APPLICANT: Chehalis River Basin Flood Control Zone District
DATUM: North American Datum 1983
ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

REFERENCE #: NWS-2014-1118
LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.681091, -122.985087

SHEET: 2 of 22
DATE: 7/29/2020

Existing Conditions
FRE Facility

ANCHOR QEA WETLAND AND STREAM DELINEATION STUDY AREA (WSEL 628FT) MAXIMUM EXTENT OF TEMPORARY INUNDATION POOL (MAX EXTENT OF TEMP. INUNDATION)
DELINEATED WETLAND (ANCHOR QEA 2018)
DELINEATED STREAMS (ANCHOR QEA 2018)
Existing Conditions
Quarry Sites and Proposed Access

APPLICANT:
Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS:
See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project
REFERENCE #: NWS-2014-1118
LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.881091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

SHEET: 4 of 22
DATE: 7/29/2020

Huckleberry Ridge Quarry
South Quarry
North Quarry
Quarry Site
Anchor QEA wetland and stream delineation study area (WSEL 628ft)
NHD Stream
Delineated streams (Anchor QEA 2018)
Existing roads to be improved for quarry site access

National Wetland Inventory
Delineated Wetland (Anchor QEA 2019)
USDA Hydric Soil Rating
Not Hydric
Hydric Soil
APPLICANT: Chehalis River Basin Flood Control Zone District

DATE: North American Datum 1983

ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.681091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

SHEET: 5 of 22
DATE: 7/29/2020

Existing Conditions

Pe Ell Water Line

Pe Ell Water Treatment Plant

Chehalis River Intake

Lester Creek Intake

Water Transmission Intake
Water Transmission Line (Approximate Location)
NHD Stream
Delineated streams (Anchor QEA 2018)
Existing roads to be improved for quarry site access
National Wetland Inventory
Delineated Wetland (Anchor QEA 2018)

USDA Hydric Soil Rating
Not Hydric
Hydric Soil
Anchor QEA wetland and stream delineation study area (WSEL 828ft)
APPLICANT: Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

PROPOSED PROJECT: Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA
SHEET: 6 of 22
DATE: 7/29/2020
APPLICANT:
Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS:
See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.681091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

SHEET: 7 of 22
DATE: 7/29/2020

Total Wetland Cut/Fill:
Temporary: 762 CY
Permanent: 3,273 CY

Total Temporary Cut/Fill In Chehalis River: 8,147 CY

FRE Facility Construction
Access and Staging
APPLICANT: Chehalis River Basin Flood Control Zone District
DATUM: North American Datum 1983
ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project
REFERENCE #: NWS-2014-1118
LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.681091, -122.985087

PROPOSED PROJECT: Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chelahis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County  STATE: WA
SHEET: 8 of 22  DATE: 7/29/2020
APPLICANT: Chehalis River Basin Flood Control Zone District
DATUM: North American Datum 1983
ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project
REFERENCE #: NWS-2014-1118
LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.681091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

SHEET: 9 of 22
DATE: 7/29/2020

Potential Quarry Sites – Plan View

Existing roads to be improved for construction and quarry site access
Potential Quarry Site Development Area (Quarry not to exceed 15 acres)
Anchor QEA wetland and stream delineation study area (WSEL 628 ft)
Delineated streams (Anchor QEA 2018)
Delineated Wetland (Anchor QEA 2019)
National Wetland Inventory
USDA Hydric Soil Rating
Not Hydric
Hydric Soil

Huckleberry Ridge Quarry Site
(West ~4.6 Miles)

Huckleberry Ridge Quarry Site

North Quarry Site

South Quarry Site
APPLICANT: Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.881091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

SHEET: 10 of 22
DATE: 7/29/2020
APPLICANT: Chehalis River Basin Flood Control Zone District
DATUM: North American Datum 1983
ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project
REFERENCE #: NWS-2014-1118
LAT/LONG: FRE Facility: 46.545080, -123.298656
                        Airport Levee: 46.881091, -122.985087

PROPOSED PROJECT: Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport
IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County STATE: WA
SHEET: 11 of 22 DATE: 7/30/2020

Permanent Stream Impact
(3.2 Acres 220,309 CY Cut/194,766 CY Fill/1,021 Linear ft)

Permanent Wetland Impact (0.14 Acres)
Total Permanent Wetland Cut/Fill: 85,254 CY Cut / 85,254 CY Fill
Permanent Wetland Impact (0.44 Acres)
Permanent Relocated Access Road

Completed Dam and Fish Passage Facility
- Approach Channel
- CHTR Facility
- Dam
- Stilling Basin
- OHWM 2-Year Water Surface Elevation
- Cross Section (See sheets 10 - 15)
- Delineated Wetland (Anchor QEA 2019)
- Permanent Wetland Impact
- Permanent Stream Impact
- Lewis County Parcel
APPLICANT: Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG: FFE Facility: 46.545080, -123.298656
            Airport Levee: 46.681091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands

NEAR: Pe Ell, and Chehalis

COUNTY: Pacific and Lewis County

STATE: WA

SHEET: 12 of 22

DATE: 7/30/2020
APPLICANT:
Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS:
See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
- FRE Facility: 46.545080, -123.298656
- Airport Levee: 46.881091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA
SHEET: 14 of 22
DATE: 7/29/2020
APPLICANT:
Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS:
See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
FRE Facility: 46.545080, -123.298656
Airport Levee: 46.681091, -122.985087

PROPOSED PROJECT:

Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands

NEAR: Pe Ell, and Chehalis

COUNTY: Pacific and Lewis County

STATE: WA

DATE: 7/29/2020

FRE Dam

Typical Dam and Spillway
FRE Dam
Low Levels Sluices
Longitudinal Sections

APPLICANT:
Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS:
See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
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PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

DATE: 7/29/2020

ELEVATION (FT)

STATION ALONG SECTION (FT)

0.1
1
20' TRAINING WALL

FRE DAM AXIS
RCC DAM

0.85
1
20' TRAINING WALL

HYDRAULIC EMERGENCY BULKHEAD

UPPER DECK
LOWER DECK

scale in feet

SECTION - 12'W x 20'H SLUICE

SECTION - 10'W x 16'H SLUICE

STILLING BASIN
BAFFLE BLOCKS
SAILING BLOCKS

EXISTING GROUND ENDWALL

DRAINAGE GALLERY

VENT
AIR

WATER QUALITY INTAKE PORT 4' DIA (TYP)
WATER QUALITY INTAKE PORT 7 ½ DIA

4 - 4" DIA (TYP)

4 - 48" VALVES
1 - 84" VALVE

TRASH RACKS FOR LOW LEVEL OUTLET. (TYP)

WATER QUALITY INTAKE PORT 7 ½ DIA

GROUT CURTAIN (SEE SHEET FRE-S-4 FOR APPROXIMATE DEPTH)

HYDRAULIC RADIAL GATE

PLATE

RIDGE DECK AND ACCESS PORTAL

STILLING BASIN ENDWALL

TRASH RACKS

WATER QUALITY INTAKE PORT 7 ½ DIA

TRASH RACKS

20' TRAINING WALL

HYDRAULIC RADIAL GATE

EL 377.0
STILLING BASIN

1' RCC LIFTS (TYP)

EXISTING GROUND SURFACE

DRAINAGE GALLERY

VENT
AIR

WATER QUALITY INTAKE PORT 4' DIA (TYP)
WATER QUALITY INTAKE PORT 7 ½ DIA

4 - 4" DIA (TYP)

4 - 48" VALVES
1 - 84" VALVE

TRASH RACKS FOR LOW LEVEL OUTLET. (TYP)

WATER QUALITY INTAKE PORT 7 ½ DIA

GROUT CURTAIN (SEE SHEET FRE-S-4 FOR APPROXIMATE DEPTH)

HYDRAULIC RADIAL GATE

PLATE

RIDGE DECK AND ACCESS PORTAL

STILLING BASIN ENDWALL

TRASH RACKS

WATER QUALITY INTAKE PORT 7 ½ DIA

TRASH RACKS

20' TRAINING WALL

HYDRAULIC RADIAL GATE

EL 377.0
STILLING BASIN
APPLICANT: Chehalis River Basin Flood Control Zone District

DATUM: North American Datum 1983

ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project

REFERENCE #: NWS-2014-1118

LAT/LONG:
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Airport Levee: 46.881091, -122.985087

PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport

IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA

SHEET: 19 of 22 DATE: 7/29/2020

DEBRIS MANAGEMENT SORTING YARD
DELINeated OHWM (ANCHOR QEA 2018)

TEMPORARY WETLAND IMPACT
DELINeated WETLAND (ANCHOR QEA 2018)
Pe Ell Water Line
Plan View

APPLICANT: Chehalis River Basin Flood Control Zone District
DATUM: North American Datum 1983
ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project
REFERENCE #: NWS-2014-1118
LAT/LONG:
FRE Facility: 46.545080, -123.298656
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PROPOSED PROJECT:
Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport
IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Lewis County
STATE: WA
SHEET: 20 of 22
DATE: 7/30/2020
Geographic Focus Areas for Aquatic and Terrestrial Mitigation

APPLICANT: Chehalis River Basin Flood Control Zone District
DATUM: North American Datum 1983
ADJACENT PROPERTY OWNERS: See Appendix C for full list of property owners

Chehalis River Basin Flood Damage Reduction Project
REFERENCE #: NWS-2014-1118
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Construct floodwater retention facility and associated infrastructure, and raise levee at the Centralia-Chehalis Airport
IN: Chehalis River, Tributaries, and Wetlands
NEAR: Pe Ell, and Chehalis
COUNTY: Pacific and Lewis County
STATE: WA
SHEET: 22 of 22 DATE: 7/29/2020