TABLE 1: ABBREVIATIONS AND ACRONYMS

BMP	Best Management Practices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
COE	U.S. Army Corps of Engineers
Commission	California Coastal Commission
cy	cubic yard
dB	decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
DFG	California Department of Fish and Game
FWS	United State Fish and Wildlife Service
Harbor District	Humboldt Bay Harbor Recreation and Conservation District
HTL	High Tide Line (8.0 feet NAVD for project)
MHT	Mean High Tide (approx. 6.0 NAVD for project)
msl	mean sea level
NAVD	North American Vertical Datum *(survey datum for project)*
NOAA Fisheries	Formerly the National Marine Fisheries Service (NMFS)
Pers. com.	Personal communication
RR ROW	railroad right-of-way
RWQCB	Regional Water Quality Control Board
sf	square feet
SWPPP	Storm Water Pollution Prevention Plan
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USGS	United States Geological Survey
WWTP	City of Arcata Wastewater Treatment Plan

Table 2 - Parcels and Land Use

APN	OWNER NAME	SITE ADDRESS	JURISDICTION	COASTAL ZONE
020-121-003	M STREET STORAGE		Arcata City	No
020-136-002	M STREET STORAGE		Arcata City	No
020-136-003	DBA MAD RIVER GLASS	1485 L ST	Arcata City	No
020-141-001	ARCATA UNION HIGH SCHOOL DIST PL	1720 16TH ST	Arcata City	No
021-191-002	SLACK & WINZLER PROPERTIES PT		Arcata City	Yes
021-191-003	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
021-201-003	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
021-201-004	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
021-201-010	WINKEL RICHARD H & KAREN L HWJT		Arcata City	Yes
021-201-011	WINKEL RICHARD H & KAREN L HWJT		Arcata City	Yes
501-043-001	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
501-043-002	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
501-043-004	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
505-131-016	ARCATA COMMUNITY DEV AGENCY		Arcata City	No
505-131-014	ARCATA COMMUNITY DEV AGENCY		Arcata City	No
505-131-001	ARCATA CITY OF PL		Arcata City	No
505-121-030	ARCATA VOLUNTEER FIRE DEPT INC CR		Arcata City	No
505-121-026	FRANKE JAMES F III		Arcata City	No
505-121-022	ARCATA CITY OF PL		Arcata City	No
505-111-005	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	No
505-051-024	PATTERSON WILLIAM & PATTI HWCP	2204 JAY ST	Arcata City	No
505-131-017	ARCATA CITY OF PL		Arcata City	No
505-051-012	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	No
505-051-002	ARCATA CITY OF PL		Arcata City	No
503-211-004	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
503-241-010	ARCATA CITY OF PL		Arcata City	Yes
503-241-011	ARCATA CITY OF PL		Arcata City	Yes
503-241-012	ARCATA CITY OF PL		Arcata City	Yes
503-241-013	ARCATA CITY OF PL		Arcata City	Yes
503-241-014	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
503-251-002	ARCATA CITY OF PL		Arcata City	Yes
503-251-003	CITY OF ARCATA PL		Arcata City	Yes

Table 2 - Parcels and Land Use

APN	OWNER NAME	SITE ADDRESS	JURISDICTION	COASTAL ZONE
503-251-008	NORTHWESTERN PACIFIC RAILROAD CO SB		Arcata City	Yes
503-251-009	ARCATA CITY OF PL		Arcata City	Yes
503-251-011	SLACK AND WINZLER PROPERTIES PT		Arcata City	Yes
503-251-012	ARCATA CITY OF PL		Arcata City	Yes
501-043-005	NORTHWESTERN PACIFIC RAILROAD CO SB		City and County	Yes
501-091-006	NORTHWESTERN PACIFIC RAILROAD CO SB		County	Yes
501-043-010	UNITED STATES OF AMERICA PL		County	Yes
501-061-015	NORTHWESTERN PACIFIC RAILROAD CO SB		County	Yes
501-241-027	NORTHWESTERN PACIFIC RAILROAD CO SB		County	Yes

Arcata Rail-with-Trail Connectivity Project:

Table 3: Existing Areas and Impacted Areas of Habitats, Wetlands, and Waters of the US/State

Project Location	Jurisdiction	Type of Impact		Habitat Types		Wetland Types				Other Waters of US/State		California State Special Status Plants[10]			
				Shorebird Roosting/ Rocky Shoreline	Riparian (1 Parameter)[1]	Palustrine Emergent Wetlands	Ditch (stormwater conveyance w/ Palustrine Vegetation)	Estuarine Intertidal Emergent (Saltmarsh)	Estuarine Emergent (ditch)[2]	Ordinary High Water Mark	Tidal Waters of the US (unvegetated)[3]	Humboldt Bay owl's-clover (*Castilleja ambigua ssp. humboldtiensis*)	Lyngbye's Sedge (*Caryx Lyngbyei*)	Point Reyes bird's-beak (*Cordylanthus maritimus ssp. palustris*)	Sand Spurrey (*Spergularia Canadensis var. occidentalis*)
Total Existing[4]	Various	NA	SF	1,473	89,737	174,803	6,299	126,723	13,584	2,009	42,952	30,789	7,045	37,173	0
			Ac.	0.03	2.06	4.01	0.14	2.91	0.31	0.05	0.99	0.71	0.16	0.85	0.00
Northern Extent to CZ Boundary	City/ COE	Cubic Yards of Fill associated with Permanent Impacts[5]	CY	0	188	161	68	0	0	0	0	NA	NA	NA	NA
		Permanent Impacts (Ground Disturbance)[6]	SF	0	3,377	2,893	1,231	0	0	0	0	0	0	0	0
		Permanent Impacts (Structure Shading)[7]	SF	0	0	0	0	0	0	NA	NA	0	0	0	0
		Temporary Construction Impacts (5ft buffer)[8]	SF	0	2,025	1,918	17	0	0	87	0	0	0	0	0
		Temporary Impacts Associated with Staging Areas[9]	SF	0	0	0	0	0	0	0	0	0	0	0	0
CZ to South City Boundary	City/ COE/ CC	Cubic Yards of Fill associated with Permanent Impacts[5]	CY	0	108	394	4	442	0	0	12	NA	NA	NA	NA
		Permanent Impacts (Ground Disturbance)[6]	SF	0	1,952	7,091	76	7,949	0	0	224	186	0	429	0
		Permanent Impacts (Structure Shading)[7]	SF	0	0	808	0	804	0	NA	NA	98	0	187	0
		Temporary Construction Impacts (5ft buffer)[8]	SF	0	2,735	4,881	187	8,298	0	0	961	257	0	279	0
		Temporary Impacts Associated with Staging Areas[9]	SF	0	0	5,362	0	0	0	0	0	0	0	0	0
South City Boundary to Southern Extent	COE/ CC	Cubic Yards of Fill associated with Permanent Impacts[5]	CY	0	45	2,646	0	0	550	0	9	NA	NA	NA	NA
		Permanent Impacts (Ground Disturbance)[6]	SF	0	815	47,619	0	0	9,903	0	170	0	0	0	0
		Permanent Impacts (Structure Shading)[7]	SF	0	0	207	0	0	368	NA	NA	0	0	0	0
		Temporary Construction Impacts (5ft buffer)[8]	SF	0	560	17,279	0	0	2,977	0	262	0	0	0	0
		Temporary Impacts Associated with Staging Areas[9]	SF	0	0	0	0	0	0	0	0	0	0	0	0
IMPACT SUMMARY (all project areas combined)	Various	Cubic Yards of Fill associated with Permanent Impacts	CY	0	341	3,200	73	442	550	0	22	NA	NA	NA	NA
	Various	Permanent Impacts (Ground Disturbance)[6]	SF	0	6,144	57,603	1,307	7,949	9,903	0	394	186	0	429	0
			Ac.	0.00	0.14	1.32	0.03	0.18	0.23	0.00	0.01	0.00	0.00	0.01	0.00
	Various	Permanent Impacts (Structure Shading)[7]	SF	0	0	1,016	0	804	368	NA	NA	98	0	187	0
			Ac.	0.00	0.00	0.02	0.00	0.02	0.01	NA	NA	0.00	0.00	0.00	0.00
	Various	Temporary Construction Impacts (5ft buffer from permanent impacts associated with ground disturbance)[8]	SF	0	5,320	24,077	204	8,298	2,977	87	1,223	257	0	279	0
			Ac.	0.00	0.12	0.55	0.00	0.19	0.07	0.00	0.03	0.01	0.00	0.01	0.00
	Various	Temporary Impacts Associated with Staging Areas[9]	SF	0	0	5,362	0	0	0	0	0	0	0	0	0
			Ac.	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

1 1-Parameter Riparian areas are uplands; Riparian areas w/ wetland hydrology/soils calcuated as wetlands

2 Estuarine Emergent (ditch) are saltwater wetlands isolated from direct tidal influence by railroad prism

3 Tidal Waters of the US is everthing below HTL (8.0' elevations when converted to NAVD88)

4 Existing areas = acreage within Project Study Area mapped and delineated in the field

5 Cublic Yards of Wetlands assumes an average depth of 1.5' fill in wetlands

6 Areas that will be filled in association with construction of the project

7 Areas shaded by bridge decks or other structures that have no permanent ground disturbance impacts

8 A 5-foot buffer around all Permanent Impacts (ground distrubance) in which temporary impacts are likely during construction

9 Designated areas for construction staging and stockpiling; temporary impacts may occur

10 Surveys of California Special Status Plant Species extended beyond the study area

Abbreviations: CC=California Coastal Commission COE = Army Corp of Engineers CZ = Coastal Zone SF = Square Footage CY = Cubic Yards Ac. = Acres NA = Not Applicable

Arcata Rail-with-Trail Connectivity Project:

Table 4: Bridge Statistics and Calculations of Bridge Impacts

Name of Water Crossing	Bridge Data					Pile Data[1,2]			
	# of Approach Spans	Length of Structure (lf)[1]	Width of Structure (lf)[1]	Total Surface Area of Structure (sf)[1]	# of Bridge-Footings (pile caps)[1]	Total Number of Piles (16.5" diameter each)	Total Number of Piles (12" diameter each)	Total Piles above HTL (outside Tidal Waters of US)	Total Piles below HTL (within Tidal Waters of the US)
Brainard's Slough	2	148	12	1,776	4	4	0	2	2
Old Jacoby Creek	2	124	12	1,488	4	4	0	3	1
Gannon Slough	5	305	12	3,660	8	18	0	3	15
Overview Platform	0	50	13.5	675	0	0	4	4	3
Butcher Slough	0	72	12	864	2	0	0	0	0
Arcata Marsh Berm Bridge	0	93	12	1,111	5	0	0	0	0
Jolly Giant Creek	0	23	12	278	2	0	0	0	0

Notes

1 Including approach spans

2 All piles are encased in pile caps; pile caps constitue ground disturbance

3 Includes several wetland types combined; see Table 3 for breakdown of impacts to wetlands by

4 Tidal Waters of the US is everthing below HTL (8.0' elevation when converted to NAVD88)

5 Impacts in Tidal Waters triggers Section 404 and Section 10

6 Sturctural shading of unvegetated Tidal Waters is not calculated as an impact

Abbreviations

OHWM = Ordinary High Water Mark

HTL = High Tide Line (8.0' NAVD88)

SF = Square Feet

LF = Lineal Feet

Arcata Rail-with-Trail Connectivity Project:

Table 5: Interim Existing Areas and Impacted Areas of Habitats, Wetlands, and Waters of the US/State

Project Location	Jurisdiction	Type of Impact		Total (includes some Wetland Delineation Data and some Natural Features Inventory Data)[9]											
				Habitat Types		Wetland Types				Other Waters of US/State		Special Status Plants			
				Shorebird Roosting/ Rocky Shoreline	*Riparian (1 Parameter)*[1]	*Palustrine Emergent Wetlands*	*Estuarine Intertidal Emergent (Saltmarsh)*	*Estuarine Emergent (ditch)*[2]	*Ditch (stormwater conveyance w/ Palustrine Vegetation)*	*Ordinary High Water Mark*	*Tidal Waters of the US (unvegetated)*[3]	*Humboldt Bay owl's-clover (Castilleja ambigua ssp. humboldtiensis)*	*Lyngbye's Sedge (Caryx Lyngbyei)*	*Point Reyes bird's-beak (Cordylanthus maritimus ssp. palustris)*	*Sand Spurrey (Spergularia Canadensis var. occidentalis)*
Total Existing[4]	Various	NA	SF	1,473	153,839	300,700	387,213	13,584	6,299	2,858	77,833	30,789	7,045	37,173	0
			Acres	0.03	3.53	6.90	8.89	0.31	0.14	0.07	1.79	0.71	0.16	0.85	0.00
Northern Extent to CZ Boundary	City/ COE	Permanent Impacts (Ground Disturbance)[5]	SF	0	3,740	1,493	0	0	640	89	0	0	0	0	0
		Cubic Yards of Fill associated with Permanent Impacts	CY	0	208	83	0	0	36	5	0	NA	NA	NA	NA
		Permanent Impacts (Structure Shading)[6]	SF	0	0	0	0	0	0	NA	NA	0	0	0	0
		Temporary Construction Impacts (5ft buffer)[7]	SF	0	6,146	3,303	0	0	178	93	0	0	0	0	0
		Temporary Impacts Associated with Staging Areas[8]	SF	0	0	0	0	0	0	0	0	0	0	0	0
CZ to South City Boundary	City/ COE/ CZ	Permanent Impacts (Ground Disturbance)	SF	0	3,267	1,959	1,796	0	62	0	21	83	0	141	0
		Cubic Yards of Fill associated with Permanent Impacts	CY	0	182	109	30	0	3	0	1	NA	NA	NA	NA
		Permanent Impacts (Structure Shading)	SF	0	0	808	672	0	0	NA	NA	41	0	26	0
		Temporary Construction Impacts (5ft buffer)	SF	0	5,694	4,935	1,662	0	123	0	240	335	0	264	0
		Temporary Impacts Associated with Staging Areas	SF	0	0	5,362	0	0	0	0	0	0	0	0	0
South City Boundary to Southern Extent	COE/ CZ	Permanent Impacts (Ground Disturbance)	SF	0	572	95	229	7	0	0	15	0	39	168	0
		Cubic Yards of Fill associated with Permanent Impacts	CY	0	32	5	13	0	0	0	1	NA	NA	NA	NA
		Permanent Impacts (Structure Shading)	SF	0	0	0	0	0	0	NA	NA	0	6	0	0
		Temporary Construction Impacts (5ft buffer)	SF	4	931	2,740	4,028	244	0	0	266	204	126	650	0
		Temporary Impacts Associated with Staging Areas	SF	0	0	11	0	0	0	0	0	0	0	0	0
IMPACT SUMMARY (all project areas combined)	Various	Permanent Impacts (Ground Disturbance)	SF	0	7,579	3,547	772	7	702	89	36	83	39	309	0
			Acres	0.00	0.17	0.08	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00
	Various	Cubic Yards of Fill associated with Permanent Impacts	CY	0.00	421.07	197.07	42.89	0.37	39.00	4.93	2.02	NA	NA	NA	NA
	Various	Permanent Impacts (Structure Shading)	SF	0	0	808	82	0	0	NA	NA	41	6	26	0
			Acres	0.00	0.00	0.02	0.00	0.00	0.00	NA	NA	0.00	0.00	0.00	0.00
	Various	Temporary Construction Impacts (5ft buffer from permanent impacts associated with ground disturbance)	SF	4	12,771	10,978	5,112	244	301	93	506	539	126	914	0
			Acres	0.00	0.29	0.25	0.12	0.01	0.01	0.00	0.01	0.01	0.00	0.02	0.00
	Various	Temporary Impacts Associated with Staging Areas	SF	0	0	5,373	0	0	0	0	0	0	0	0	0
			Acres	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

1 1-Parameter Riparian areas are uplands; Riparian areas showing wetland hydrology or soils are calcuated as wetlan

2 Estuarine Emergent (ditch) are saltwater wetlands isolated from direct tidal influence by railroad pris

3 Tidal Waters of the US is everthing below HTL (8.0' elevations when converted to NAVD88

4 Existing areas = acreage within Project Study Area mapped and delineated in the field

5 Areas that will be filled in association with construction of the proje

6 Areas shaded by bridge decks or other structures that have no permanent ground disturbance impacts

7 A 5-foot buffer around all Permanent Impacts (ground distrubance) in which temporary impacts are likely during constructi

8 Designated areas for construction staging and stockpiling; temporary impacts may occ

9 The maps used to generate this data includes two sources of base data: Natural Features Inventory (NFI) and Wetland Delineation. The NFI search area was large since it was conducted early in the project before alignments were identified. However, the data collected during the NFI was only collected at the reconnaissance level. Later in the project a "selected alignment" was identified (see figure sets 2 through 6) as a single alignment for which further analysis was to be conducted. A wetland delineation was conducted in the study area of this selected alignment. This map portrays data associated with the "interim alignment," which is adjacent to the selected alignment. The wetland delineation data is displayed in the study area of the interim alignment maps where there is overlap. However, some areas of the interim alignment study area were outside of the area studied during the selected alignment's wetland delineation. Therefore, the interim alignment includes some data from the Natural Features Inventory.

Abbreviations: CC=California Coastal Commission COE = Army Corp of Engineers CZ = Coastal Zone SF = Square Footage CY = Cubic Yards Ac. = Acres NA = Not Applicat

Arcata Rail-with-Trail Connectivity Project:

Table 6: Interim Bridge Statistics and Calculations of Bridge Impacts

Name of Water Crossing	Bridge Data					Pile Data[1,2]			
	# of Approach Spans	Length of Structure (lf)[1]	Width of Structure (lf)[1]	Total Surface Area of Structure (sf)[1]	# of Bridge-Footings (pile caps)[1]	Total Number of Piles (12" diameter each)	Total Number of Piles (16.5" diameter each)	Total Piles above HTL (outside Tidal Waters of US)	Total Piles below HTL (within Tidal Waters of the US)
Brainard's Slough	0	85	10	850	2	0	0	0	0
Old Jacoby Creek	0	50	12	600	2	0	0	0	0
Gannon Slough	0	10	196	1960	0	0	0	0	0
Overview Platform	0	50	13.5	675	0	4	0	4	3
Butcher Slough	0	80	10	800	2	0	0	0	0
Arcata Marsh Berm Bridge	0	93	12	1111	5	0	0	0	0
Jolly Giant Creek	0	23	12	278.4	2	0	0	0	0

Notes

1 Including approach spans

2 All piles are encased in pile caps; pile caps constitue ground disturbance

3 Includes several wetland types combined; see Table 3 for breakdown of impacts to wetlands by type

4 Tidal Waters of the US is everthing below HTL (8.0' elevation when converted to NAVD88)

5 Impacts in Tidal Waters triggers Section 404 and Section 10

6 Sturctural shading of unvegetated Tidal Waters is not calculated as an impact

Abbreviations

OHWM = Ordinary High Water Mark

HTL = High Tide Line (8.0' NAVD88)

SF = Square Feet

LF = Lineal Feet