	ALASKA PIPELINE PROJECT DRAFT RESOURCE REPORT 3 FISH, VEGETATION, AND WILDLIFE RESOURCES APPENDIX 3C	USAG-UR-SGREG-000013 DECEMBER 2011 REVISION 0
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APPENDIX 3C VEGETATION IMPACTS

(to be filed in the final report)

DRAFT

TABLE 3C-1

Alaska Pipeline Project
Acres of Forested Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / Facility	Closed Needleleaf Forest		Open Needleleaf Forest		Needleleaf Woodland		Closed Broadleaf Forest		Open Broadleaf Forest		Broadleaf Woodland		Closed Mixed Forest		Open Mixed Forest		Mixed Woodland		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
PT Pipeline																				
Beaufort																				
Coastal Plain																				
Pipeline																				
Right-of-Way																				
Additional Temporary Workspace (ATWS)																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
ALASKA																				
MAINLINE																				
Beaufort																				
Coastal Plain																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				

TABLE 3C-1

Alaska Pipeline Project
Acres of Forested Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / Facility	Closed Needleleaf Forest		Open Needleleaf Forest		Needleleaf Woodland		Closed Broadleaf Forest		Open Broadleaf Forest		Broadleaf Woodland		Closed Mixed Forest		Open Mixed Forest		Mixed Woodland		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Brooks																				
Foothills																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Brooks Range																				
Pipeline																				
Right-of-Way																				

TABLE 3C-1

Alaska Pipeline Project
Acres of Forested Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / Facility	Closed Needleleaf Forest		Open Needleleaf Forest		Needleleaf Woodland		Closed Broadleaf Forest		Open Broadleaf Forest		Broadleaf Woodland		Closed Mixed Forest		Open Mixed Forest		Mixed Woodland		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Ray Mountains																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Yukon-Tanana Uplands																				

TABLE 3C-1

Alaska Pipeline Project
Acres of Forested Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / Facility	Closed Needleleaf Forest		Open Needleleaf Forest		Needleleaf Woodland		Closed Broadleaf Forest		Open Broadleaf Forest		Broadleaf Woodland		Closed Mixed Forest		Open Mixed Forest		Mixed Woodland		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground																				
Facilities ^c																				
Pipe Storage and																				
Contractor Yards																				
Access Roads																				
Construction																				
Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Tanana-																				
Kuskokwim																				
Lowlands																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction																				
Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				

TABLE 3C-1

Alaska Pipeline Project
Acres of Forested Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / Facility	Closed Needleleaf Forest		Open Needleleaf Forest		Needleleaf Woodland		Closed Broadleaf Forest		Open Broadleaf Forest		Broadleaf Woodland		Closed Mixed Forest		Open Mixed Forest		Mixed Woodland		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction																				
Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				

^a The numbers in this table have been rounded for presentation purposes. As a result, the totals may not reflect the exact sum of the addends in all cases.

^b Operational maintenance will typically include a 100-foot-wide pipeline right-of-way. The operational impact acres for the pipeline right-of-way include the maintained pipeline right-of-way and other permanent facilities that will be utilized during operation of Project facilities.

^c Acreage used for the construction and operation of Aboveground Facilities is 0.0 when it occurs within the construction or operation footprint of the pipeline right-of-way. Additional acreage is noted if Aboveground Facilities are placed outside of these areas.


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TABLE 3C-2																						
Alaska Pipeline Project Acres of Scrub Vegetation Cover Types Affected by Construction and Operation ^{a,b}																						
Section / County / Facility	Closed Dwarf Tree Scrub		Open Dwarf Tree Scrub		Dwarf Tree Scrub Woodland		Closed Tall Scrub		Open Tall Scrub		Closed Low Scrub		Closed Low Scrub		Dryas Dwarf Scrub		Ericaceous Dwarf Scrub		Willow Dwarf Scrub		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
PT Pipeline																						
Beaufort Coastal Plain																						
Pipeline																						
Right-of-Way																						
ATWS																						
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						
ALASKA MAINLINE																						
Beaufort Coastal Plain																						
Pipeline																						
Right-of-Way																						
ATWS																						

TABLE 3C-2

Alaska Pipeline Project

Acres of Scrub Vegetation Cover Types Affected by Construction and Operation ^{a,b}

Section / County / Facility	Closed Dwarf Tree Scrub		Open Dwarf Tree Scrub		Dwarf Tree Scrub Woodland		Closed Tall Scrub		Open Tall Scrub		Closed Low Scrub		Closed Low Scrub		Dryas Dwarf Scrub		Ericaceous Dwarf Scrub		Willow Dwarf Scrub		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						
Brooks Foothills																						
Pipeline Right-of-Way																						
ATWS																						
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						
Brooks Range																						

TABLE 3C-2

Alaska Pipeline Project

Acres of Scrub Vegetation Cover Types Affected by Construction and Operation ^{a,b}

Section / County / Facility	Closed Dwarf Tree Scrub		Open Dwarf Tree Scrub		Dwarf Tree Scrub Woodland		Closed Tall Scrub		Open Tall Scrub		Closed Low Scrub		Closed Low Scrub		Dryas Dwarf Scrub		Ericaceous Dwarf Scrub		Willow Dwarf Scrub		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Pipeline																						
Right-of-Way																						
ATWS																						
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						
Ray Mountains																						
Pipeline																						
Right-of-Way																						
ATWS																						
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						

TABLE 3C-2

Alaska Pipeline Project

Acres of Scrub Vegetation Cover Types Affected by Construction and Operation ^{a,b}

Section / County / Facility	Closed Dwarf Tree Scrub		Open Dwarf Tree Scrub		Dwarf Tree Scrub Woodland		Closed Tall Scrub		Open Tall Scrub		Closed Low Scrub		Closed Low Scrub		Dryas Dwarf Scrub		Ericaceous Dwarf Scrub		Willow Dwarf Scrub		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Subtotal																						
Yukon-Tanana Uplands																						
Pipeline																						
Right-of-Way																						
ATWS																						
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						
Tanana- Kuskokwim Lowlands																						
Pipeline																						
Right-of-Way																						
ATWS																						
Aboveground Facilities ^c																						

TABLE 3C-2

Alaska Pipeline Project
Acres of Scrub Vegetation Cover Types Affected by Construction and Operation ^{a,b}

Section / County / Facility	Closed Dwarf Tree Scrub		Open Dwarf Tree Scrub		Dwarf Tree Scrub Woodland		Closed Tall Scrub		Open Tall Scrub		Closed Low Scrub		Closed Low Scrub		Dryas Dwarf Scrub		Ericaceous Dwarf Scrub		Willow Dwarf Scrub		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						
ATWS																						
Aboveground Facilities ^c																						
Pipe Storage and Contractor Yards																						
Access Roads																						
Construction Camps																						
Borrow Sites																						
Helipads																						
Subtotal																						

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^c Acreage used for the construction and operation of Aboveground Facilities is 0.0 when it occurs within the construction or operation footprint of the pipeline right-of-way. Additional acreage is noted if Aboveground Facilities are placed outside of these areas.

TABLE 3C-2

Alaska Pipeline Project

Acres of Scrub Vegetation Cover Types Affected by Construction and Operation ^{a,b}

Section / County / Facility	Closed Dwarf Tree Scrub		Open Dwarf Tree Scrub		Dwarf Tree Scrub Woodland		Closed Tall Scrub		Open Tall Scrub		Closed Low Scrub		Closed Low Scrub		Dryas Dwarf Scrub		Ericaceous Dwarf Scrub		Willow Dwarf Scrub		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.


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TABLE 3C-3																				
Alaska Pipeline Project Acres of Herbaceous Vegetation Cover Types Affected by Construction and Operation^{a,b}																				
Section / County / Facility	Dry Graminoid Herbaceous		Mesic Graminoid Herbaceous		Wet Graminoid Herbaceous		Dry Forb Herbaceous		Mesic Forb Herbaceous		Wet Forb Herbaceous		Mosses		Lichens		Freshwater Aquatic Herbaceous		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
PT Pipeline																				
Beaufort Coastal Plain																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
ALASKA MAINLINE																				
Beaufort Coastal Plain																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				

TABLE 3C-3

Alaska Pipeline Project
Acres of Herbaceous Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / County / Facility	Dry Graminoid Herbaceous		Mesic Graminoid Herbaceous		Wet Graminoid Herbaceous		Dry Forb Herbaceous		Mesic Forb Herbaceous		Wet Forb Herbaceous		Mosses		Lichens		Freshwater Aquatic Herbaceous		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Brooks																				
Foothills																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Brooks Range																				
Pipeline																				
Right-of-Way																				

TABLE 3C-3

Alaska Pipeline Project
Acres of Herbaceous Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / County / Facility	Dry Graminoid Herbaceous		Mesic Graminoid Herbaceous		Wet Graminoid Herbaceous		Dry Forb Herbaceous		Mesic Forb Herbaceous		Wet Forb Herbaceous		Mosses		Lichens		Freshwater Aquatic Herbaceous		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Ray Mountains																				
Pipeline Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Project Total																				

TABLE 3C-3

Alaska Pipeline Project
Acres of Herbaceous Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / County / Facility	Dry Graminoid Herbaceous		Mesic Graminoid Herbaceous		Wet Graminoid Herbaceous		Dry Forb Herbaceous		Mesic Forb Herbaceous		Wet Forb Herbaceous		Mosses		Lichens		Freshwater Aquatic Herbaceous		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Yukon-Tanana Uplands																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				
Construction Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Project Total																				
Tanana- Kuskokwim Lowlands																				
Pipeline																				
Right-of-Way																				
ATWS																				
Aboveground Facilities ^c																				
Pipe Storage and Contractor Yards																				
Access Roads																				

TABLE 3C-3

Alaska Pipeline Project
Acres of Herbaceous Vegetation Cover Types Affected by Construction and Operation^{a,b}

Section / County / Facility	Dry Graminoid Herbaceous		Mesic Graminoid Herbaceous		Wet Graminoid Herbaceous		Dry Forb Herbaceous		Mesic Forb Herbaceous		Wet Forb Herbaceous		Mosses		Lichens		Freshwater Aquatic Herbaceous		Total	
	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.	Con.	Op.
Construction																				
Camps																				
Borrow Sites																				
Helipads																				
Subtotal																				
Project Total																				

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