involve a new or modified air pollution source that would exceed WCAA regulatory standards. Construction of the project would have short-term, localized effects on air quality due to a temporary increase in tail-pipe emissions from construction equipment and fugitive dust emissions; however, adherence to applicable rules and regulations set forth by the Puget Sound Clean Air Agency and implementing typical fugitive dust and tailpipe emission reduction practices would limit construction-related emissions to below regulatory thresholds.

Potentially applicable policies of the Washington Clean Air Act are detailed in Ecology's CZMA guidance document (Ecology 2020). An assessment of the proposed action's consistency with those applicable policies and regulations is provided in Table 4 below.

Table 4: Consistency with Applicable Washington Clean Air Act Policies

Regulation Title and Relevant Provisions	Consistency Determination
WCAA RCW 70.94.037 (Recodified as RCW 70A.15.1060) In areas subject to a state implementation plan, no state agency, metropolitan planning organization, or local government shall approve or fund a transportation plan, program, or project within or that affects a nonattainment area unless a determination has been made that the plan, program, or project conforms with the state implementation plan for air quality as required by the federal clean air act.	**Not applicable**. The proposed action is not within a nonattainment area.
WCAA RCW 70.94.040 (Recodified as RCW 70A.15.1070) Except where specified in a variance permit, as provided in RCW 70.94.181, it is unlawful for any person to cause air pollution or permit it to be caused in violation of this chapter, or of any ordinance, resolution, rule or regulation validly promulgated hereunder.	**Consistent**. The proposed action would not result in any new or modified air pollution sources and would comply with applicable policies/regulations.
WCAA RCW 70.94.041 (Recodified as RCW 70A.15.1080) Any building or structure listed on the national register of historic sites, structures, or buildings... or on the state register..., shall be permitted to burn wood as it would have when it was a functioning facility as an authorized exception to the provisions of this chapter. Such burning of wood shall not be exempted from the provisions of RCW 70.94.710 through 70.94.730.	**Not applicable.** The proposed action would not include any burning in association with any historic uses at the site.
WCAA RCW 70.94.151 (Recodified as RCW 70A.15.2200) Persons operating or responsible for air contaminant sources shall register and report as required.	**Not applicable.** The proposed action would not result in any new or modified air pollution sources that affect the level of air contaminants emitted, so a permit for a new source (Notice of Construction) would not be required.

Regulation Title and Relevant Provisions	Consistency Determination
WCAA RCW 70.94.152 (Recodified as RCW 70A.15.2210) Requires notice of the establishment of proposed any new sources except single-family and duplex dwellings or de Minimis new sources. See Chapter 173-400 WAC.	**Not applicable.** The proposed action would not result in any new or modified air pollution sources that affect the level of air contaminants emitted.
WCAA RCW 70.94.153 (Recodified as RCW 70A.15.2220) Any person proposing to replace or substantially alter the emission control technology installed on an existing stationary source emission unit must file a notice of construction application with the jurisdictional permitting authority.	**Not applicable.** The proposed action does not include alterations or replacement to any emission control technologies.
WCAA RCW 70.94.154 (Recodified as RCW 70A.15.2230) Reasonably available control technology (RACT) means the lowest emission limit that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. RACT is required for existing sources.	**Not applicable.** The proposed action does not include the development of new or modified air pollution sources that affect the level of air contaminants emitted and would therefore not require RACT.
WCAA RCW 70.94.161 (Recodified as RCW 70A.15.2260) Large commercial and industrial sources of air pollution must get an air operating permit. Rules follow this Section - see Chapter 173-401 WAC.	**Not applicable.** No large commercial or industrial sources of air pollution are a component of the proposed action.
WCAA RCW 70.94.162 (Recodified as RCW 70A.15.2270) Rules follow this Section - see Chapter 173-401 WAC.	See Chapter 173-401 WAC below.
WCAA RCW 70.94.181 (Recodified as RCW 70A.15.2310) Any person who owns or is in control of any plant, building, structure, establishment, process or equipment may apply to the department of ecology or appropriate local authority board for a variance from rules or regulations governing the quality, nature, duration or extent of discharges of air contaminants.	**Not applicable.** No variance from rules or regulations pertaining to air quality would be sought in conjunction with the proposed action.
WCAA RCW 70.94.200 (Recodified as RCW 70A.15.2500) For the purpose of investigating conditions specific to the control, recovery or release of air contaminants into the atmosphere, a control officer, the department, or their duly authorized representatives, shall have the power to enter at reasonable times upon any private or public property, excepting non-multiple unit private dwellings housing two families or less. No person shall refuse entry or access to any control officer, the department, or their duly authorized representatives, who requests entry for the purpose of inspection, and who presents appropriate credentials; nor shall any person obstruct, hamper or interfere with any such inspection.	**Consistent.** The completed project would adhere to this policy, and would not prevent access for inspection to any control officer, the department, or duly authorized representatives.
WCAA RCW 70.94.450 - 477 (Recodified as RCW 70A.15.3500 - 3600) Laws about Woodstoves and solid fuel burning devices.	**Not applicable.** No solid fuel burning devices, including wood stoves, are a component of the proposed action.
WCAA RCW 70.94.521 (Recodified as RCW 70A.15.4000) Counties to develop plans for major worksites for TDM	**Not applicable.** This RCW section pertains to county development of transportation demand management plans. This does not pertain to development of the proposed action.
WCAA RCW 70.94.527 (Recodified as RCW 70A.15.4020) Transportation demand management -- Requirements for counties and cities.	**Not applicable.** This RCW section pertains to the development of transportation demand management plans by various jurisdictions. This does not pertain to development of the proposed action.
WCAA RCW 70.94.531 (Recodified as RCW 70A.15.4040) Major employers must follow adopted Commuter Trip Reduction Plans and submit the program to locals.	**Not applicable.** This policy pertains to major employers, which are defined as “a private or public employer, including state agencies, that employs one hundred or more full-time employees at a single

Regulation Title and Relevant Provisions	Consistency Determination
	worksite" (RCW 70A.15.4010). The number of staff employed at the MRS is less than 100. Consequently, this policy is not applicable.
WCAA RCW 70.94.610 (Recodified as RCW 70A.15.4510) Except as provided in subsection (2) of this section, a person may not burn used oil as fuel in a land-based facility or in state waters unless the used oil meets applicable standards.	**Not applicable.** No burning of used oil is a component of the proposed action.
WCAA RCW 70.94.620 (Recodified as RCW 70A.15.4520) Metals mining and milling operations permits by department of ecology - special inspection requirements.	**Not applicable.** No metals, mining, or milling operations are a component of the proposed action.
WCAA RCW 70.94.6512 - 6552 (Recodified as RCW 70A.15.5010 - 5210) Sections pertaining to burning (outdoor burning, agricultural burning, burning for weed abatement, etc.).	**Not applicable.** No burning is a component of the proposed action.
WCAA RCW 70.94.970 (Recodified as RCW 70A.15.6410) A person who services or repairs or disposes of a motor vehicle air conditioning system; commercial or industrial air conditioning, heating, or refrigeration system; or consumer appliance shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere.	**Not applicable.** No servicing or repair of air conditioning/refrigeration systems is a component of the proposed action.
WCAA RCW 70.94.980 (Recodified as RCW 70A.15.6420) Related to the sale/purchase of regulated refrigerant containers or consumer products containing chlorofluorocarbons.	**Not applicable.** No purchase/sale of these materials/items is a component of the proposed action.
WCAA WAC 173-400 This chapter establishes technically feasible and reasonably attainable standards and establishes rules generally applicable to the control and/or prevention of the emission of air contaminants. 60 sections. (010-.930) address non-road engines, relocation of portable sources, general standards for maximum emissions for all sources, among others.	**Not applicable.** The proposed action does not include new non-road engines, would not relocate the existing emergency generator, does not include new combustion and incineration units, or emit hazardous air pollutants.
WCAA WAC 173-401 This chapter establishes the elements of a comprehensive Washington state air operating permit program. All sources subject to this regulation shall have a permit to operate that assures compliance by the source with all applicable requirements. 45 sections (.100-.940)	**Not applicable.** The proposed action does not include the development of a source required to have an operating permit, such as a major source, or stationary source, solid waste incineration units, or sources that would continue to air pollution that would create a threat to public health or welfare.
WCAA WAC 173-405 (1)"Kraft mill" means any manufacturing facility which uses an alkaline solution containing sodium hydroxide and/or sodium sulfide, and any other chemical pulping facility, except those covered by Chapter 173-410 WAC, to produce pulp and/or paper products from wood fibers. For the purposes of this regulation: 13 sections .012-.091	**Not applicable.** The proposed action does not include any facilities to be used for the production of pulp and/or paper products.
WCAA WAC 173-406 Acid rain and permit requirements for affected units subject to the requirements of the acid rain program	**Not applicable.** The proposed action does not include any units listed in Tables 1, 2, or 3 of 40 C.F.R. 73.10(a) or a utility unit, cogeneration facility, or any of the other applicable units listed in WAC 173-406-103.
WCAA WAC 173-407 Part I requires mitigation of the emissions of carbon dioxide from all new and certain modified fossil- fueled thermal electric generating facilities with station-generating capability of more than 25 megawatts of electricity. (010-080).	**Not applicable.** The proposed action does not include fossil-fueled thermal electric generating facilities, or other types of electric generating facilities.

Regulation Title and Relevant Provisions	Consistency Determination
Part II establishes statutory goals for the statewide reduction of greenhouse gases. It applies to all baseload electric generation facilities and units and baseload electric cogeneration facilities and units that meet certain criteria. (100 - 240)	
WCAA WAC 173-420 This chapter applies to the Washington State Department of Transportation.	**Not applicable.** The proposed action is not affiliated with the Washington Department of Transportation.
WCAA WAC 173-421 This chapter establishes requirements to preserve emission control equipment installed on motor vehicles. A person shall not remove or render inoperable any component or change any element of design of a motor vehicle including adjustments outside the range of manufacturer's specifications that could affect the amount of air contaminants emitted from that vehicle.	**Consistent.** No component of the proposed action would involve altering or removing a component of a motor vehicle that would be outside manufacturer's specifications, or would affect the amount of air contaminants emitted from the vehicle.
WCAA WAC 173-422 All motor vehicles, not specifically exempted by WAC 173-422-170, which are registered or reregistered within the boundaries of an emission contributing area, as specified in WAC 173-422-050, are subject to the vehicle emission inspection requirements of this chapter.	**Not Applicable.** This WAC section has been repealed, as of June 2, 2021.
WCAA WAC 173-422A These rules implement the motor vehicle emission test program required by state law (chapter 70.120 RCW Motor vehicle emission control). They are intended to encourage appropriate emission repairs of vehicles to reduce air pollution.	**Not Applicable.** This WAC section has been repealed, as of June 2, 2021.
WCAA WAC 173-423 This chapter applies to all 2009 and subsequent model year passenger cars, light duty trucks and medium duty passenger vehicles registered, leased, rented or sold for use in the state of Washington, except as provided in WAC 173-423-060, Exemptions.	**Not applicable.** This WAC section largely pertains to requirements established for manufacturers/retailers of cars and/or rental agencies. No car manufacturing, sale, or rental is a component of the proposed action.
WCAA WAC 173-425 through 173-434 These WAC sections pertain to agricultural, solid fuel, or solid waste burning.	**Not applicable.** No burning is a component of the proposed action.
WCAA WAC 173-441 This rule establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of certain facilities that directly emit GHGs that exceeds the reporting threshold, as well as for certain suppliers of liquid motor vehicle fuel, special fuel, or aircraft fuel and electric power entities. For suppliers, the GHGs reported are the quantity that would be emitted from the complete combustion or oxidation of the products supplied.	**Not applicable.** The NWFSC is not subject to mandatory GHG reporting requirements because it does not exceed the GHG reporting threshold (10,000 metric tons of CO_2e) and the proposed action does not include new sources of emissions within the scope of reportable GHG emissions for facilities. The NWFSC is also not a fuel supplier or electric power entity.
WCAA WAC 173-455 Air Quality Fee Regulation and fee schedule.	**Not applicable.** Only the solid fuel retail sales fee and the weather modification fee apply to counties regulated by a local air agency. Neither of these fees is applicable to the proposed action.
WCAA WAC 173-460 This chapter establishes the systematic control of new or modified sources emitting toxic air pollutants (TAPs) in order to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety. TAPs include carcinogens and non-carcinogens listed in WAC 173-460-150.	**Not applicable.** This WAC section applies to "new sources" (the construction or modification of a stationary source that increases the amount of any air contaminant or introduces new contaminants) or "stationary sources" (any building, structure, facility, or installation that emits or may emit any air contaminant). No new sources or modifications to existing stationary sources

Regulation Title and Relevant Provisions	Consistency Determination
	of air contaminants are associated with the proposed action.
WCAA WAC 173-476 This chapter establishes maximum acceptable levels in the ambient air for particulate matter, lead, sulfur dioxide, nitrogen oxides, ozone, and carbon monoxide.	**Consistent.** Operation of the proposed action would not produce emissions that would violate ambient air quality standards specified under this WAC section.
WCAA WAC 173-480 This chapter defines maximum allowable levels for radionuclides in the ambient air and control emissions from specific sources.	**Not applicable.** Emissions of radionuclides in the air is not a component of the proposed action.
WCAA WAC 173-481 This chapter, promulgated under RCW 70.94.305 and 70.94.331, establishes fluoride standards for the protection of livestock and vegetation. Standards address the fluoride content of forage and gaseous fluorides in the ambient air.	**Not applicable.** Fluoride emission is not a component of the proposed action.
WCAA WAC 173-485 This rule determines reasonably available control technology for emissions of greenhouse gases emitted by petroleum refineries located in the state.	**Not applicable.** The proposed action is not associated with a petroleum refinery.
WCAA WAC 173-490 This chapter establishes technically feasible and reasonably attainable standards for sources emitting volatile organic compounds (VOCs).	**Not applicable.** The proposed action does not include new or modified stationary emissions sources of VOCs as listed in WAC-490-025 and is not located in or operating within designated ozone nonattainment areas of the state of Washington. In addition, WAC-490-025 states sources of VOC emissions may be exempted if the source is a development operation and the equipment is used exclusively for research, laboratory analysis or determination of product quality and commercial acceptance, provided emissions of VOCs from such operations do not exceed 300 kg (660 lbs) per month. The proposed action would not result in new or modified emissions of VOCs that exceed the emission standards.
WCAA WAC 173-491 This chapter applies to gasoline marketing operations (e.g. gas stations), including the storage, transport, and transfer of gasoline, as well as the transfer from storage tanks into transport tanks, and from storage tanks into motor vehicles.	**Not applicable.** The proposed action does not relate to gasoline marketing operations.
WCAA WAC 173-492 This chapter applies to sellers of oxygenated gasoline in Spokane County - This regulation reduces carbon monoxide emissions from gasoline powered motor vehicles, through the wintertime use of oxygenated gasolines.	**Not applicable.** The proposed action does include selling oxygenated gasoline.
WCAA WAC 173-492 This chapter applies to weather modification activities - No person shall engage in weather modification activities except under and in accordance with a license and a permit issued by Ecology, unless specifically exempt from this requirement in WAC 173-495-040.	**Not applicable.** The proposed action does not include weather modification activities.

Acronyms:

CO_2e = carbon dioxide equivalent; GHG = greenhouse gas; MRS = Manchester Research Station; RACT = Reasonably available control technology; RCW = Washington Revised Code; TAPs = toxic air pollutants; TDM = Transportation Demand Management; VOCs = volatile organic compounds; WAC = Washington Administrative Code; WCAA = Washington Clean Air Act

4.3 Ocean Resources Management Act (ORMA)

The provisions of ORMA are **not applicable** to the proposed action because the project site is within Puget Sound, and not in the Pacific Coastal jurisdiction. No further discussion of consistency is required.

4.4 Washington Marine Spatial Plan for Marine Waters (MSP)

The provisions of MSP are **not applicable** to the proposed action because the project site is within Puget Sound, and not in the Pacific Coastal jurisdiction. No further discussion of consistency is required.

4.5 Shoreline Management Act (SMA)

The 1971 state SMA has a broad reach: coverage extends to shorelines of the state and shorelines of statewide significance, both of which include coastal marine waters, wetlands, aquatic areas, lakes, and streams. The law provides for the management of the shorelines of the state "by planning for and fostering all reasonable and appropriate uses." The law is aimed at "protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto." The SMA requires all shoreline counties and municipalities to develop SMPs.

The requirement to obtain state and local permits pursuant to the SMA and SMPs is a state law requirement independent of the requirements of the CZMA. In the case where a Federal license and/or permit applicant must also obtain a local Shoreline Development Permit (SDP), and/or a Conditional Use Permit (CUP) or Variance, the issuance of the permit may be sufficient to show that a project meets the requirements of the SMA for the purposes of consistency with the WCZMP.

Unless required by Federal law, Federal agencies are not required to obtain shoreline permits. However, Ecology encourages Federal agencies to review their projects, relying on the provisions of the applicable SMPs, as an administrative convenience to demonstrate consistency. In doing so, the WCZMP recognizes that the Federal agency is not applying for a permit. The Federal agency can work with local governments for input in preparing a Consistency Determination that is based on the SMP. If a Federal agency chooses not to rely on the SMPs to demonstrate consistency, it should review the enforceable policies and describe how the project is consistent with those policies.

4.5.1 Consistency of Proposed Action

The applicable SMP for the project site is the Kitsap County SMP, which is contained in KCC Title 22, and was last updated in April 2022. An assessment of the proposed action's consistency with applicable policies and regulations from the Kitsap County SMP are provided in Table 5 and Table 6 below.

Table 5: Consistency with Applicable Kitsap County Shoreline Management Regulations

Regulation Title and Relevant Provisions	Consistency Determination
KCC 22.100.120 APPLICABILITY	**Consistent**. The project site is within the area that these regulations apply to.
KCC 22.150.650 DEFINITIONS "Water-dependent use" means a use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations. "Water-oriented use" means a use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.	**Consistent**. The Manchester Research Station fits the definition of both a water-dependent and water-oriented use, as the fisheries research laboratory relies on a constant supply of fresh, clean and locally sourced seawater from the Sound.
KCC 22.200 SHORELINE JURISDICTION AND ENVIRONMENT DESIGNATION	**Consistent**. Shorelines within the project vicinity are designated "Rural

Regulation Title and Relevant Provisions	Consistency Determination
KCC 22.200.125 Rural Conservancy	Conservancy". Therefore, only KCC section 22.200.125, which address this, is applicable. These are addressed in turn below.
KCC 22.200.125(B) Rural Conservancy – Designation Criteria This shoreline jurisdictional designation includes shorelines outside of the urban growth area or limited areas of more intensive rural development that support lesser-intensity resource base uses, including aquaculture.	**Consistent**. The proposed action is an aquaculture facility, and would conform to the designation criteria of this shoreline environmental designation.
KCC 22.200.125(C)(1) Rural Conservancy – Management Policies Uses should be limited to those which sustain the shoreline area's physical and biological resources, and those of a nonpermanent nature that do not substantially degrade ecological functions or the rural or natural character of the shoreline area. Developments or uses that would substantially degrade or permanently deplete the physical and biological resources of the area should not be allowed.	**Consistent**. The proposed action will not alter existing uses of the shoreline at the MRS. New impacts to the shoreline area's physical and biological resources would be limited to trenching and associated backfill to original grade (i.e., no net fill) within the coastal floodplain required for installation of trunk lines, overflow pipelines, and drain connections to existing tanks and buildings. Most of the proposed pipeline installation would be within the existing, paved/graveled area, although a small amount of trenching in grassed areas would be required. The action would not substantially degrade or deplete the physical/ biological resources of the area. No physical changes are proposed below the high tide line.
KCC 22.200.125(C)(2) Rural Conservancy – Management Policies New development should be designed and located to preclude the need for shoreline stabilization. New shoreline stabilization or flood control measures should only be allowed where there is a documented need to protect an existing structure or ecological functions and mitigation is applied.	**Consistent.** The proposed action would not require new shoreline stabilization or flood control measures.
KCC 22.200.125(C)(3) Rural Conservancy – Management Policies Residential development standards shall ensure no net loss of shoreline ecological functions and should preserve the existing character of the shoreline consistent with the purpose of the "rural conservancy" environment.	**Consistent.** The proposed action would not involve residential development.
KCC 22.200.125(C)(4) Rural Conservancy – Management Policies Low-intensity, water-oriented commercial uses may be permitted in the limited instances where those uses have been located in the past or at unique sites in rural communities that possess shoreline conditions and services to support the development.	**Consistent.** The proposed action would not include commercial uses.
KCC 22.200.125(C)(5) Rural Conservancy – Management Policies Water-dependent and water-enjoyment recreation facilities that do not deplete the resource over time, such as boating facilities, angling, hunting, wildlife viewing trails and swimming beaches, are preferred uses, provided significant adverse impacts to the shoreline area are mitigated.	**Consistent.** The proposed action would not include recreation facilities.
KCC 22.200.125(C)(5) Rural Conservancy – Management Policies Agriculture, commercial forestry and aquaculture, when consistent with the program, may be allowed.	**Consistent.** The proposed action would support the continuation of existing aquaculture research at the site.

Regulation Title and Relevant Provisions	Consistency Determination
KCC 22.400.105(A) General Regulations – Proposed Development New development shall be located and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging. New development shall be located and designed to avoid the need for future shoreline stabilization. New development on lots constrained by depth, topography or critical areas shall be located to minimize, the need for shoreline stabilization. New development on steep slopes or bluffs shall be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary. Subdivision shall be planned to avoid the need for shoreline stabilization. Non-water-oriented facilities and accessory structures must be located landward of buffers and adjacent water-oriented uses, or outside shoreline jurisdiction	**Consistent.** The proposed action would not require shoreline stabilization, is not located on steep slopes or bluffs, and is a water-dependent land use.
KCC 22.400.105(B) General Regulations – Proposed Development Water-dependent in-water structures, activities, and uses are not subject to the shoreline buffers established in this program. Projects involving in-water work must obtain all applicable state and federal permits or approvals, including those from the U.S. Army Corps of Engineers, Ecology, Washington Department of Fish and Wildlife (WDFW), and/or Washington Department of Natural Resources. Projects involving in-water work must comply with timing restrictions as set forth by state and federal project approvals. Bank vegetation disturbance should be limited, and revegetated/protected from erosion. If, at any time, water quality problems develop as a result of in-water work, immediate notification must be made to any appropriate state or federal agency, e.g., Ecology, WDFW, National Marine Fisheries Service, U.S. Fish and Wildlife Service, etc. Affected tribes shall also be notified.	**Consistent.** The proposed action is a water-dependent use, and the project is in the process of obtaining, or has obtained, all necessary permits required for this federal agency action. No in-water work is proposed as a component of the proposed action. The proposed action would upgrade existing facilities with a long history of operation without significant water quality impacts. However, in the event that water quality problems develop, appropriate authorities would be notified.
KCC 22.400.110 General Regulations – Mitigations Permitted uses and developments shall be designed and conducted in a manner that protects the current ecological condition, and prevents or mitigates adverse impacts.	**Consistent.** The proposed action would institute BMPs and mitigation measures designed to avoid, minimize, or rectify impacts to the current ecological condition (as stipulated by this code section). The proposed action does not include any compensatory mitigation that would be regulated by sections 22.400.110(B) or 22.400.110(C) of the SMP.
KCC 22.400.115(B) General Regulations – Critical Areas Before new development activities are permitted within the floodplain, compliance with Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) protection standards for critical habitats for listed species shall be demonstrated through submittal of a habitat management plan prepared by a qualified wildlife biologist.	**Consistent.** The proposed new seawater treatment and distribution facilities, buildings, internal access roads and parking areas, and associated site improvements will be located inland from the existing shoreline embankment and will all be outside of the effective mapped 100-year floodplain. The Environmental Assessment drafted for the project concluded that with the implementation of standard construction erosion and sediment control BMPs the proposed action would have no direct or indirect impact on the nearby floodplain.
KCC 22.400.115(D) General Regulations – Critical Areas Critical saltwater habitats require a higher level of protection due to the important ecological functions they provide. Nonresidential docks, bulkheads, bridges, fill, floats, jetties, utility crossings and other human-made structures shall not intrude into or over critical saltwater habitats, unless the public's need for such an action or	**Consistent.** The proposed action includes trenching to install seawater pipelines within the shoreline jurisdiction, but not within the marine environment itself. Instead, these pipelines would connect to

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structure is clearly demonstrated, avoidance measures have been exhausted, the project will result in no net loss of ecological functions, and the project is consistent with the state's interest in resource protection and species recovery.	existing intake and outfall pipelines above the mean higher high water line.
KCC 22.400.115(E) General Regulations – Critical Areas Channel migration zones shall be classified as landslide hazard areas, and may be either high geologic hazard or low geologic hazard depending on the site characteristics outlined in Section 19.400.410(A). Channel migration zone maps can be found in Appendix D to the ordinance codified in this title.	**Not applicable.** The proposed action would not occur within a channel migration zone. A small portion of the site is classified as either moderate erosion hazard or high landslide hazard but these zones are located outside the shoreline jurisdiction and thus not subject to this policy.
KCC 22.400.115(F) General Regulations – Critical Areas Exemptions for small wetlands described elsewhere in the code do not apply within the shoreline jurisdiction. A wetland buffer may not be reduced through averaging more than 25% of the standard buffer.	**Consistent.** No onshore wetlands are mapped at the NOAA property in the National Wetland Inventory, WDFW PHS Mapper, or Kitsap County's Watercourse and Surface Water Map. A single palustrine scrub-shrub/emergent wetland was identified on the property during site visits, but it is located outside the shoreline jurisdiction and thus not subject to this policy. The project would not directly impact any wetland.
KCC 22.400.120 – General Regulations – Vegetation Conservation Buffers Buffers shall consist of a non-clearing area established to protect the integrity, functions and values of the affected critical area or shoreline, but may also be modified and reduced to accommodate allowed uses when consistent with the Act and this program. Development or uses that require vegetation clearing shall be designed to avoid the following in order of priority: native trees, other native vegetation, nonnative trees, and other nonnative vegetation.	**Consistent.** Disturbance associated with the proposed action within a standard rural conservancy vegetation buffer of 130 feet from the OHWM is limited to trenching associated with the pipeline alignments. Some trenching in this buffer would occur in already developed areas and would have no impact to vegetation. For other areas, as documented during site visits, vegetation in this area consists entirely of nonnative, mowed grasses and other herbaceous species. Disturbance in this area is consistent with the priorities outlined in this policy.
KCC 22.400.125 – General Regulations – Water Quality and Quantity New development shall provide stormwater management facilities designed, constructed and maintained in accordance with the current stormwater management standards in Title 12. An SDAP shall also be required for impervious surface creation in areas of the shoreline mapped as critical drainage areas and those meeting minimum critical drainage area criteria, defined in KCC Title 12. For sites outside of the census-defined urban areas, or the UGAs, the creation or cumulative addition of impervious surfaces that results in five percent or more of the development site being covered in impervious surfaces or the creation or cumulative addition of ten thousand square feet of impervious surfaces from the predevelopment conditions, whichever is greater, is a major development, and requires stormwater mitigation through an SDAP.	**Consistent.** Disturbance within the shoreline jurisdiction is limited to trenching associated with pipeline installation. No stormwater management facilities will be required for these features, and no new impervious surface creation is associated with these action components (any trenched areas will be restored to baseline conditions).
KCC 22.400.130 – General Regulations – Historic, Archaeological, Cultural, Scientific and Educational Resources This section applies to archaeological and historic resources either recorded by the Department of Archaeology and Historic Preservation, local jurisdictions or applicable tribal databases or predictive models.	**Not applicable.** A cultural resources survey was conducted for the proposed action, which included desktop review and field surveys (including test pits). The results of the survey concluded that the proposed action would have no impact to built-environment historic properties or

Regulation Title and Relevant Provisions	Consistency Determination
	known significant archaeological resources. However, if archaeological resources are uncovered during excavation, activities that may damage or alter such resources will be suspended within 100 feet of the find will be suspended. Kitsap County, the Office of Archaeology and Historic Preservation and affected Indian tribes will be notified.
KCC 22.400.135 – General Regulations – View blockage In order to protect water views, all principal buildings, and all additions to a principal building, shall be located to maintain the minimum shoreline structure setback line.	**Not applicable.** The only proposed action component occurring within the shoreline jurisdiction is trenching associated with the various pipelines. No buildings are proposed within the shoreline jurisdiction.
KCC 22.400.145 A and B – General Regulations – Public Access All recreational and public access facilities shall be designed, located and operated in a manner consistent with the purpose of the environment designation in which they are located. substantial developments or conditional uses shall provide public access where developments use or will create increased public demand for shoreline access, interfere with an existing access way, new non-water-oriented uses are proposed, or will interfere with public use of land/waters subject to public trust doctrine.	**Not applicable.** The shoreline at the site is not currently accessible to the public, and does not incorporate public access components. No increase for public demand of use of the adjacent shoreline, or interference with public use/access of the shoreline would occur as a component of the proposed action.
KCC 22.400.145(C) – General Regulations – Public Access Shoreline development by public entities, port districts, state agencies, and public utility districts shall include public access measures as part of each shoreline development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.	**Consistent.** While the proposed action is development by a federal agency, security concerns prohibit making the facility open to the public. Consequently, no public access to the shoreline is proposed as a component of the proposed action. Additionally, alternative public access opportunities are immediately adjacent to the site, as described in response to KCC 22.400.145(G). The site currently has no public access.
KCC 22.400.145(G) – General Regulations – Public Access Public access shall not be required if an applicant/proponent demonstrates to the satisfaction of the county that unavoidable health/safety hazards are present, legal limitations apply, security concerns exist, it is cost prohibitive, environmental impacts would occur, public access directly conflicts with the proposed use, or adequate public access already exists along the subject shoreline	**Consistent.** As described above, security concerns prohibit public use of the shoreline on the project parcel. However, Manchester State Park is immediately adjacent to the proposed action site, and the campground is only 100-feet from the proposed project area. Adequate public access already exists, and the proposed action would not limit or change public access opportunities from baseline conditions.
KCC 22.400.150 – General Regulations – Flood Hazard Reduction Measures A Conditional Use Permit is required for installation of flood hazard reduction measures.	**Not applicable.** No flood hazard reduction measures are proposed as a component of the proposed action.
KCC 22.400.155 – General Regulations – Restoration and Enhancement Restoration and enhancement uses and developments are permitted as an SDP, or may be exempt from an SDP if criteria in Section 22.500.100(C) are met, for all environment designations, provided the project's primary purpose is the restoration of the natural character and ecological functions of the shoreline, as determined by the department.	**Not applicable.** The proposed action is not a restoration or enhancement project.
KCC 22.600.115 – Shoreline Use and Modification Development Standards – Aquaculture	**Not applicable. A**s a federal agency NOAA is not required to obtain local

Regulation Title and Relevant Provisions	Consistency Determination
Where aquaculture is proposed in rural conservancy shoreline designations, Substantial Development Permit requirements shall apply.	permitting approvals. However, to comply with the Coastal Zone Consistency Management Act, NOAA would meet all applicable permit requirements to the maximum extent feasible.
KCC 22.600.115(C)(1) – Shoreline Use and Modification Development Standards – Aquaculture Aquaculture is dependent on the use of the water area and, when consistent with control of pollution and prevention of damage to the environment, shall be a preferred use. Aquaculture shall not be permitted in areas where it would result in a net loss of shoreline ecological functions, or where adverse impacts to critical saltwater and freshwater habitats cannot be mitigated. Aquaculture shall not significantly conflict with navigation and other water-dependent uses. Aquaculture activities proposed within shorelines of statewide significance shall first be subject to the policies for shorelines of statewide significance contained in Chapter 22.300 (General Goals and Policies), and then the policies and regulations contained in this section, in that order of preference. Over-water structures and/or equipment, and any items stored upon such structures such as materials, garbage, tools, or apparatus, shall be designed and maintained to minimize visual impacts. Aquaculture structures and equipment used on tidelands below ordinary high water shall be of sound construction, with the owners' identifying marks where feasible, and shall be so maintained.	**Consistent.** The proposed action would support aquaculture research activities, and is thus a preferred use. No net loss of shoreline ecological function would occur in association with the proposed action. No over-water structures or equipment, or development that would interfere with navigation, are proposed. No new structures below ordinary high water are proposed. The proposed action is also consistent with policies contained in KCC 22.300 regarding shorelines of statewide significance, as described in responses to policies SH47 through SH52 in Table 6 below.

Acronyms:

BMP = Best Management Practice; Ecology = Washington Department of Ecology; FEMA = Federal Emergency Management Agency; KCC = Kitsap County Code; NFIP = National Flood Insurance Program; NOAA = National Oceanic and Atmospheric Administration; OHWM = ordinary high water mark; PHS = Priority Habitats and Species; SDAP = Site Development Activity Permit; SDP = Shoreline Development Permit; SMP = Shoreline Master Plan; UGA = Urban Growth Area; WDFW = Washington Department of Fish and Wildlife

Table 6: Consistency with General Goals and Policies from the Kitsap County Shoreline Management Plan

Provision	Title	Consistency Determination
Policy SH1	Protect and conserve shoreline areas that are ecologically intact and minimally developed or degraded. Develop incentives and regulations for privately owned shorelines that will protect and conserve these areas while allowing reasonable and appropriate development.	**Consistent**. The proposed action will not alter existing uses of the shoreline at the MRS. New impacts to the shoreline area's physical and biological resources would be limited to trenching and associated backfill to original grade (i.e., no net fill) within the coastal floodplain, above mean high water. Most of the proposed trenching would be within existing, paved or graveled areas, although a small amount would occur in grassed areas. These activities would not substantially degrade or deplete the physical and biological resources of the area.
Policy SH2	Recognize that nearly all shorelines, even substantially developed or degraded areas, retain important ecological functions.	**Consistent**. The proposed action includes the incorporation of best management practices to protect shoreline jurisdiction. The proposed action is supporting existing land uses at the site, and would not substantially degrade or deplete the resources of the area.

Provision	Title	Consistency Determination
Policy SH3	Utilize transfer of development rights as allowed by Chapter 17.580 as an option to protect ecological functions.	**Not applicable.** The proposed action does not include any transfer of development rights.
Policy SH4	Permitted uses and developments should be designed and conducted in a manner that protects the current ecological condition, and prevents or mitigates adverse impacts.	**Consistent.** The proposed action incorporates mitigation and best management measures to avoid or reduce potential impacts to the shoreline jurisdiction. Avoidance, minimization, and reduction of potential impacts are prioritized (in order of priority).
Policy SH5	Shoreline ecological functions that should be protected include (but are not limited to) habitat, water quality maintenance, and water quantity maintenance.	**Consistent**. The proposed action incorporates design features, best management practices, and mitigation measures intended to protect geological resources, climate impacts, air quality, water resources/hydrological processes, flora and fauna, wetlands, and floodplains (among other resources).
Policy SH6	Shoreline processes, both freshwater and marine, that should be protected to support the above functions include but are not limited to the delivery, loss and movement of sediment, water, nutrients, toxins, pathogens, and large woody material.	**Consistent**. See response to Policy SH5.
Policy SH7	In assessing the potential for new uses and developments to impact ecological functions and processes, onsite/offsite, immediate and long term, cumulative, and any mitigation measures or beneficial effects should be taken into account.	**Consistent.** Project impacts have been evaluated for all of these sources in analyses prepared as a part of an Environmental Assessment.
Policy SH8	Critical areas in the shoreline jurisdiction shall be protected in a manner that results in no net loss to shoreline ecological functions. Pursuant to RCW 36.70A.030(5), critical areas include wetlands, frequently flooded areas, fish and wildlife habitat conservation areas, geologically hazardous areas, and critical aquifer recharge areas.	**Consistent**. These policies are more thoroughly described in responses to KCC 22.400.115(B) through (F).
Policy SH9	Preserve native plant communities on marine, river, lake and wetland shorelines. In order to maintain shoreline ecological functions and processes, development along the shoreline should result in minimal direct, indirect, or cumulative impacts. This includes keeping overhanging vegetation intact, preserving established areas of native plants and minimizing clearing and grading near bluff edges, designing and placing structures in areas that avoid disturbance of native plants, and removal of noxious weeds.	**Consistent**. New impacts to the shoreline area's physical and biological resources would be limited to trenching and associated backfill to original grade (i.e., no net fill). Most of the proposed trenching would be within existing paved or graveled areas, although a small amount would occur in grassed areas. These activities would not substantially degrade or deplete the physical and biological resources of the area. No grading would occur below mean high water.
Policy SH10	Shoreline landowners are encouraged to preserve and enhance native woody vegetation and native groundcovers to stabilize soils and provide habitat. When shoreline uses or modifications require a planting plan, maintaining native plant communities, replacing noxious weeds and avoiding installation of ornamental plants are preferred. Nonnative vegetation requiring use of fertilizers, herbicides/pesticides, or summer watering is discouraged.	**Consistent**. The proposed action would not impact native plant communities within the shoreline jurisdiction. Impacts to vegetation would occur within grassed areas, which would be revegetated after disturbance. Mitigation measures include procedures to avoid spread of noxious weeds and revegetation with native species where practicable.
Policy SH11	Maintaining native or ecologically functional vegetation is preferred over clearing to provide views or lawns. Limited and selective clearing may	**Not applicable.** The proposed action does not incorporate clearing to provide views or lawns. Impacts to vegetation within the

Provision	Title	Consistency Determination
	be allowed when slope stability and ecological functions are not compromised. Limited trimming and pruning is generally preferred over removal of native vegetation.	shoreline jurisdiction would only occur within grassed areas, which would be revegetated after disturbance.
Policy SH12	Shoreline use and development should minimize impacts that contaminate surface or groundwater, cause adverse effects on shoreline ecological functions, or impact aesthetic qualities and recreational opportunities, including healthy shellfish harvest.	**Consistent**. The proposed action would not result in impacts to surface or groundwater, or impact ecological functions of the shoreline. Aesthetic qualities and recreational opportunities would remain at baseline conditions.
Policy SH13	Ensure mutual consistency with other regulations that address water quality and stormwater quantity, including standards as provided for in Title 12 (Stormwater Drainage) and Chapter 173-201A WAC (Water Quality Standards).	**Consistent**. The proposed action could result in potentially minor impacts to stormwater quality and indirect impacts to Clam Bay and Puget Sound. However, the project would obtain a NPDES Construction Stormwater General Permit from the EPA, and would adhere to all other pertinent water quality standards and regulations.
Policy SH14	Utilize pervious materials and other appropriate low impact development techniques where soils and geologic conditions are suitable and where such practices could reduce stormwater runoff.	**Consistent**. The proposed action would not increase any impervious surface within the shoreline jurisdiction, and most impacts would be restored to baseline conditions (e.g. existing paved areas will be repaved after excavation/trenching) after project completion.
Policy SH15	All shoreline use and development shall be conducted in accordance with Title 15 (Flood Hazard Areas). The subdivision of land should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway. When evaluating alternate flood control measures or floodplain restoration opportunities, consider the removal or relocation of structures in flood-prone areas.	**Consistent.** The proposed action would not occur within a FEMA floodplain. See response to KCC 22.400.115(B).
Policy SH16	Accommodate and promote, in priority order, water-dependent, water-related and water-enjoyment economic development. Such development should occur in those areas already partially developed with similar uses consistent with this program, areas already zoned for such uses consistent with the Kitsap County Comprehensive Plan, or areas appropriate for water-oriented recreation.	**Consistent.** The proposed action is a water-dependent development project, and requires proximity to the shoreline to function. Additionally, the action would occur within a parcel already developed with similar uses.
Policy SH17	Water-oriented economic development, such as those aquaculture activities encouraged under the Washington Shellfish Initiative, should be encouraged and shall be carried out in such a way as to minimize adverse effects and mitigate unavoidable adverse impacts to achieve no net loss of shoreline ecological functions.	**Consistent**. The proposed action would minimize adverse effects and mitigate unavoidable adverse impacts to the shoreline jurisdiction through the use of avoidance measures and best management practices.
Policy SH18	Prevent damage or destruction of historic, archaeological, cultural, scientific and educational (HASCE) sites through coordinated identification, protection and management with the appropriate local, state and federal authorities and registrars, affected Indian tribes, and property owners.	**Consistent**. A cultural resources survey was conducted for the proposed action, which included desktop review and field surveys (including test pits). The results of the survey concluded that the proposed action would have no impact to built-

Provision	Title	Consistency Determination
		environment historic properties or known significant archaeological resources.
Policy SH19	Provide opportunities for education and appreciation related to HASCE features where appropriate and where maximum protection of the resource can be achieved.	**Not applicable.** The current land use precludes public use of the property, and no known HASCE features were identified during cultural resource surveys at the site.
Policy SH20	For shoreline use and development activities, including plats and subdivisions at full build-out, employ innovative development features to achieve no net loss of ecological functions, such as sustainable and low impact development practices where appropriate	**Consistent**. See response to Policy SH-5.
Policy SH21	Give preference to water-dependent uses and single-family residential uses that are consistent with preservation of shoreline ecological functions and processes. Secondary preference should be given to water-related and water-enjoyment uses. Non-water-oriented uses should be limited to those locations where the above-described uses are inappropriate or where non-water-oriented uses demonstrably contribute to the objectives of the Act. For use preference within shorelines of statewide significance, see Section 22.300.145(B).	**Consistent**. The proposed action is a water-dependent use and would not significantly alter the shoreline ecological functions and processes from baseline conditions.
Policy SH22	Designate and maintain appropriate areas for protecting and restoring shoreline ecological functions and processes to control pollution and prevent damage to the shoreline jurisdiction and/or public health.	**Not applicable.** This policy relates to County actions regarding land use designations.
Policy SH23	Through appropriate site planning and use of the most current, accurate and complete scientific and technical information available, shoreline use and development should be located and designed to avoid the need for shoreline stabilization or actions that would result in a net loss of shoreline ecological functions.	**Consistent**. The proposed action does not incorporate shoreline stabilization or any actions that would result in a net loss of shoreline ecological functions.
Policy SH24	Aquaculture is of statewide interest. Properly managed, it can result in long-term, over short-term, benefit and can protect the resources and ecology of the shoreline. Aquaculture is dependent on the use of the water area and, when consistent with the control of pollution and prevention of damage to the environment, is a preferred use of the water area.	**Consistent.** The proposed action would, in part, consist of aquaculture activities and is a water-dependent land use.
Policy SH25	Potential locations for aquaculture activities are relatively restricted by water quality, temperature, dissolved oxygen content, currents, adjacent land use, wind protection, commercial navigation, and salinity. The technology associated with some forms of aquaculture is still experimental and in formative states. Therefore, some latitude should be given when implementing the regulations of this section; provided, that potential impacts on existing uses and shoreline ecological functions and processes should be given due consideration.	**Not applicable.** This policy relates to County actions regarding review processes.
Policy SH26	Aquaculture activities should be located, designed and operated in a manner that supports long-term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes.	**Consistent**. Within the shoreline jurisdiction, the proposed action would largely consist of an in-kind replacement of existing infrastructure. The proposed development is intended to ensure long-term, beneficial use of the shoreline.

Provision	Title	Consistency Determination
Policy SH27	Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions and processes, adversely impact eelgrass and macroalgae, or significantly conflict with navigation and other water-dependent uses.	**Consistent**. The proposed action would not result in a net loss of shoreline ecological functions, and would only replace existing infrastructure within the shoreline jurisdiction.
Policy SH28	Aquaculture facilities should be designed and located to avoid the spread of disease to native aquatic life, the establishment of new nonnative species, and significant impacts to the aesthetic qualities of the shoreline.	**Consistent**. The proposed action would allow NOAA/NMFS to continue to research both restoration and commercial aquaculture of shellfish and anadromous and marine finfish. The facility is designed to have minimal risk of contaminating native environments/aquatic life.
Policy SH29	Upland uses and modifications should be properly managed to avoid degradation of water quality of existing shellfish areas.	**Consistent**. The upland uses would directly support the aquaculture activities conducted by NOAA/NMFS at the site. There would be no impact to the water quality of existing shellfish areas.
Policy SH30	Planting and harvesting by boat shall be preferred over low-tide harvest methods where feasible	**Not applicable.** No planting or harvest methods/activities are proposed as a part of the proposed action.
Policy SH31	Noncommercial and small-scale aquaculture projects should be encouraged through the shoreline exemption process.	**Not applicable.** This policy relates to County actions regarding review processes.
Policy SH32	Protect the public's opportunity to enjoy the physical and visual qualities of the shoreline by balancing shoreline use and development in such a way that minimizes interference with the public's use or enjoyment of the water. This may be achieved through regulatory provisions, incentives or other cooperative agreements.	**Consistent**. No recreational resources are present at the site, although Manchester State Park is present immediately to the north of the project site. Impacts of the proposed action to recreational resources in the vicinity of the project would be temporary (e.g., construction noise) and minimized by best management practices and mitigation measures.
Policy SH33	Evaluate site-appropriate types and methods of required public access when reviewing all public shoreline development projects and private subdivision of land into more than four parcels. Based on project-specific circumstances, this may include physical or visual access on or off site.	**Not applicable.** This policy relates to County actions regarding review processes.
Policy SH34	Acquire, maintain and improve diverse physical and visual shoreline access through public and private efforts. This should be accomplished in a comprehensive and prioritized manner through the use of existing plans and programs, including those that address population growth and shoreline access demands such as the Kitsap County Comprehensive Plan, the Kitsap County Parks, Recreation and Open Space (PROS) Plan, and other port and state park plans.	**Not applicable.** This policy relates to County actions.
Policy SH35	Publicly owned, undeveloped road-ends, tax-title lands and rights-of-way adjacent to salt and freshwater shorelines should be evaluated for use as public access points. These lands may be developed for access by a community organization, consistent with Chapter 11.36.1.	**Not applicable.** This policy relates to County actions. Additionally, the project would not include any publicly owned, undeveloped road-ends, or other areas that could apply here.
Policy SH36	Use shoreline public access points to enhance the public's understanding and appreciation of shoreline ecology, cultural history, maritime heritage, and location specific rules and boundaries	**Not applicable.** This policy relates to County actions.

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	by incorporating educational and interpretive signage and other tools into public access facilities.	
Policy SH37	Integrate and facilitate voluntary and incentive-based cooperative restoration and enhancement programs between local, state, and federal public agencies, tribes, nonprofit organizations, and landowners to address shorelines with impaired ecological functions and/or processes.	**Not applicable.** This policy relates to County actions.
Policy SH38	Identify restoration opportunities through sources such as the Kitsap County Shoreline Inventory and Characterization Report, salmon recovery plans, local watershed plans, Puget Sound Nearshore Ecosystem Restoration Project (PSNERP), and the Salmon Recovery Lead Entity Habitat Work Schedule, and authorize, coordinate and facilitate appropriate publicly and privately initiated restoration projects.	**Not applicable.** This policy relates to County actions.
Policy SH39	Encourage and facilitate restoration and enhancement projects for priority habitats and species (Washington Department of Fish and Wildlife, PHS Program).	**Not applicable.** This policy relates to County actions.
Policy SH40	Shoreline ecosystem protection and restoration projects shall be prioritized, located and designed utilizing the most current, accurate and complete scientific and technical information available to promote resiliency of habitats and species.	**Not applicable.** The proposed action is not a restoration project. However, the project will be designed using the most current, accurate, and complete scientific and technical information available.
Policy SH41	Plan, locate and design proposed transportation, parking facilities, and utility facilities where routes will avoid a net loss of shoreline ecological functions or will not adversely impact existing or planned water-dependent uses.	**Consistent**. The proposed action will site transportation/parking facilities in areas which avoid or minimize impacts to shoreline ecology, and the parking facilities will support the water-dependent use at the site.
Policy SH42	Parking facilities in shorelines are not a preferred use. Such facilities shall only be allowed as necessary to support an authorized use and only when environmental and visual impacts are minimized.	**Consistent**. The increase in parking capacity associated with the proposed action is minimal (3 more spaces than currently exist), and will only be used to support the water-dependent use at the site.
Policy SH43	New or expanded transportation routes and essential utility facilities shall, to the extent feasible, be located in areas that don't require extensive cut/fill or shoreline stabilization, be limited to local access and public shoreline access routes, be located in existing rights-of-way corridors, and not be built within the shoreline jurisdiction when possible.	**Consistent**. The proposed expanded parking facilities, access roads, and other transportation facilities will be located in areas that do not require stabilization, and will primarily be located in previously developed areas outside of the shoreline jurisdiction.
Policy SH44	Transportation and utility projects shall be consistent with the public access policies and plans of this program.	**Consistent.** The transportation and utility components of the proposed action would conform to all other portions of the SMP, as indicated by other responses in this table and Table 5 to other policies.
Policy SH45	Provide for alternate modes of travel, including pedestrian, bicycle and public transportation, where appropriate.	**Not applicable.** The proposed action does not include modifications to publicly used roadways or travel corridors. Parking and traffic corridors associated with the project are only intended for users of the NOAA/NMFS facility and will not include accommodations for alternate modes of transportation.

Provision	Title	Consistency Determination
Policy SH46	Maintenance of existing transportation corridors and utility facilities shall be carried out in a manner that will avoid a net loss of shoreline ecological functions and, where feasible and appropriate, improve shoreline ecological functions.	**Consistent**. The proposed action will have minimal impacts to shoreline ecological functions, as described in response to Policy SH9.
Policy SH47	For shorelines of statewide importance, recognize and protect the statewide interest over local interest. Various agencies/organizations (WDFW, Ecology, affected tribes, etc.) should be consulted on development proposals that could affect anadromous fisheries. Recognize and take into account state agencies' policies, programs and recommendations in developing and administering use regulations.	**Consistent**. The proposed action would occur on a shoreline of Puget Sound and would therefore be considered a shoreline of statewide significance. An Environmental Assessment was developed for the proposed action, which included outreach efforts for various agencies/organizations, including letters to: the Muckleshoot Tribal Council, the Port Gamble S'Klallam Tribal Council, the Skokomish Tribal Council, the Stillaguamish Tribal Council, the Suquamish Tribal Council, the Tulalip Board of Directors, and the non-federally recognized Duwamish Tribal Organization. Additionally, various state agencies including Ecology and WDFW were afforded the opportunity to comment on the Environmental Assessment as well.
Policy SH48	For shorelines of statewide importance, preserve the natural character of the shoreline. Administer shorelines environments and regulations to minimize damage to the shoreline. Where natural resources of statewide importance are being diminished over time by human activities, restoration of those resources should be facilitated. In order to reduce adverse impacts to the environment while accommodating future growth, new intensive development activities should upgrade and redevelop those areas where intensive development already occurs, rather than allowing high-intensity uses to extend into low-intensity use or underdeveloped areas.	**Consistent.** Most of the policy pertains to County actions. However, the proposed action will redevelop an area where intensive development already occurs.
Policy SH49	For shorelines of statewide significance, result in the long-term over short-term benefit. Preserve sufficient shorelands and submerged lands to accommodate current and projected demand for economic resources, such as shellfish beds and navigable harbors. Actions that would convert resources into irreversible uses or detrimentally alter natural conditions that are characteristic of shorelines of statewide significance should be severely limited. Evaluate the short-term economic gain or convenience of developments in relationship to long-term and potentially costly impairments to the natural environment. Actively promote aesthetic considerations when contemplating new development, redevelopment of existing facilities, or for the general enhancement of shoreline areas.	**Not applicable.** This policy relates to County review actions.
Policy SH50	For shorelines of statewide significance, protect the resources and ecology of the shoreline. Projects shall be required to consider incremental and cumulative impacts while ensuring no net loss of shoreline ecosystem processes and functions. In order to ensure the long-term protection of	**Consistent**. An Environmental Assessment was developed for the proposed action, which evaluates cumulative effects of the action and other nearby actions. All cumulative effect evaluations were determined to be short

Provision	Title	Consistency Determination
	ecological resources of statewide importance, activities impacting anadromous fish habitats, forage fish spawning and rearing areas, shellfish beds and other unique environments should be severely limited. Limit public access where improvements would result in a loss of shoreline ecological functions, such as in priority or sensitive habitats.	term and minor, or negligible, including potential impacts to flora and fauna.
Policy SH51	For shorelines of statewide importance, Increase public access to publicly owned areas of the shorelines. Preserve and encourage public access with special scenic or cultural qualities. Give priority to developing paths and trails to shoreline areas and linear access along the shorelines, where appropriate. Locate development, including parking, as far inland from the OHWM as is feasible so that access is enhanced.	**Not applicable.** The proposed action does not include publicly owned and accessible areas of the shoreline.
Policy SH52	Increase recreational opportunities for the public in the shoreline. Public access and recreation requirements should take into account the activities of state agencies and the interests of the citizens of the state to visit public shorelines. Plan for and encourage development of facilities for recreational use of the shorelines, but reserve areas for lodging and related facilities on uplands well away from the shoreline, with provisions for nonmotorized access to the shorelines.	**Not applicable.** The proposed action does not include publicly owned and accessible areas of the shoreline.
Policies SH53 through SH56	Policies specific to shorelines of statewide significance occurring within Hood Canal.	**Not applicable.** The proposed action does not occur within Hood Canal.

Acronyms:

Ecology = Washington Department of Ecology; EPA = U.S. Environmental Protection Agency; FEMA = Federal Emergency Management Agency; HASCE = historic, archaeological, cultural, scientific and educational; KCC = Kitsap County Code; MRS = Manchester Research Station; NMFS = National Marine Fisheries Service; NOAA = National Oceanic and Atmospheric Administration; NPDES = National Pollutant Discharge Elimination System; OHWM = ordinary high water mark; PHS = priority habitat species; PROS = Parks, Recreation and Open Space; PSNERP = Puget Sound Nearshore Ecosystem Restoration Project; RCW = Washington Revised Code; SMP = Shoreline Master Plan; WAC = Washington Administrative Code; WDFW = Washington Department of Fish and Wildlife

5. Statement of Consistency

Based on the information provided in this document, and in accordance with the Federal Coastal Zone Management Act of 1972, as amended, NOAA has determined that the Proposed Action (Manchester Research Station Seawater System Replacement and Campus Addition Project) is consistent to the maximum extent practicable with the enforceable policies of Washington's Coastal Zone Management Program (CZMP).

6. References

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U.S. Army Corps of Engineers (USACE). 2019. Final Fourth Five-Year Review Report Old Navy Dump/Manchester Annex United States Army Corps of Engineers Kansas City District Fuds No. F10WA011902 EPA ID: WA8680030931 Manchester, Washington September 13, 2019. Accessed August 2022.

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USACE, EPA, and NOAA. 2012. Old Navy Dump/Manchester Annex Superfund Site Institutional Control Plan. Last revised March 16, 2012. Including Appendix L: Declaration of Land Use Controls and Restrictive Covenant.

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Appendix A Best Management Practices and Mitigation Measures

NOAA has committed to implementing the following Best Management Practices (BMPs) and Mitigation Measures for the proposed action, as documented in the Environmental Assessment (EA) for the project (AECOM 2023), prepared in accordance with the National Environmental Policy Act. The EA concluded that no significant impact would result from the proposed action, provided that recommended mitigation measures are implemented and associated state and federal regulatory permits are acquired.

A.1 Construction Best Management Practices:

- Trenching and excavation activities would be undertaken in accordance with OSHA excavation standards (29 CFR Part 1926 Subpart P).
- The construction contractor would implement standard practices to reducing dust and equipment emissions during construction, potentially including watering exposed surfaces, covering haul trucks, removing visible mud or dirt track-out onto adjacent roads, limiting vehicle speeds on unpaved areas, complete paving and grading work in a timely manner, and lay building pads as soon as possible after grading, and minimize idling times.
- The construction contractor would prepare and implement a Construction Stormwater Pollution Prevention Plan in compliance with EPA's Construction General Permit to avoid release of sediment and construction debris into nearby marine, estuarine, and riverine habitats. The plan would contain a Temporary Erosion and Sediment Control Plan. Impact avoidance and minimization measures and standard construction BMPs that would be included in the SWPPP are listed below:
    - The number of access routes, size of staging areas, and the size of the active construction sites shall be limited to the minimum necessary to achieve project objectives and the staging, storage equipment laydown, access routes, and parking areas would be established on paved or previously disturbed areas to the extent feasible.
    - Standard construction site erosion control measures such as silt fencing and covering of stockpiles shall be used where sediment from exposed slopes could erode and enter drainage facilities. Areas of disturbed soils that slope toward drainages would be stabilized when not actively used to reduce erosion potential.
    - If work is conducted during the wet season October 1 through April 30, stockpiled fill materials and excavation spoils shall be covered.
    - Silt fencing shall be installed around all areas of disturbed soil, stockpiled fill materials, and excavation spoils.
    - A clean construction site shall be maintained to reduce the potential for debris entering surface waters. Any debris that enters the water shall be contained, removed, and disposed of at an upland location.
    - The contractor shall be required to maintain construction equipment and vehicles to prevent them from leaking fuel or lubricants. Refueling shall occur in paved areas of the site, away from water bodies.
    - Procedures to prevent or respond to leaks, spills, or other releases of pollutants shall be established and implemented.

    - Monitoring and inspections by qualified personnel shall be undertaken to verify permit compliance. Inspections and any corrective actions shall be documented.

- The following standard protocols for inadvertent discoveries—if encountered—would be followed, in consultation with Department of Archaeology & Historic Preservation (DAHP) and in accordance with 36 C.F.R 800 and 43 C.F.R Part 10.

    - If, during excavation or other construction activities, any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, activities that may damage or alter such resources will be suspended within 100 feet of the find. Resources include, but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify the NOAA Contracting Officer so that the appropriate authorities and/or tribal representatives and other interested parties as appropriate may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made, consistent with 36 CFR 800.13. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources. If the find is a human remain, the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) shall be followed (43 CFR Part 10).

- The following standard BMPs to limit construction noise impacts to the extent practicable would include:

    - Route truck traffic away from residential areas and sensitive receptor locations such as schools or parks, to the extent practicable.

    - Turn off equipment when not in use and prohibit unnecessary idling of internal combustion engines.

    - Locate stationary noise-generating equipment such as air compressors or portable power generators as far as practicable from sensitive receptors.

    - Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that in are in good condition and appropriate for the equipment.

- The following standard traffic management BMPs to limit transportation impacts to the extent practicable would include:

    - Providing early notification to staff and visitors about upcoming construction and expected disruptions to traffic flow.

    - Utilizing signage to indicate detours or road closures, where applicable.

    - Avoiding obstructions to pedestrian areas and provide clear pedestrian walkways if obstructions cannot be avoided.

A.2 Mitigation Measures:

- **Mitigation Measure 4.5-1, Maintain Pre-development Hydrology.** Site planning, design, construction, and maintenance strategies shall be implemented to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow. Design of new impervious surfaces (buildings and paved areas) shall utilize low-impact design and/or “green infrastructure” elements to avoid any direct discharge of stormwater to waterbodies.
- **Mitigation Measure 4.8-1: Noxious Weed Control.**
  - Revegetate disturbed areas, as needed, with a native seed mix to prevent the spread or establishment of invasive species.
  - To prevent the establishment and spread of invasive species, assess populations of noxious weeds and treat weed populations prior to the start of ground-disturbing activities.
  - Use weed-free project staging areas and avoid or minimize travel through areas where noxious weed infestations have been documented.
  - Ensure that construction equipment arriving on site has been cleaned prior to entry. Clean all equipment before leaving the project site.
  - New or replacement landscape plantings shall use native species wherever practicable.
- **Mitigation Measure 4.8-2: Pre-Construction Surveys for Nesting Birds.** A qualified biologist shall survey the project footprint and appropriate survey radii (determined by the biologist based on the species) for migratory birds and their nests prior to construction. If breeding birds are identified, implement appropriate buffers (determined by the biologist based on the species) to prevent unintentional take through nest abandonment or failure. No construction activities shall occur within the buffers until the biologist confirms that activities may recommence.
- **Mitigation Measure 4.9-1: Wetland Delineation and Avoidance.** Prior to construction (including any ground-disturbance or vegetation removal) within 100 feet of the small wetland that is present to the west of the main driveway and southwest of Building 22, NOAA shall retain a qualified wetland scientist to conduct a formal wetland delineation in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. Based on the wetland function and rating, the wetland scientist shall recommend an appropriate vegetation protection zone width and other measures to avoid or minimize sedimentation and turbidity into the wetland. At a minimum such measures shall include:
  - Installation of high-visibility fencing around the wetland (including the recommended vegetation protection zone width) to prevent access by personnel or equipment during construction.
  - Installation of erosion and sediment controls, including silt fencing, compost socks, and./or straw wattles between the fenced protection zone and nearby construction work areas.
  - Stabilization of exposed soils, including stockpiles, in construction areas adjacent to and/or upslope of the wetland.
- **Mitigation Measure 4.13-1: Restrict Construction Hours**. Restrict noise generating construction activities to between the hours of 7:00 a.m. to 10:00 p.m., where feasible.
- **Mitigation Measure 4.13-2: Preconstruction coordination and notification.** Minimize noise impacts at the Manchester State Park campground through preconstruction coordination and notification with the State Parks Department.

- **Mitigation Measure 4.14-1: Utilize a designated haul route.** Construction-related truck traffic shall utilize the preferred haul route along Beach Drive East and Colchester Road to Mile Hill Road. Heavy construction vehicle and equipment movement shall be minimized during peak rush hours.
- **Mitigation Measure 4.14-2: Preconstruction coordination and notification.** The construction contractor shall meet with site operations personnel at NOAA and EPA to coordinate time windows and durations of internal roadway closures necessary for construction activity.
- **Mitigation Measure 4.14-3: Develop a roadway closure and traffic detours plan.** This plan shall be developed with consultation and approval from site operations personnel at NOAA and EPA. Additional temporary parking needs shall be addressed as well as allowable time windows and the duration of roadway closures for various stages of construction.
- **Mitigation Measure 4.17-1: Environmental Media Management Plan.** Prepare an Environmental Media Management Plan to assist NOAA and construction personnel in managing contaminated soils, dewatering water, or remnant site features that may be encountered during construction earthwork activities to minimize impacts on the environment and on worker and public health and safety. The Environmental Media Management Plan shall include procedures to be employed during ground disturbing activities within the Former Fire Training Area to minimize risks associated with handling or disposal of potentially contaminated soils or groundwater, or asbestos-clad piping. NOAA shall consult and coordinate with the EPA Region 10 Remedial Project Manager and with the US Army Corps of Engineers Project Manager in developing the EMMP. The Environmental Media Management Plan shall include, at a minimum, the following components:
    - Soil Management Plan
    - Sampling and Analysis Plan
    - Contingency Asbestos Handling Plan
    - Contingency Dewatering Plan
- **Mitigation Measure 4.17-2: Implement Institutional Controls.** NOAA and its contractors shall implement and adhere to the following site institutional controls (USACE et al 2012; USACE 2019): within the restricted areas (areas where TPH impacts remain in soil) or underground storage tank (UST) areas of the former Fire Training Area:
    - Design future storm water runoff systems to divert runoff away from the UST areas.
    - Notify contractors and employees working in subsurface excavations of the need to utilize health and safety precautions normally applicable to UST removals.
    - Excavations shall be observed by a qualified environmental professional to determine if exposed soils contain free product. If free product is encountered, excavated soils shall be disposed of in an appropriate off-site landfill. If free product is not encountered, the soils may be returned to the original excavation, or very close to the original excavation in a substantially similar environment.
    - Temporary storm water controls and other BMPs, such as temporary soil covers and subsurface liners, shall be used to minimize infiltration and runoff of soil materials.
- **Mitigation Measure 4.17-3:** Site-Specific Health and Safety Plan. The contractor shall develop a site-specific health and safety plan outlining procedures to protect worker health and safety during all site development and construction activities, in accordance with 29 CFR 1910.120. Site-specific investigation reports relating to petroleum, dioxin, and perfluoroalkyl substances (PFAS) contamination at the site should be provided to the contractor by NOAA, to inform the development of appropriate health and safety measures.

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