Appendix E. Federal-Aid Highway Program ESA-MSA Programmatic Notification Review and Verification

K19071 I-5 Rose Quarter Improvement Project Version 10/2020 FAHP Notification Strategy

Figure 1. Project Area I-5 Rose Quarter Improvement Project



KN19071 I-5 Rose Quarter Improvement Project Design , Construction, Impacts, and Mitigation Reporting Strategy

10/7/2020

• Introduction

- Project Design and Delivery (CMGC)
 - o CMGC
 - o CMGC and the FAHP
 - o Commitment Tracking

• Continued Design and Interagency Coordination:

- o Stormwater Management
 - Define the project's ISA and CIA
 - Establish future reporting parameters and requirements relative to design updates and BMP selections
 - Overview *Figure 6* from the 2018 EA

o Agency Updates, Review and Decision Making, and Record Keeping

Introduction

The project must complete its ESA consultation requirements prior to completion of the Environmental Assessment (EA) process. The project is currently preparing its responses to comments received as part of the 45-day public comment period. This and a FHWA/NMFS approved FAHP notification is required prior to finalizing the anticipated *Finding of No Significant Impact* (FONSI) in fall/winter of 2020. The EA presented the project with a low level of design and addresses this through continued use of the *Construction Manager/General Contractor* (CM/GC) after the NEPA process. Therefore, continued interagency ESA coordination will be integrated into the CMGC process to ensure that the project's phased design, BMPs, avoidance and minimization measures, enhancements, and mitigation meet the intent of the 2012 FAHP ESA-programmatic Biological Opinion.

CMGC

The CMGC employs a phased approach of design and construction management that relays on separate Contractors to provide design, management, and owner's representation (ODOT). ODOT, as the owner will be informed and can influence the design throughout the process. Key points in the process are reserved for ODOT's approval. When ODOT considers the design to be complete, the construction manager then has an opportunity to bid on the project based on the completed design and schedule. If the owner, designer and independent cost estimator agree that the contractor has submitted a fair price, ODOT will issue a construction contract and the construction manager then becomes the general contractor. An advantage to the process is that the contractor acts as the consultant during the design process and can offer constructability and pricing feedback on design options and can identify risks based on the contractor's established means and methods. This process also allows the owner to be an active participant during the design process and make informed decisions on design options based on the contractor's expertise. A more extensive presentation of the process is available at:

https://www.fhwa.dot.gov/construction/contracts/acm/cmgc.cfm

CMGC and the FAHP

An environmental sub-team will be integrated into the CMGC that includes regular coordination and representation by ODOT Region 1 Environmental staff (e.g. REC). Through this process and as the owner ODOT will strategically identify, in collaboration with NMFS and FHWA, when to convey project design change information and seek input and when to submit project change requests. This relationship will ensure FAHP-ESA compliance through inclusion of the following FAHP elements (1.3.2 Conservation Measures): Stormwater treatment deficit (on-site). ODOT Region 1 Environmental will use the project's standing placeholder within the established monthly ODOT Region 1/FHWA/ NMFS Environmental Coordination Meeting (ODOT) to provide updates to the agencies, seek guidance to ensure compliance with the FAHP and the approved Notification, and present and seek advisement regarding decision points (e.g. the use of off-site surplus stormwater credits). The Consultant will track and manage these elements within the project's ODOT ProjectWise database folder.

At minimum, the tracking database folders will contain:

- Diagrams that include the project's
 - Pre and post project ISA and CIA, any CIA lacking treatment, and areas off-site treatment
- Tracking spreadsheet that
 - Enumerates and quantifies the stormwater management basin areas (onsite and off-site)
 - Stormwater treatment BMPs
- Documentation of interagency QA/QC and decision documents between ODOT and third parties Including NMFS, ODFW, DSL, DEQ, USACE, and FHWA.
- FHWA and NMFS approved ODOT *Project Change Forms* that comply with the FAHP and memorialize significant levels of design. See the individual element sections below for more detail.

Note: To provide clarity through the CMGC process, one folder will contain all current relative design and BMPs agreed upon by the Project and the Environmental sub-team including relative agreement summaries. Another folder will include all other previous design elements and summaries relative to the FAHP notification and the FAHP ESA-programmatic.

Strategy Elements: Stormwater Management

Pre and Post ISA and CIA

- PBOT ROW
 - The project assumes that the PBOT CIA portion will be captured and treated via use of stormwater planters per Portland Bureau of Environmental Services design. This design standard meets the 2014 ODOT Hydraulics Manual for infiltration style BMPs (e.g. infiltration swale). It is also assumed that the design storm will be infiltrated. Flows in excess of the design storm if not infiltrated will be conveyed to the City's Columbia Blvd Wastewater Treatment Plant. These flows will receive additional treatment that meets EPA standards via permit (DEQ) will then be discharged to the Columbia River. This second level of treatment is not known and is not available to compare to the FAHP standards.
 - Due to a lack of survey and design all PBOT CIAs have been combined into into one 'basin' since all non-infiltrated flows are assumed to be conveyed as now to the City's Columbia Blvd. Wastewater treatment Facility.
 - Flows that cannot be then fully infiltrated to the design storm and or flows in excess of the facilities' capacity are assumed to then be conveyed to the City's Columbia Blvd Wastewater Treatment Plant. Additional treatment that meets EPA standards via permit (DEQ) will then be discharged to the Columbia River. This second level of treatment is not known and is not available to compare to the FAHP standards.
- ODOT ROW
 - Record BMPs in the Notification that are most relevant to the existing conditions within each sub-basin though design and BMP siting changes are likely. This is more relevant than "TBD". The project at this time is unable to account for 3-acres (Basin #4). It is assumed that design refinement will either eliminate this need, discover offsite treatment locations within the project corridor, and or use surplus treatment generated via previously constructed STIP projects (e.g. 18806 US-26 Cornelies Pass-185th.

Note: PBOT and ODOT CIA and ISA boundaries and acreages have been interpreted from GIS, roadway imaging, and preliminary design since survey has not been completed.

Documenting Future Changes in Conveyance and Treatment (PROJCHG versus PCR)

- FAHP Project Change Forms (FAHPCHG) requiring FHWA & NMFS approval will include: Off-site treatment; and use of Proprietary technology not yet approved for *Enhanced, General Use,* under the WADOE TAPE Program.
- Project Completion Report (PCR)
 - All changes documented in FAHPCHG forms
 - Any changes in TAPE approve BMPs classified for "Enhanced", "General Use".
 - Contiguous expansion, contraction, or refinement of the CIA (based on FAHP 'triggers') of 'on-site' CIA and ISA
- A KMZ or other approved graphics, and a spreadsheet will be kept up-to-date on the project's ftp folder through design and construction to demonstrate ISA, CIA, and treatment.

Known Assumptions

ODOT ROW

- The CIA and if need be a minor equivalent portion will be captured and treated for water quality treatment per the 2014 ODOT Hydraulics Manual. This will reduce or eliminate the current direct discharge into the Willamette River.
- The at grade portion of I-5 will be reconstructed to full depth and connect the existing auxiliary lanes to upgrade the corridor from a continuous bi-directional 4-lane thoroughfare to 6-lanes. This will occur in current ROW.
- New auxiliary lanes and full shoulders will be added to I-5 NB and SB between I-84 and I-405 to reduce frequent crashes and improve operations.

PBOT ROW

- Construction of the I-5 mainline improvements will require the replacement of the N/NE Weidler, N/NE Broadway, N Williams, and N Vancouver structures over I-5. They will be rebuilt as two highway covers.
- The N Flint Ave I-5 crossing will be removed.
- Construct a new span across I-5 between Hancock and Dixon and Center St and N Vancouver Ave.
- Construct a new bike/pedestrian span across I-5 between N Winning Way (Ramsay Way) and N Clackamas. This does not trigger *stormwater management* per the FAHP.
- Construct that fully span I-5 and connect the following PBOT ROW's.
 - NE Broadway and NE Weidler
 - N Vancouver

The following page includes Figure 6 from the EA demonstrating the above improvements. A KMZ package available in the project's FAHP ftp folder and eventually the ProjectWise database to view the project's entire stormwater management are and proposed northern I-5 mitigation area (Fremont Bridge to N. Going Ave. Interchange).

Figure 6. Broadway/Weidler Interchange Area Improvements



Photo Source: Google Earth 2017



ODOT Federal-Aid Highway Program ESA-MSA Programmatic Notification

Key	Number

19071

Last Modified Oct 13, 2020

Project Information

NMFS Approval	USFW Approval	Select Pre	dominant Project Type				Proponer	nt Agency		
Approval Needed	N/A		Modernization/New Alignment/Bypass ODOT							
							Namo			
							Name			
Latitude (e.g. 45.4591° N) Longitude (e.g123.8442° W) ODOT Region County Anticipated Construction St							tart Year	End Year		
45.53788	-122.66919 Region 1 Multnomah 2023 20						2027			
Biologist	Phone	E-mail			ODOT Regio	n Environmental	Coordinator	E-mail		
Devin Simmons	503-731-826	66 devin.l	.simmons@odot.sta	te.or.us	Mary You	ng		Mary.E.Yc	oung@odot	t.state.or.us
FHWA Contact Phone E-mail										
Shaneka Owens	(503) 316-25	i53 shanel	ka.owens@dot.gov					ļ	Additional 6th	Field HUCs
6th Field HUC			6th Field HU	C (if appli	cable)					dditional HUCs
170900120302 - Will	amette River-Co	lumbia River							Descriptio	below in Project on.
ODFW In-Water Work Windo	w		ODFW In-Wa	ater Work	Window					
July 1	to Octobe	r 31			to					
	to				to					
Brief Project Description:										
*Construct 'open spa Barges may be used for	f the I-5 corridor burden in the I-5 corridor burden in the I-5 corridor burden in the I-5 corridor the I-5 corright in the I coal street cross end the N Flint Ave E ODOT CIA that curden is the ter connection in the I coal street connection is assessed a correct correct in the I coal street connection is a science as the A Flint Ave I coal the I coal street connection is a science as the A Flint Ave I coal the I coal street connection is a science as the A Flint Ave I coal the I coal the A Flint Ave I coal the A Flint A Flin	etween I-405 a crease safety, a and full should on-ramp from V bridge (Clackar ssings of I-5 thr Bridge and add urrently direct-d as that service t in the City of Po th. This will furth and proposed a and Pedestria bridge decks to	nd I-84, including inte access, and operation ers in NB and SB dire Wheeler/Winning Way mas bicycle and pede ough removal and re a new roadway conne ischarges without trea- the I-5 corridor, and the ortland ROW. This winher decrease direct di s "Not Likely to Affect n Bridge over I-5 and support non-vehicula	rstate ra s. ctions (//Willian strian b blaceme ection a atment i ne appro Il increa scharge " and "h its west r open a	amp connection between I-84 his to Weidler. ridge). ent of the Bro cross I-5 at H nto the Willar baches and the se treatment binto the Will No Effect" to I -end trail. The ureas. I.e. "free	ons, I-5 ramp and I-405) to /Williams to in adway, Weidle lancock-Dixon mette River. horoughfares to of the area thi amette River. NMFS trust re e trail does no seway lids".	terminals to reduce freq aprove local er, Vancouv hat bridge a rough "Rain sources incl t trigger sto	the local roa uent crashes traffic flow a er and Willia cross I-5. gardens", inf ude: rmwater mar	and impro ind facilitate ms St Bridg iltration, an nagement p	ve e construction ges as two d the City's per the FAHP.
Affected Species										
	Species		Critical Habitat*			Spe			Critic	al Habitat*
Columbia River Chum			×			tte River Chino				X
Eulachon			X			tte River Chino				X
Green Sturgeon	in a a le		X			tte River Steelh	ead			X
Lower Columbia River Ch			X		elect Species					
Lower Columbia River Co			×		elect Species					
Lower Columbia River Ste	einead		X		elect Species					
Snake River Fall Chinook Snake River Basin Steelhe	ad		×		elect Species					
Snake River Sockeye	au		X		elect Species elect Species					
strate first bookeye			· •	1 -	cicci species				1	

Upper Columbia River Chinook Upper Columbia River Steelhead *Or proposed Critical Habitat if relevant.

Snake River Spring / Summer Chinook

May Effect EFH

Chinook Salmon Form # 734-2898 Level 2 - Limited 🗙 Coho Salmon

Coastal Pelagics

X

X

X

s Groundfish

Select Species

Select Species

Select Species

http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/ Template Last Revised October 15, 2014

Chee	k boxes to indicate project activities that may affect covered species or supporting habita	at.	
X	General Heavy Construction		Slope Stabilization and Drainage
X	Geotechnical Drilling		Streambank Stabilization and Scour Protection
	Material Sources		Culvert and Bridge Removal
	Mobilization, Staging and Disposal		Bridge Repair and Rehabilitation (As Relevant, Attach Bridge Supplement)
	Erosion, Sedimentation and Pollution Control		Bridge Construction (Attach Bridge Supplement if Aquatic)
	Temporary Access Roads		Pile Driving and Pile Removal (Attach Bridge Supplement if Aquatic)
X	Barges		Culvert Extension, Repair and/or Installation
	Temporary Bridges and Treated Materials (Attach Bridge Supplement if Aquatic)		Painting and Coating
	Work Area Isolation		Asphalt and Concrete Paving
	Clearing, Grubbing and Earthwork	X	Other Permanent Roadway Structures
	Weed Removal		Site Restoration and Enhancement Plantings
	Trees and Down Timber Removal		Channel Modification and Waterway Enhancements (Attach Relevant Plans)
	Blasting	X	Stormwater Management
			Other:
			I

Activities Requiring Approval from Services (check which apply; explain / justify below)

Not Applicable

Not Applicable

		Attachments Needed:
X	On-site stormwater treatment deficit	Relevant plans
	Net increase in artificial fill or abandoned fill in the functional floodplain	Relevant plans
	Unvegetated streambank riprap; any streambank riprap above OHW, or in-stream flow control structures	Relevant plans
	In-water work extension	IWW Variance/Project Change
	Fish passage structure or fishway (including ladder, culvert retrofit, pool-riffle structure, roughened chute)	Fish passage plan or plans
	Weed control that doesn't meet treatment standards	Relevant plans
	Blasting in or near aquatic habitat	Blasting plan
	Bridge replacement that doesn't meet fluvial performance standards	Bridge Supplement
	Stream channel modification or waterway enhancement that does not meet design standards	Relevant plans
	Stormwater flow management (when required) in watershed less than 100 mi ²	Drawing or plans
	Other modifications to FAHP design standards in the FAHP that may result in direct impacts to covered aquatic resources	Relevant plans
	Removal of Kincaid's lupine, Bradshaw's lomatium, or Fender's blue butterfly habitat	Relevant plans
	High noise producing work within 300ft of Marbled Murrelet habitat between April 1st & August 5th	Relevant plans
	Removal of mature conifer trees (18" or larger DBH) in Northern Spotted Owl or Marbled Murrelet habitat	Relevant plans

Explanation of Activities That Require Approval or Modifications:

See the project's FAHP Attachment: Sharedrive (ftp) files to review the following adaptive management and commitment tracking strategies:

A. See the attached 'strategy' summary and Stormwater Management section. The current level of survey and design requires future refinements of the CIA and needs for off-site treatment as the CMGC process develops. FHWA and NMFS approval will be required to finalize the project's stormwater management commitments, treatment strategy and BMPs, and if needed the use of off-site treatment and or surplus credits generated by previous FAHP projects. Current and anticipated credits are being reserved for their potential use by the project. E.g. KN18806 US26_CorneliusPass-NW185th Project completed in 2019.

"Other modifications to FAHP design standards" may require NMFS approval as design develops. E.g. use of stormwater treatment technologies not yet approved for "General Use" for "Enhanced Treatment" under the Washington DOE TAPE Program:

ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Emerging-stormwater-treatment-technologies Examples form previous FAHP projects include cartridge media filters and media.

Project Activities

Stormwater Management		Not Applicable
Stormwater Feature	Pre-Project	Anticipated Post Project
Project Impervious Surface Area (ISA)	33.500Acres	39.500Acres
Net New ISA (=Pre-Project-Actual Post Project)		6.000Acres
Contributing Impervious Area (CIA)	33.500Acres	39.500Acres
Total ISA Treated On-site		20.500Acres
Total ISA Treated Off-site		16.000Acres
Stormwater Credits Used*		3.000Acres
Total Managed ISA (on- and off-site and credits)		39.500Acres
Net Water Quality Treatment (=Total Managed ISA-Post Project CIA)		0.000Acres
Excess Stormwater Area Treated for Credit*		0.000Acres
* Stormwater Credit discussions still underway, please consult with NMFS before using any sort of	^c credit.	
Average Daily Traffic** Project Area 1,000-121,000 Off-Site Trea	atment Area 2,500-146,700	
**Provide range if variable. If off-site is less than on-site (per ADT Range table, see User's Guide), a greater amount	of ISA must be treated and describe below.	
Water Quality Design Storm 1.2inches Is Flow Control Provided? Not R	equired	
If Not Required, Why? Receiving water is a large waterbody		
Flow Control Design Range:		
Lower End Point Design Storm Not Required Upper End Point Design S	torm Not Required	
Stormwater Manual Cited: ODOT Hydraulic Manual 2014 Responsible Agency for	or Stormwater BMPs:	ODOT and City of Portland
Stormwater Designer Name, Phone #, E-mail:		

X Attached Aerial Photo/Site Drawing That Show: The CIA, Sub-Basins, Drainage Flow Paths, Receiving Waters and BMP Locations.

Drainage Area	Treatment Method	RMD	Maint. Table***	ISA Treated (Acres)	Receiving Water
1	Off-Site Treatment by Surface Discharge BMPs	Bioswale	ODOT T3	16.0Acre(s)	Willamette River
2	On-Site Treatment by Surface Discharge BMPs	Attached stormwater narrative	Other: Narrative	4.00Acre(s)	Willamette River
3	On-Site Treatment by Surface Discharge BMPs	Attached stormwater narrative	Other: Narrative	5.50 acre(s)	Willamette River
4	Off-Site Treatment by Surface Discharge BMPs	Various locales: See Comment Box	ODOT T3	3.00Acre(s)	Columbia River
A	PBOT: Attached stormwater narrative	Attached stormwater narrative	Other	11.00Acre(s)	Willamette River
				Acre(s)	

For additional rows, please attach the Stormwater Management Data Page.

*** ODOT Stormwater Facility Maintenance Tables (http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/omm.aspx) or other (attach).

Comments:

The project will trigger an estimated 39.5-acres of contributing impervious area requiring storm-water treatment and disposal. Of that, ODOT ROW comprises approximately 28.5 -acres, and PBOT ROW approximately 11-acres. Existing water quality infrastructure per FAHP standards is nominal, with 0.17 acres of ODOT ROW and 0.68 City of Portland ROW receiving water quality treatment per current FAHP standards. The rest of the pre-project CIA currently discharges directly into the Willamette River without treatment.

ODOT (Off-site and within the project limits, and 3-acres via other STIP Projects [existing and future credit]) The three proposed ODOT water quality facility locations within the project limits will satisfy the majority the project's post-project CIA commitments: Basin #1 on N Mississippi Ave. will treat 16-acres (off-site treatment within the I-5 corridor); Area 2= 4-acres; and Area 3= 8-acres. Up to 3- acres of off-site treatment may be required due to site constraints. Continued survey and design will refine the CIA and locate additional opportunities solely or in combination as follows:

PBOT

Within City of Portland ROW, the addition of two basin / swales at N Center Court St. and NE Wheeler Ave. will treat 1 and 2-acres, respectively. The addition of stormwater planters in City ROW will treat an additional 8-acres of impervious area. Any stormwater not infiltrated will be directed to Portland's Bureau of Environmental Service's (BES) for additional treatment.

Other STIP Projects / Off-site Treatment Opportunities (Basin #4)

Up to 3-acres of off site treatment may be required. The need for and degree of mitigation will be verified as design progresses and include continued coordination with FHWA and NMFS will occur to finalize the CIA and if needed, the appropriate mitigation (see attached 'strategy document). Off-site treatment will likely originate from previously constructed FAHP / STIP projects E.g. KN18806 US26_CorneliusPass-NW185th Project completed in 2019. It may also use the I-205 Regional Stormwater Facility. However, to date this site has yet to conduct adequate testing and data gathering to release credits..

Notes: A) For the purposes of this document, stormwater management areas have been rounded to the next higher whole acreage. This applies a conservative approach and is most relative given the minor level of design, lack of survey, and use of GIS rather than engineering / drafting software; B) The project and construction limits are assumed to be commensurate excluding the northern I-5 off-site stormwater management area. All impervious areas within this area are assumed to be reconstructed. Therefore, the pre-construction CIA and ISA have been recorded as equal; C) Given the current level of design and metadata ODOT has assumed an accuracy within +/- 10%

Habitat Impacts / Restoration

	Anticipated Impact		Anticipated Restoration			
Habitat Type	Linear ft	Area	Linear ft	Area	Primary Purpose	
Streambank Hardening Below OHW	ft		ft			
Riparian Habitat Disturbed		ft ²		ft ²		
	ft	ft ²	ft	ft²		
	ft	ft ²	ft	ft²		
	ft	ft ²	ft	ft ²		
* Aquatic Habitat Type(s) Disturbed:	Pool	Riffle Glide	Estuarine	Habitat (<300' away)		

Trees & Woody Debris Anticipated Impacts / Restoration

🗙 Not Applicable

		Trees Removed			Trees Added		
Habitat Type	0-6"	6-18"	> 18"	# Down Timber (LWM)	# Native Trees Planted	# LWM Installed	Primary Purpose
Riparian Zone							

Other Anticipated Avoidance/Minimization Measures, Offsetting Measures and Enhancements

× Not Applicable

Activity/Resource	Purpose	Amount			
Activity/nesource	i dipose	On-Site	Off-Site	Units	

Other information on impacts/restoration/enhancements (attach Additional Information form if more space needed):

List of Attachments

Not Applicable

Relevant Plans/Special Provisions	
Additional Information	

Electronic Signatures & Authorizations:

The following individuals have reviewed the Notification for accuracy & compliance with the FAHP ESA Consultation (NMFS Ref(2011/02095)) and/or (USFW Cons #01EOFW00-2012-F-0020) approve implementation of the project as described here in. A Biologist Qualified by ODOT under its ESA Effects Determination Program <u>must</u> review this document and ensure its quality before it is submitted to the FHWA. Please sign this document <u>electronically</u> & forward appropriately.

