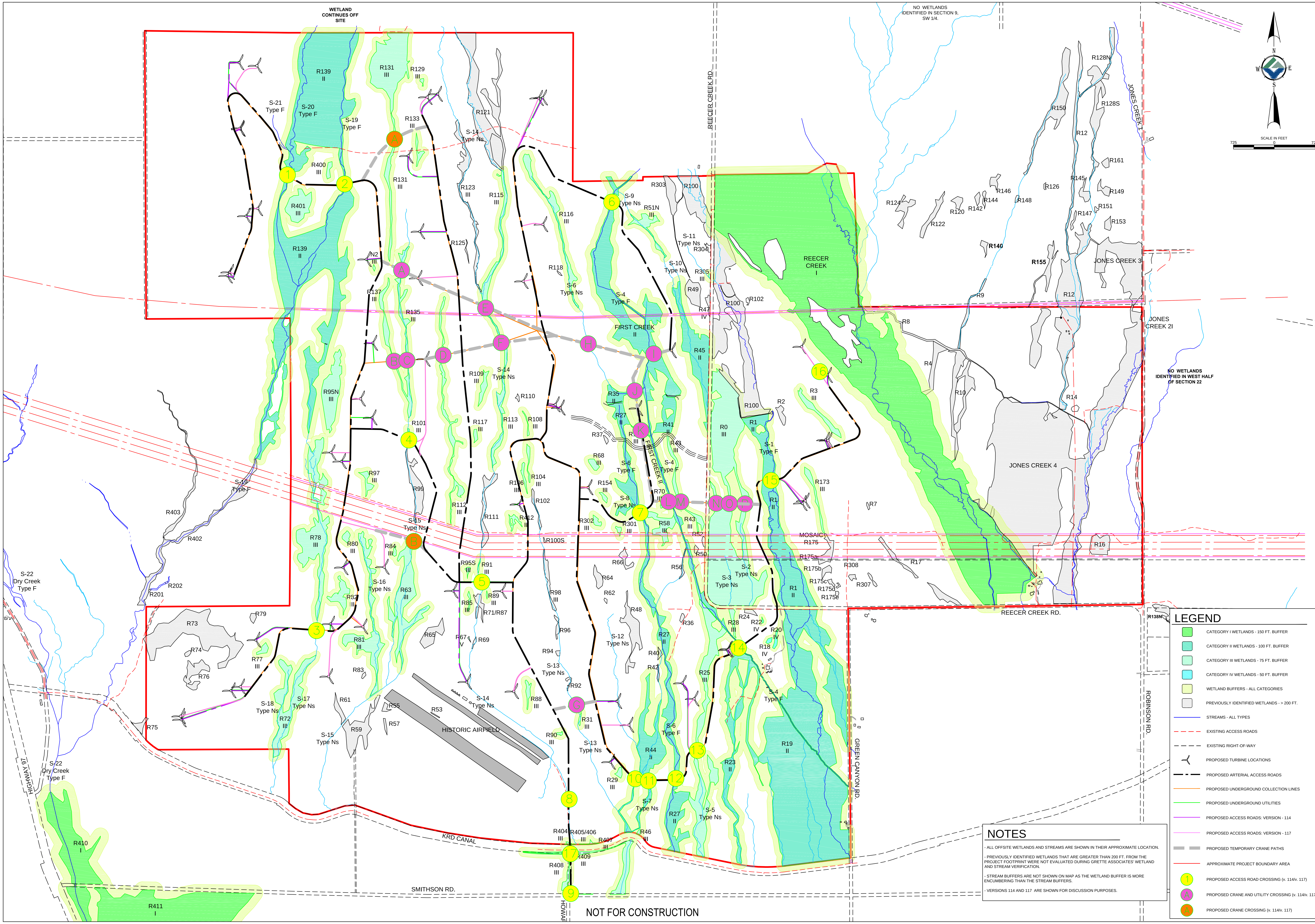
DESERT CLAIM WIND POWER LLC.

DESERT CLAIM WIND POWER PROJECT
WETLAND DELINEATION AND ANALYSIS REPORT

APPENDIX E: CROSSING PHOTO EXHIBIT



LEGEND

- CATEGORY I WETLANDS - 150 FT. BUFFER
- CATEGORY II WETLANDS - 100 FT. BUFFER
- CATEGORY III WETLANDS - 75 FT. BUFFER
- CATEGORY IV WETLANDS - 50 FT. BUFFER
- WETLAND BUFFERS - ALL CATEGORIES
- PREVIOUSLY IDENTIFIED WETLANDS - > 200 FT.
- STREAMS - ALL TYPES
- EXISTING ACCESS ROADS
- EXISTING RIGHT-OF-WAY
- PROPOSED TURBINE LOCATIONS
- PROPOSED ARTERIAL ACCESS ROADS
- PROPOSED UNDERGROUND COLLECTION LINES
- PROPOSED UNDERGROUND UTILITIES
- PROPOSED ACCESS ROADS: VERSION - 114
- PROPOSED ACCESS ROADS: VERSION - 117
- PROPOSED TEMPORARY CRANE PATHS
- APPROXIMATE PROJECT BOUNDARY AREA
- 1 PROPOSED ACCESS ROAD CROSSING (v. 114/v. 117)
- A PROPOSED CRANE AND UTILITY CROSSING (v. 114/v. 117)
- A PROPOSED CRANE CROSSING (v. 114/v. 117)

NOTES

- ALL OFFSITE WETLANDS AND STREAMS ARE SHOWN IN THEIR APPROXIMATE LOCATION.

- PREVIOUSLY IDENTIFIED WETLANDS THAT ARE GREATER THAN 200 FT. FROM THE PROJECT FOOTPRINT WERE NOT EVALUATED DURING GRETTE ASSOCIATES' WETLAND AND STREAM VERIFICATION.

- STREAM BUFFERS ARE NOT SHOWN ON MAP AS THE WETLAND BUFFER IS MORE ENCUMBERING THAN THE STREAM BUFFERS.

- VERSIONS 114 AND 117 ARE SHOWN FOR DISCUSSION PURPOSES.

DELINEATION MAP

DESERT CLAIM WIND POWER PROJECT

Grette Associates LLC
ENVIRONMENTAL CONSULTANTS
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TACOMA, WA 98403
(253) 573-9300
gretteassociates.com

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THIS DOCUMENT HAS BEEN PREPARED FOR PERMIT APPLICATION ONLY AND IS SUBJECT TO REVIEW AND MODIFICATION BY GOVERNMENT AGENCIES

PROJECT LOCATION:
KITTITAS COUNTY
ELLENSBERG, WA

PREPARED FOR:
EDF RENEWABLE DEVELOPMENT, INC.

PROJECT MANAGER:
BOYLE
DRAFTER:
WALLIN
CHECKED:
BOYLE

PROJECT NO:
3010.001

DATE: 12/18/17 REVISED: 05/10/18

SHEET SIZE:
24" X 36"

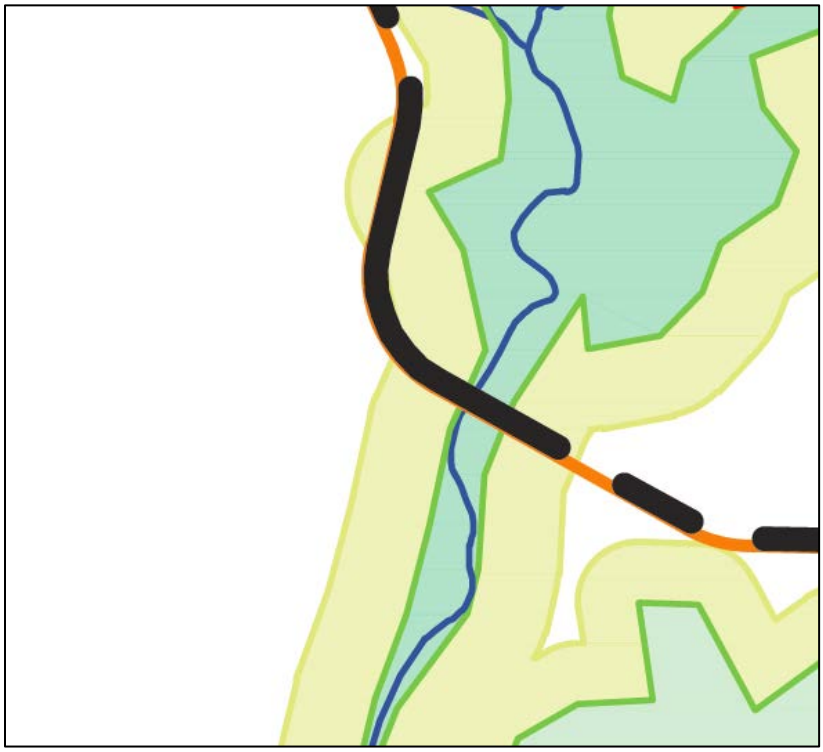
SHEET 1 OF 1

Part 7 and 8 Exhibit: Impact Details Per Crossing

Crossing RX-1: Seasonal stream within the western portion of R139. Stream was observed dry in summer of 2017. Standard Duty Crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R139 Riverine Cat II	1002/76	S20 Type F	174/13
Disturbance (<90 days)	Same	2222	Same	349

Wetland R139, Stream S-20

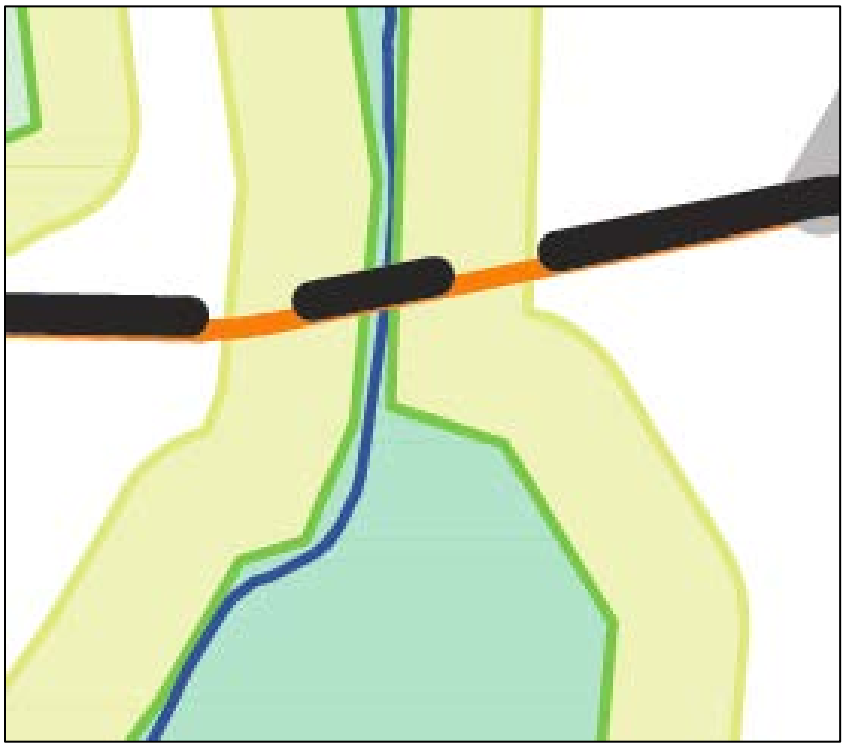


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-2: Seasonal stream within the eastern portion of R139. Stream was observed dry in summer of 2017. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R-139 Riverine Cat II	392/28	S19 Type F	44/4
Disturbance (<90 days)	Same	828ft^2	Same	131ft^2

Wetland R-139, Stream S-19

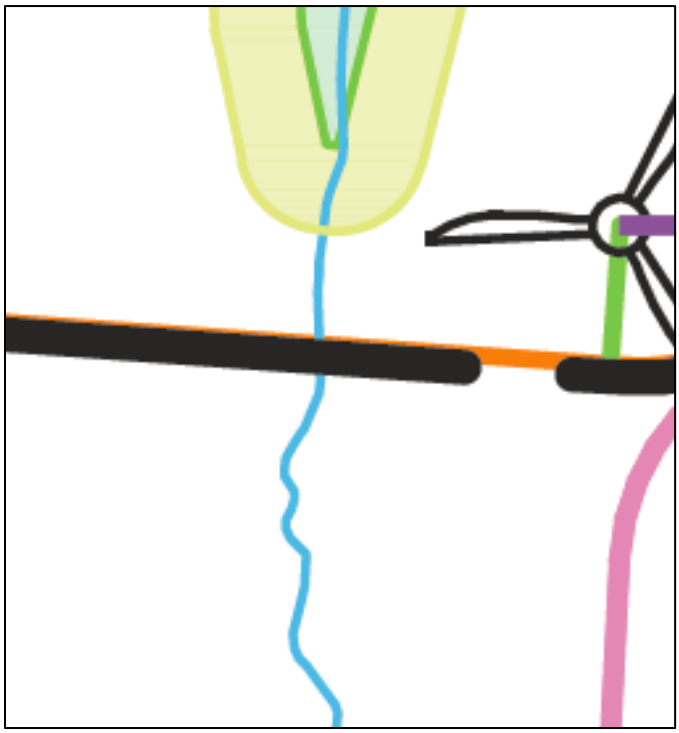


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-3: Observed stream characteristics (bed and channel) are fragmented within a vegetated topographic swale. Channeled area was observed with no hydrology (S-17). The origin of any continuous feature would be situated south within R72. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	N/A	N/A	S-17 Type Ns	44/4
Disturbance (<90 days)	N/A	N/A	Same	131ft^2

Stream S-17

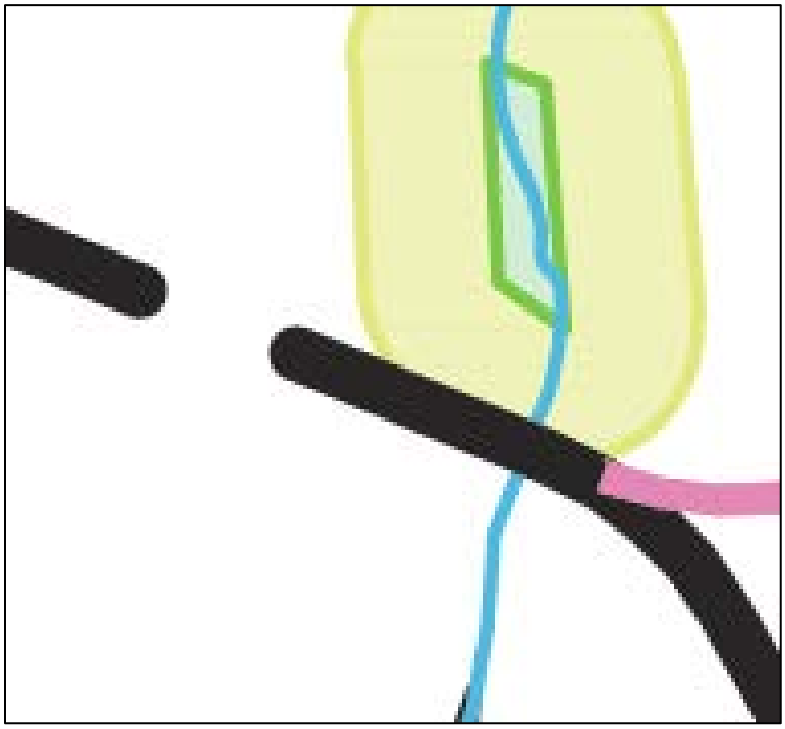


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-4: Indication of periodic flow or ponding (non-flow) was observed. Area was dry. Based on observation, the more appropriate characterization of this feature (S-15) is an ephemeral swale. In addition, upslope observations at CCX-A, B, and C did not observe any channelized flow. Observed surface hydrology (sheet flow) was associated with wetland R1. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	N/A	N/A	S-15 Type Ns	131/9
Disturbance (<90 days)	N/A	N/A	Same	262ft^2

Stream S-15

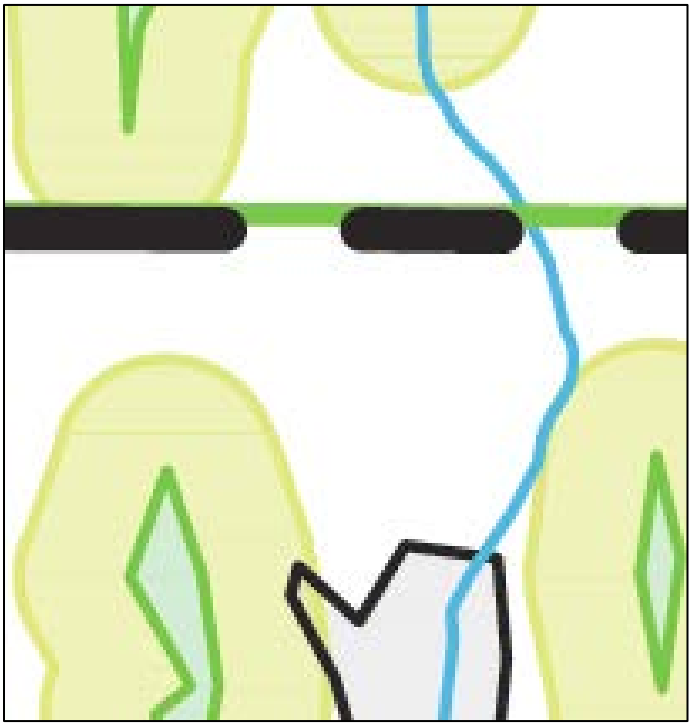


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-5: Seasonal stream (S-14), no fringe wetland. Standard duty crossing.

Activity	Wetland /Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	N/A	N/A	S-14, Type Ns	131/10
Disturbance (<90 days)	N/A	N/A	Same	262ft^2

Stream S-14

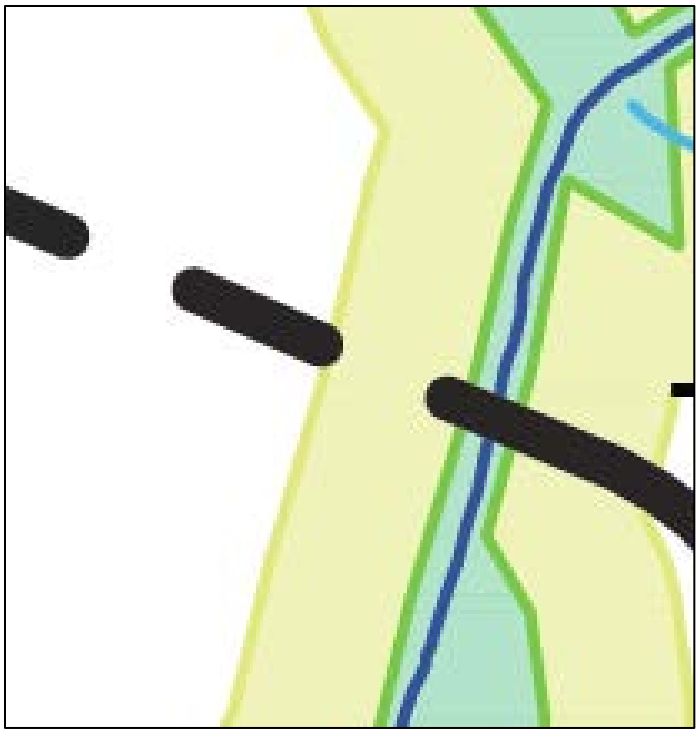


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-6: First Creek (S-4) crossing. Standard duty crossing with culvert.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	First Creek Riverine Cat II	653/47	S-4, Type F	87/7
Disturbance (<90 days)	Same	1394ft^2	Same	218ft^2

First Creek (S-4)



Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-7: Perennial stream with fringe wetland. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R27 Riverine Cat II	1020/76	S-6, Type F	44/4
Disturbance (<90 days)	Same	2090ft^2	Same	131ft^2

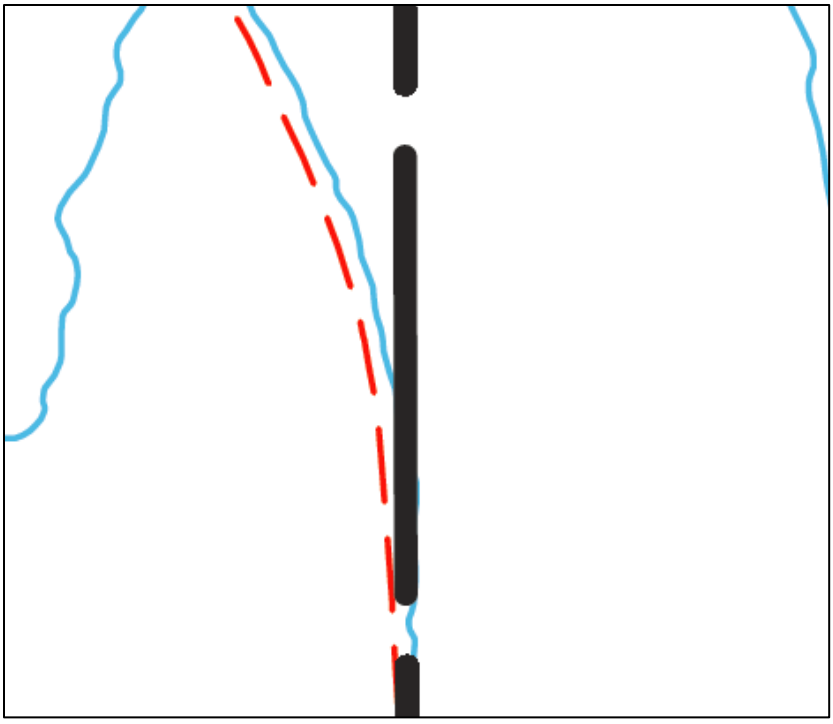
Wetland R2, Stream S-6

Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-8: Ditched ephemeral stream (S-14). Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	N/A	N/A	S-14, Type Ns	44/4
Disturbance (<90 days)	N/A	N/A	Same	131ft^2

Stream S-14

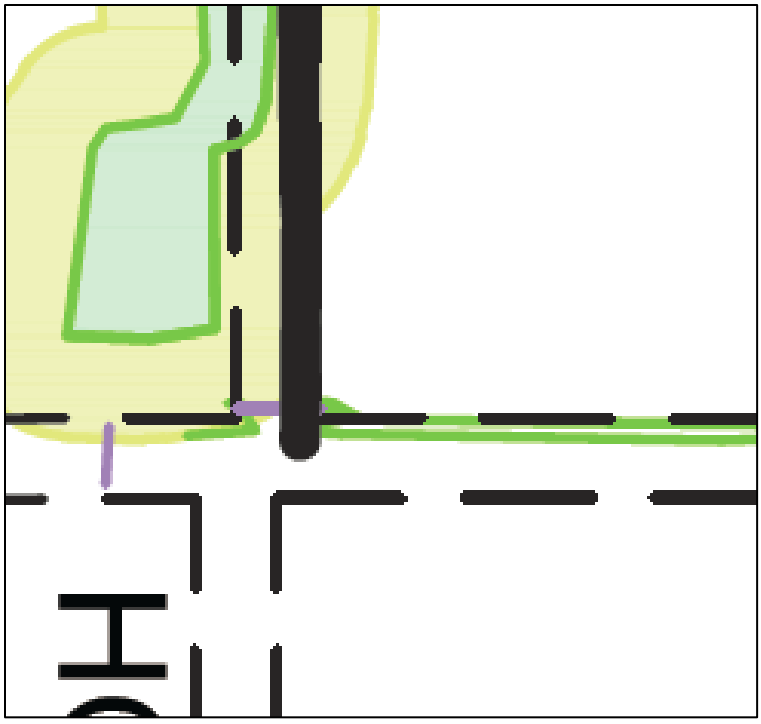


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-9: Ditch along Smithson Rd.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	N/A	N/A	Ditch	N/A
Disturbance (<90 days)	N/A	N/A	Same	828ft^2

Smithson Rd ditch



Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-10: Very little surface water observed. No stream indicators observed at crossing location. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R44 Riverine Cat II	871/64	S-12 Type Ns	44/3
Disturbance (<90 days)	Same	$1742ft^2$	Same	$88ft^2$

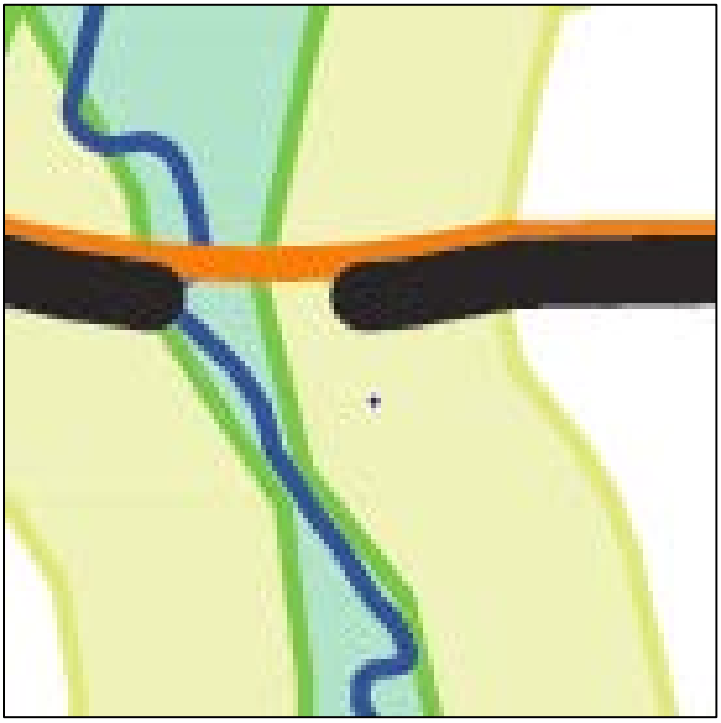
Wetland R44, Stream S-12

Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-11: Surface water and flow was observed. Flow was confined in a vegetated area within the wetland. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R44 Riverine Cat II	915/68	S-6 Type F	44/3
Disturbance (<90 days)	Same	1873ft^2	Same	88ft^2

Wetland R44, Stream S-6

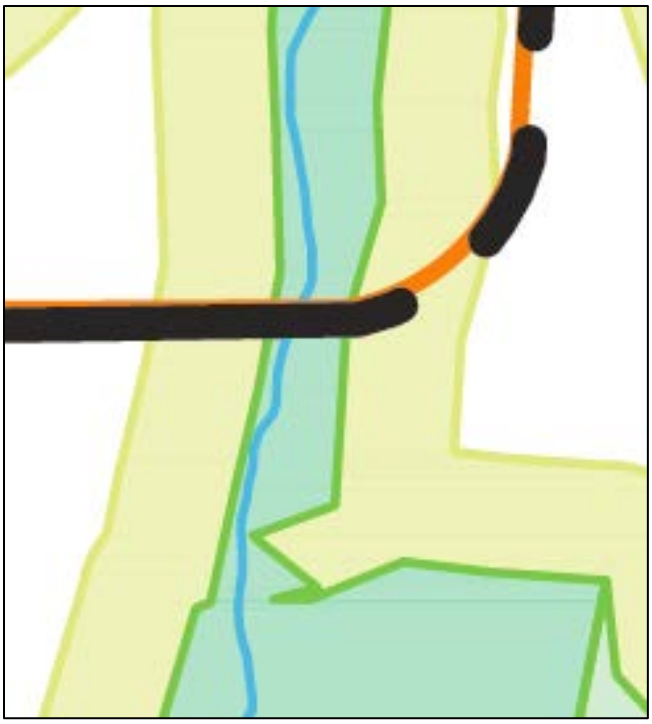


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-12: This portion of stream was dry in summer of 2017. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R27 Riverine Cat II	1263/93	S-7 Type Ns	44/3
Disturbance (<90 days)	Same	2570ft^2	Same	88ft^2

Wetland R27, Stream S-7

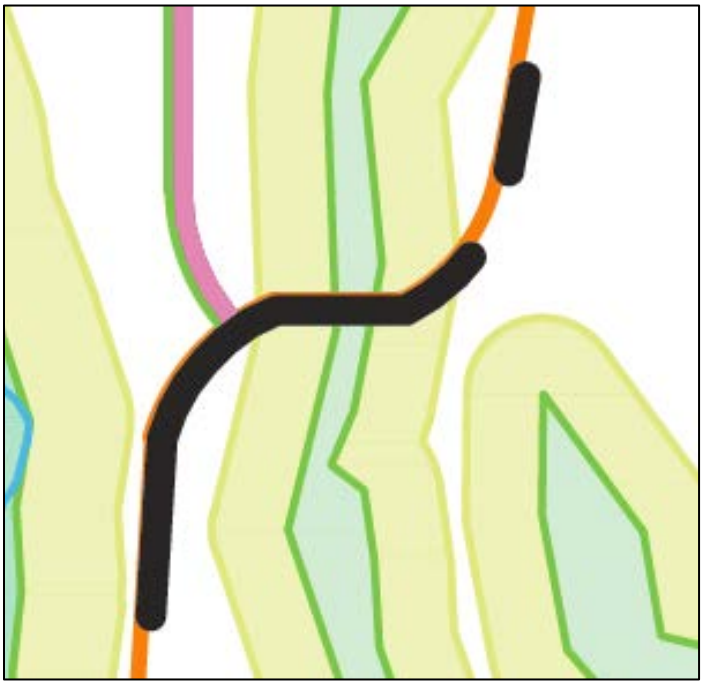


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-13: Ephemeral channel associated with the irrigation system up slope. Standard duty crossing.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R25 Slope Cat III	741/56	N/A	N/A
Disturbance (<90 days)	Same	1481ft^2	N/A	N/A

Wetland R25



Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-14: First Creek crossing. Standard duty crossing with culvert.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	First Creek Riverine Cat II	348/25	S-4 Type F	44/4
Disturbance (<90 days)	Same	740ft^2	Same	131ft^2

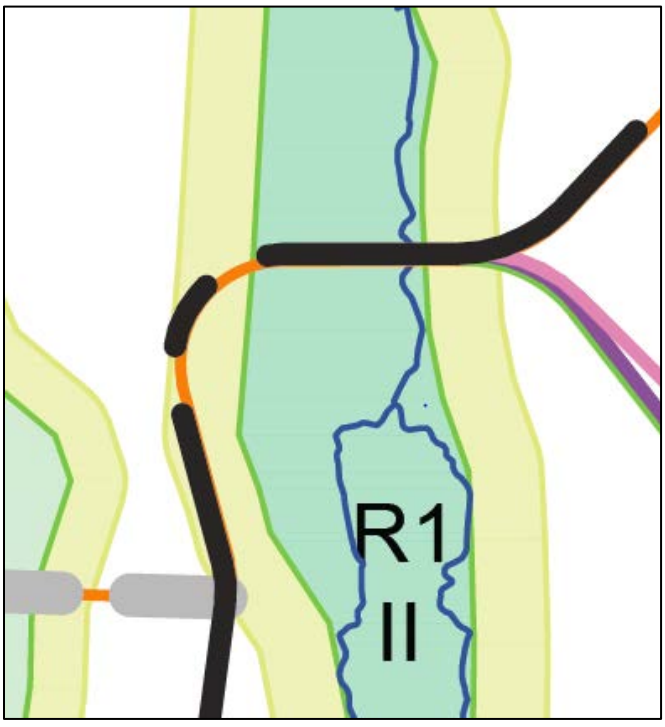
First Creek Wetland, Stream S-4

Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-15: Ephemeral Stream in Wetland R1. Standard duty crossing with culvert.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R1 Riverine Cat II	4443/330	S-1 Type F	218/15
Disturbance (<90 days)	Same	740ft^2	Same	305ft^2

Wetland R1, Stream S-1

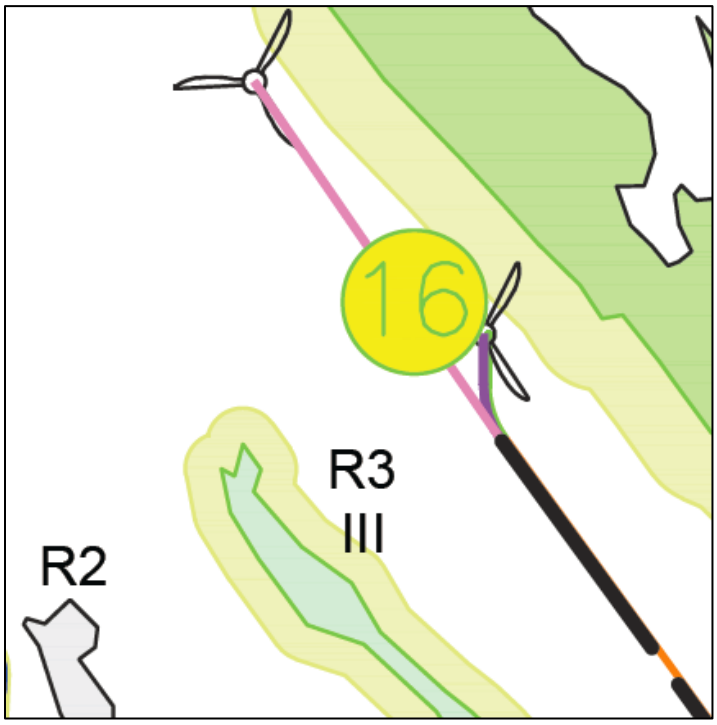


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-16: Lateral ditch through uplands. Standard duty crossing with culvert.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	N/A	N/A	Ditch	44/4
Disturbance (<90 days)	N/A	N/A	Same	$88ft^2$

Lateral ditch in NE portion of Project Area

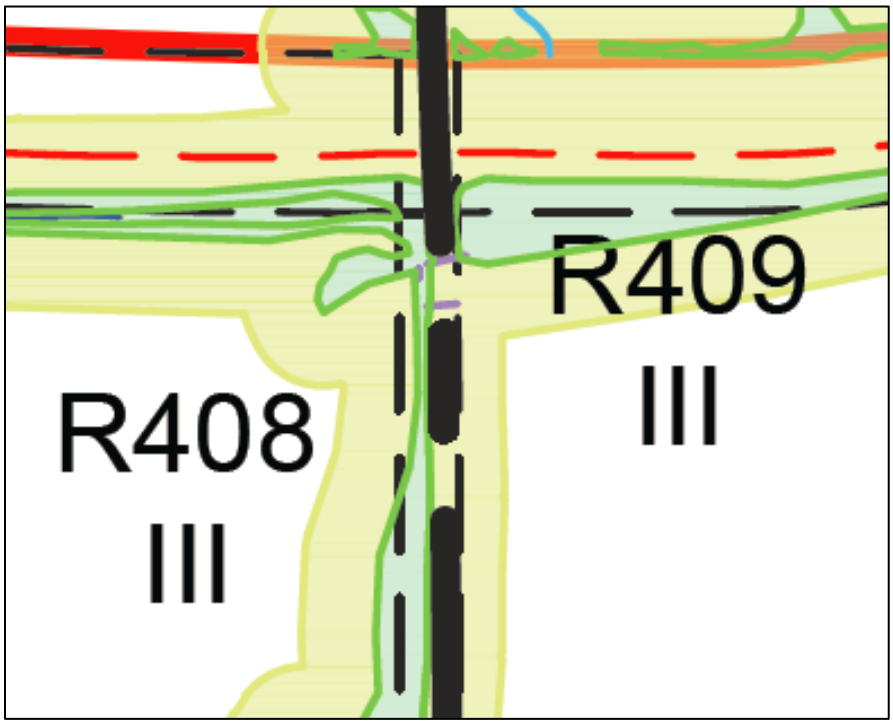


Part 7 and 8 Exhibit: Impact Details Per Crossing

RX-17: Bridge approach/bridge replacement.

Activity	Wetland/Type	Impact /volume (ft^2/yds^3)	Stream/Type	Impact /volume (ft^2/yds^3)
Permanent Fill	R408 Depression Cat III	3485/381	N/A	N/A
Disturbance (<90 days)	N/A	N/A	N/A	N/A

Approach to bridge over KRD canal



Example photos of crane crossing

The air bridge can be used for narrow and shallow wetland or stream crossings with a low grade. Timber pads are placed on the ground for the crane to traverse. Due to the size of the crane treads and the timber pads, weight is distributed over a large surface reducing compaction and impact. The timber pads are left in place only long enough for the crane to pass over them (then they are re-deployed at another crossing).