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APPENDIX A

HABITATS TRAVERSED BY THE OXYCHEM MARKHAM PIPELINE, SAN PATRICIO PIPELINE, AND ETHANE CRACKER PROJECT

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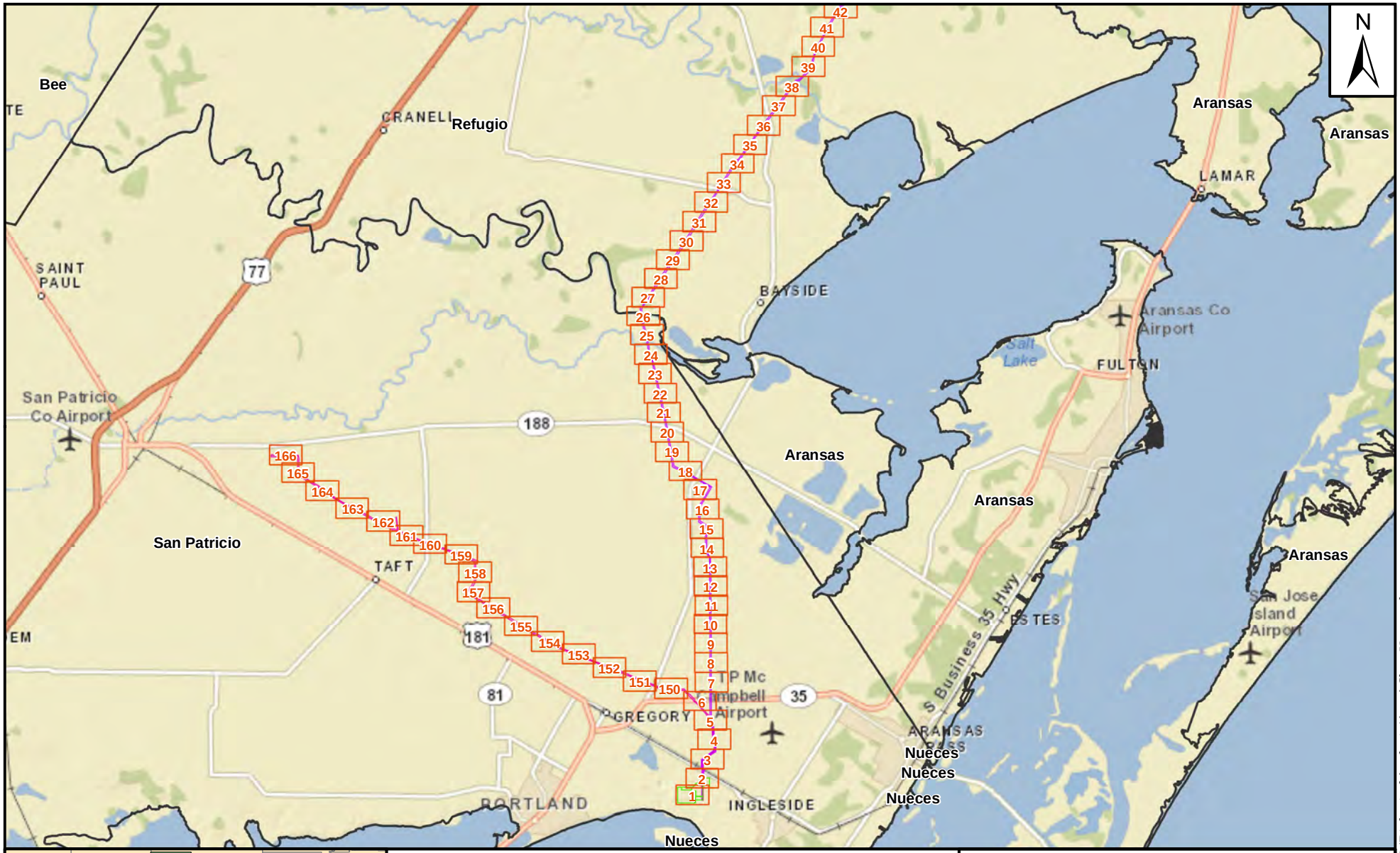

Source: World Street Map and County Boundaries from ESRI online mapping services. Available at http://services.arcgisonline.com/arcgis/services

LEGEND

- Sheet Boundary
- Markham Pipeline
- County Boundary
- Ethane Cracker
- San Patricio Pipeline

0 3 6 9 12 Miles

Scale = 1:250,000

Sheet 1 of 4

Appendix A Sheet Key. Habitats Traversed by the Oxy-Chem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/projects/OxyPhaseII/MXD/BiologicalAnalysis/AppASheetKey.mxd

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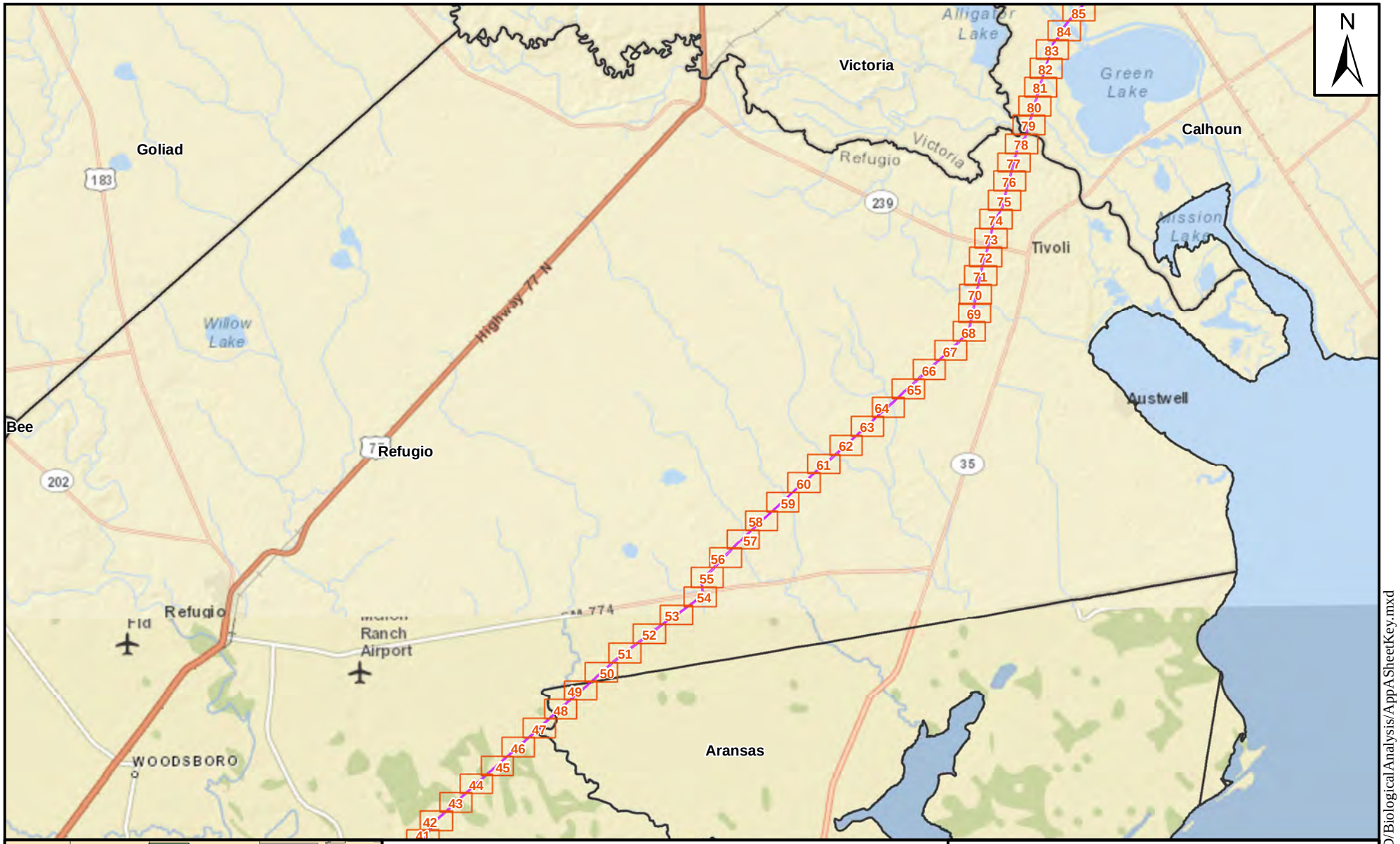

Source: World Street Map and County Boundaries from ESRI online mapping services. Available at http://services.arcgisonline.com/arcgis/services

LEGEND

- Sheet Boundary
- Markham Pipeline
- County Boundary
- Ethane Cracker
- San Patricio Pipeline

0 3 6 9 12 Miles

Scale = 1:250,000

Sheet 2 of 4

Appendix A Sheet Key. Habitats Traversed by the Oxy-Chem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/projects/OxyPhaseII/MXD/BiologicalAnalysis/AppASheetKey.mxd

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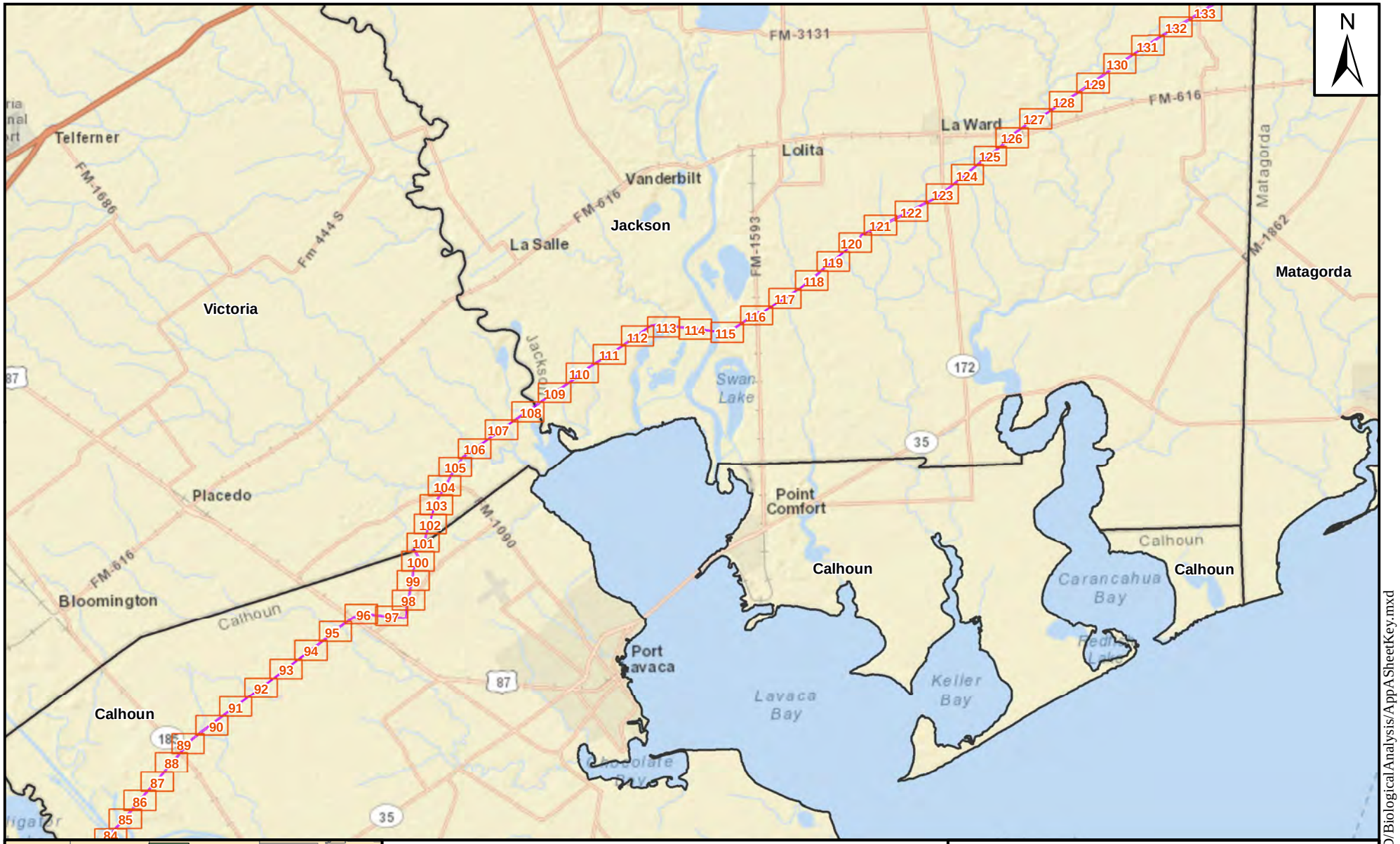


Source: World Street Map and County Boundaries from ESRI online mapping services. Available at http://services.arcgisonline.com/arcgis/services

LEGEND

Sheet Boundary
Markham Pipeline
County Boundary
Ethane Cracker
San Patricio Pipeline

0 3 6 9 12 Miles

Scale = 1:250,000

Sheet 3 of 4

Appendix A Sheet Key. Habitats Traversed by the Oxy-Chem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

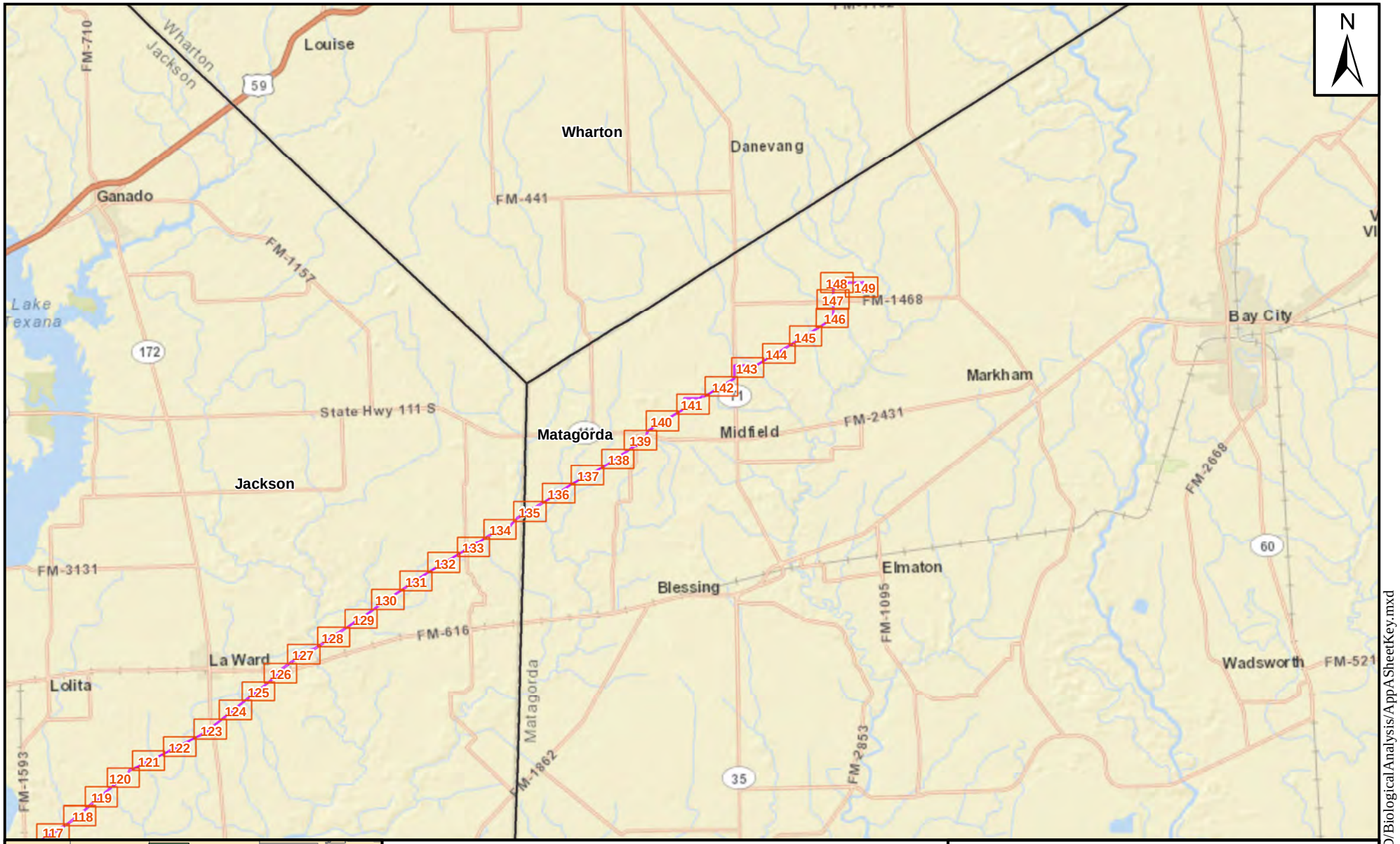
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/projects/OxyPhaseII/MXD/BiologicalAnalysis/AppASheetKey.mxd

US EPA ARCHIVE DOCUMENT



Source: World Street Map and County Boundaries from ESRI online mapping services. Available at http://services.arcgisonline.com/arcgis/services

LEGEND

- Sheet Boundary
- Markham Pipeline
- County Boundary
- Ethane Cracker
- San Patricio Pipeline

0 3 6 9 12 Miles

Scale = 1:250,000

Sheet 4 of 4

Appendix A Sheet Key. Habitats Traversed by the Oxy-Chem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

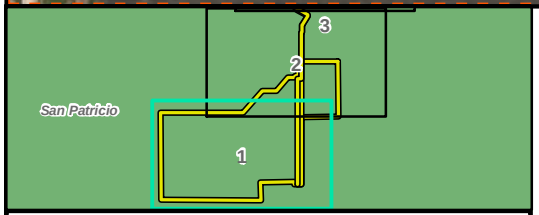
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/projects/OxyPhaseII/MXD/BiologicalAnalysis/AppASheetKey.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 1 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

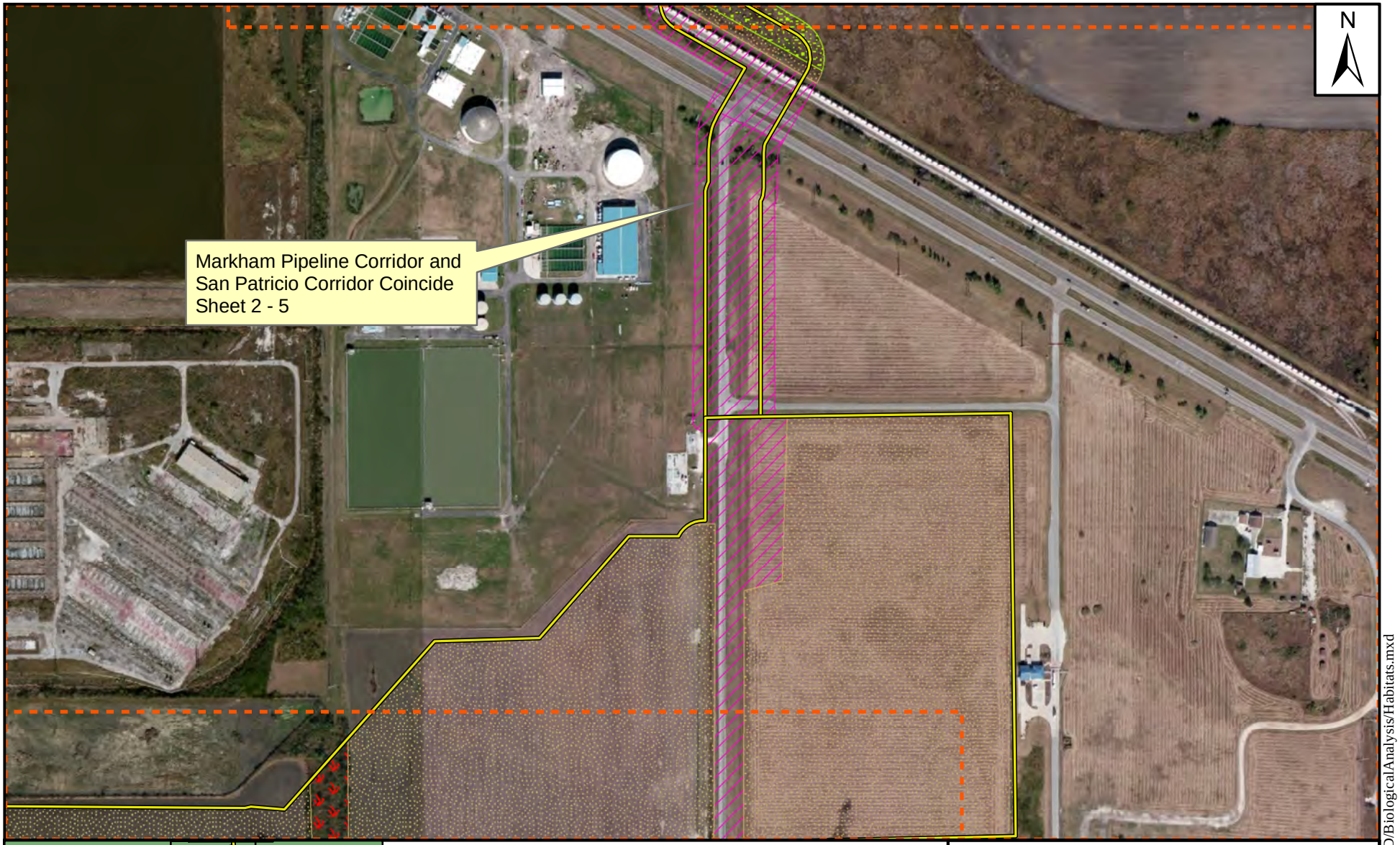
Prepared For: Occidental Chemical Corporation

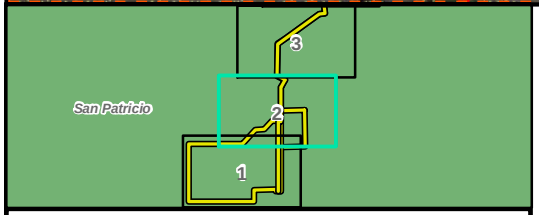
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 2 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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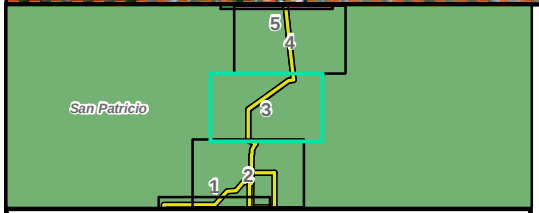


Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 3 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

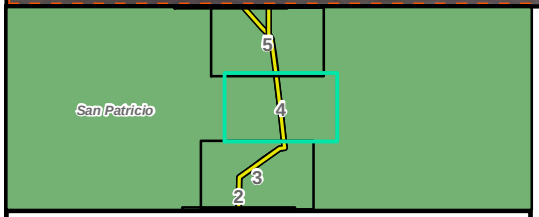
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 4 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

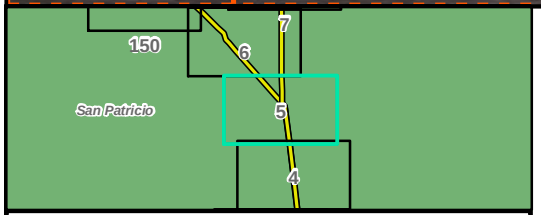
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 5 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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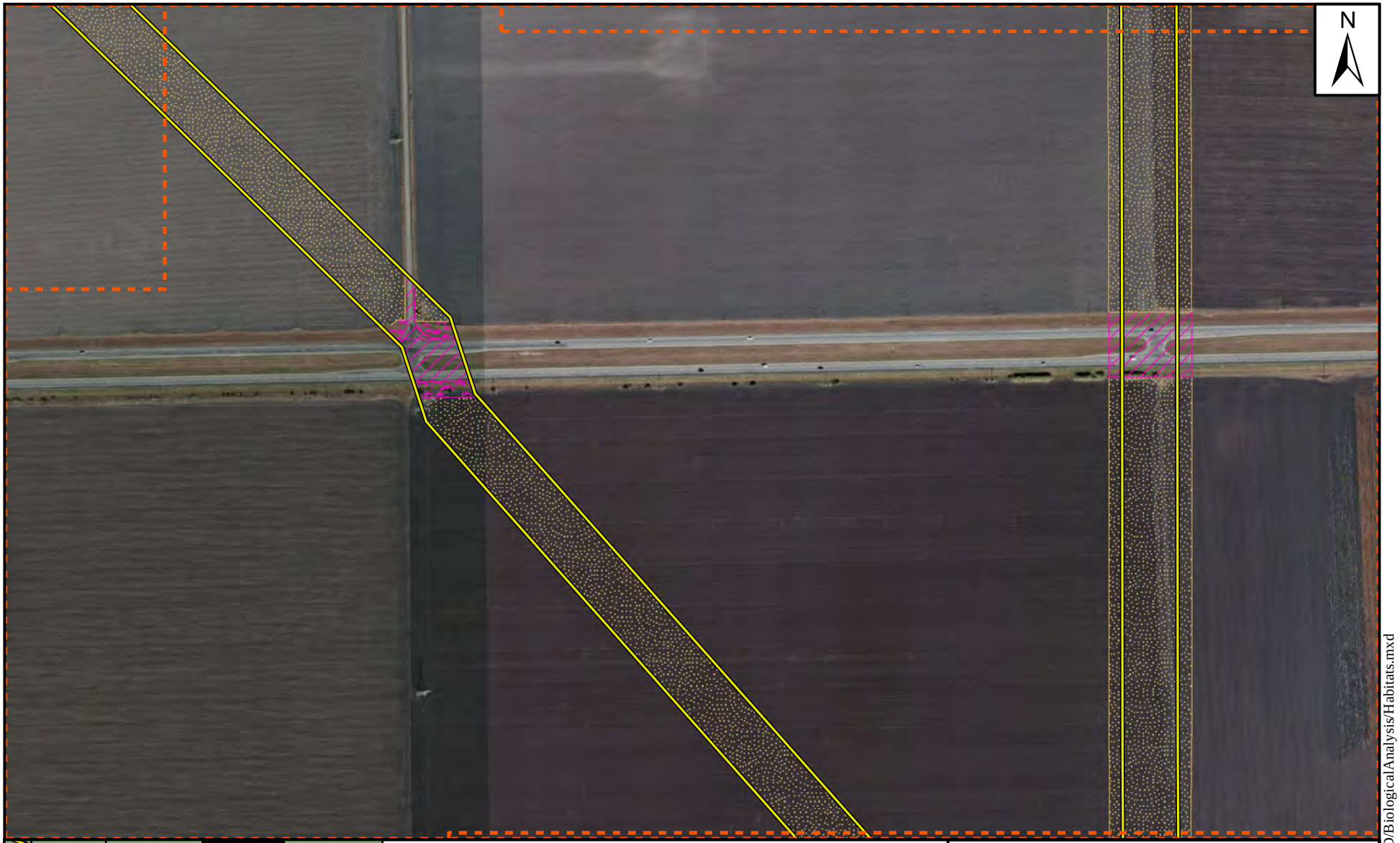
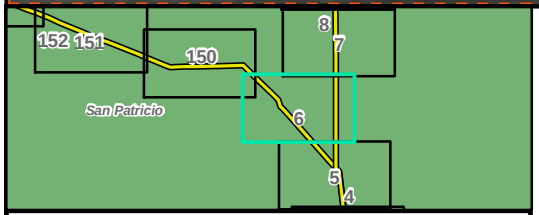




Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 6 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

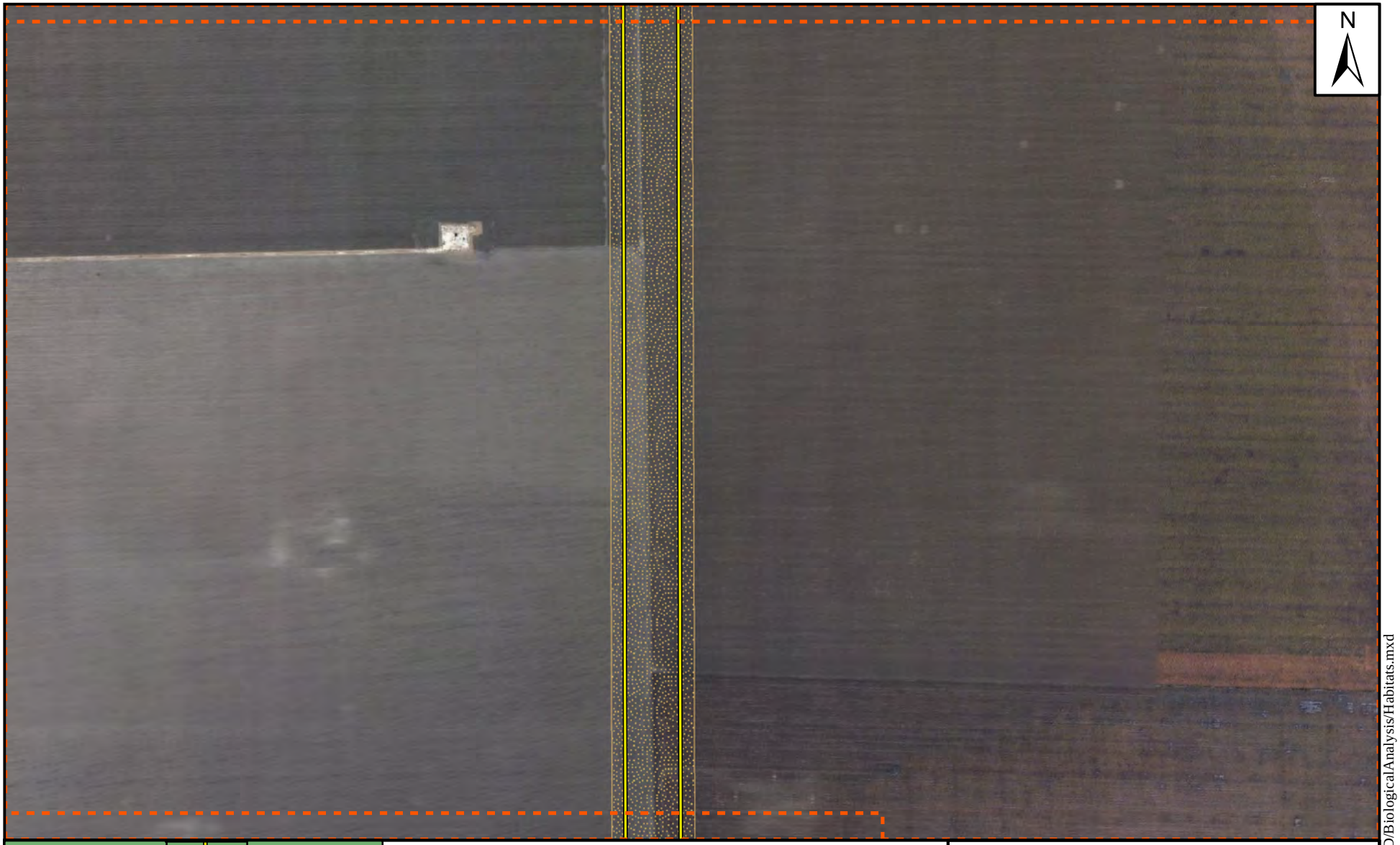
Prepared For: Occidental Chemical Corporation

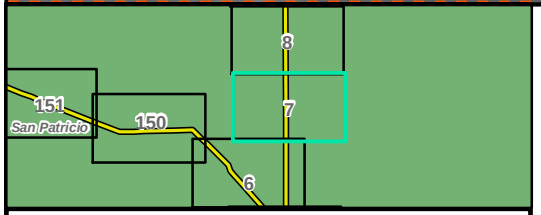
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 7 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

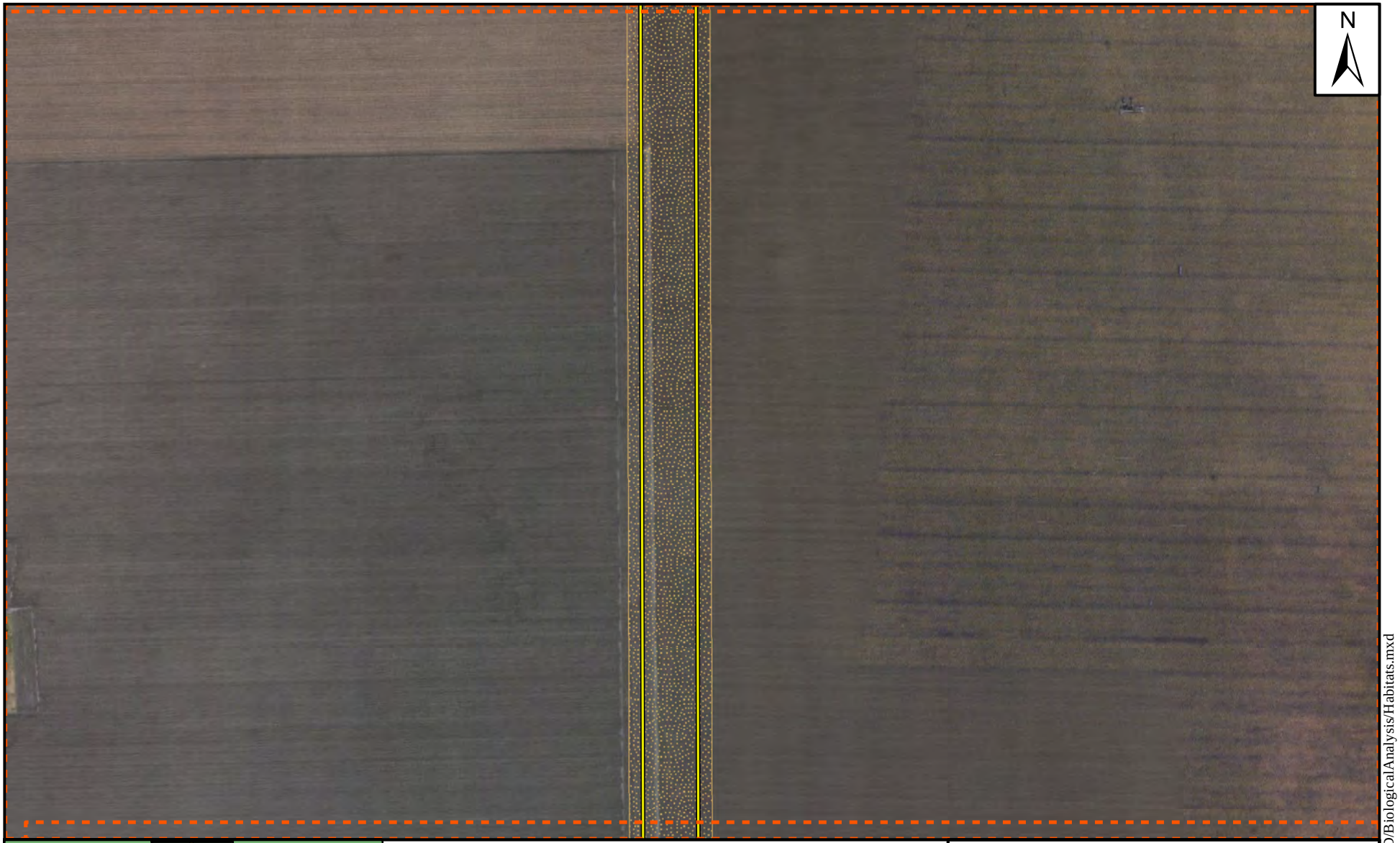
Prepared For: Occidental Chemical Corporation

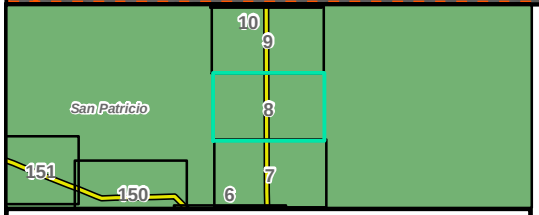
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

Feet
0 500 1,000 1,500

Scale = 1:6,000

SHEET 8 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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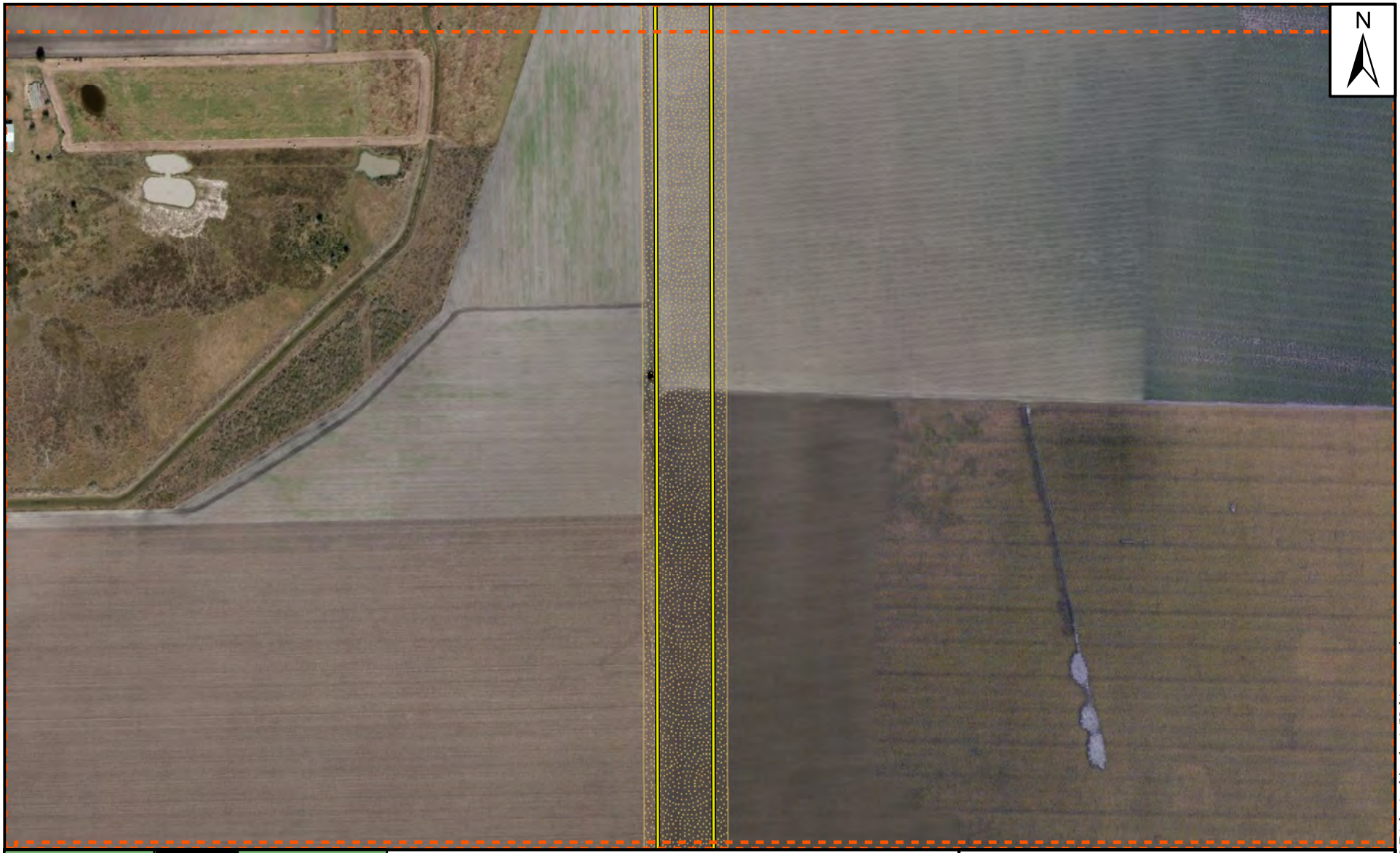
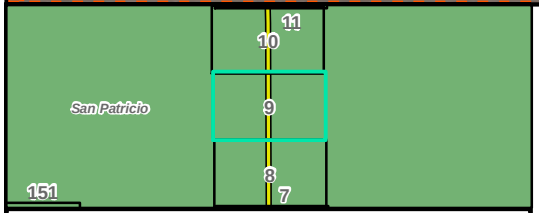




Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 9 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

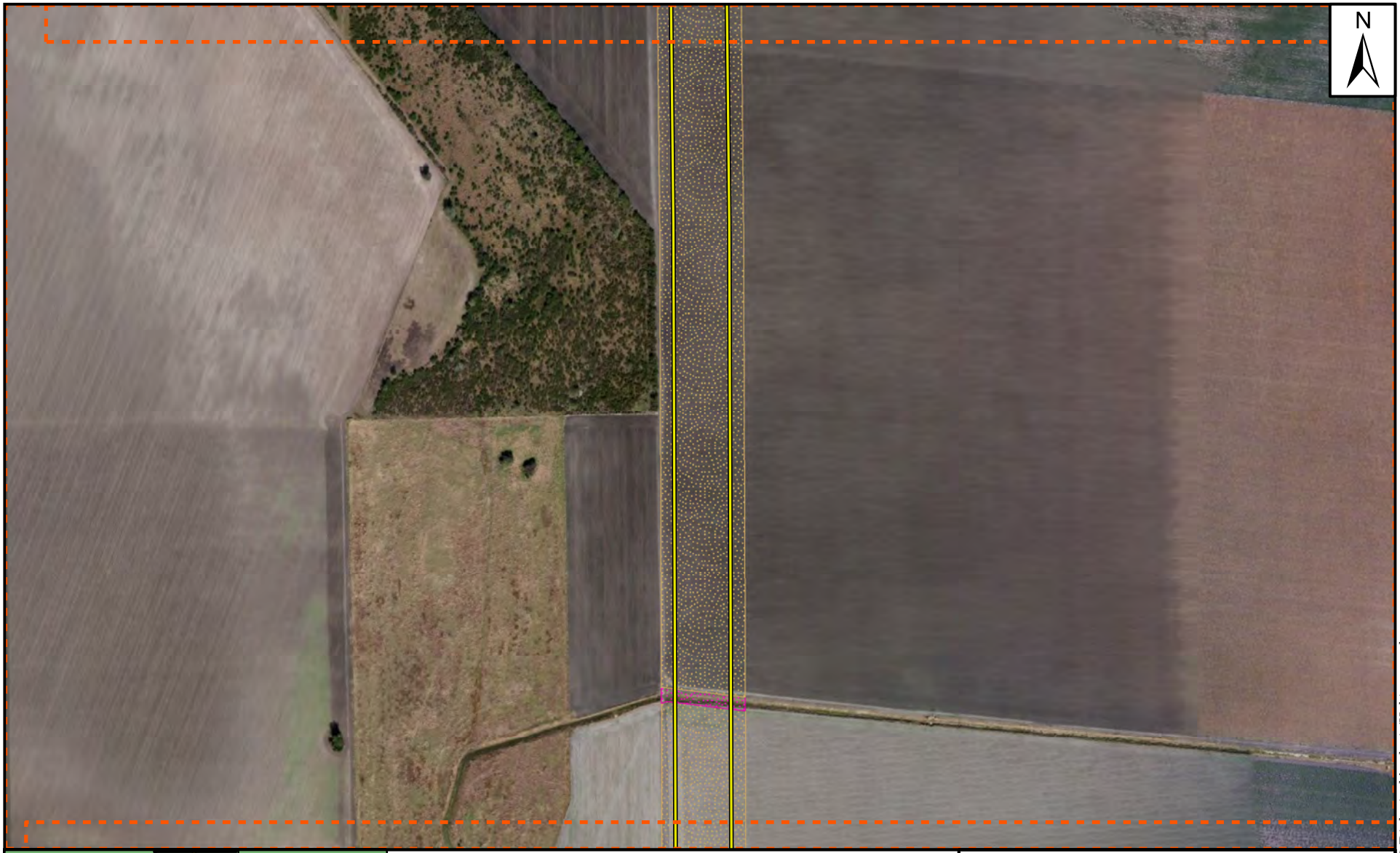
Prepared For: Occidental Chemical Corporation

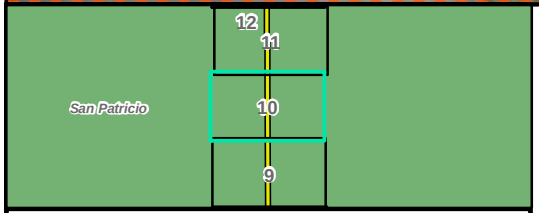
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 10 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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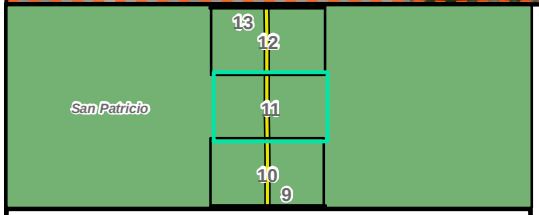

Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 11 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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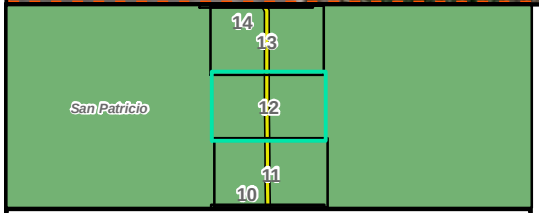

Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 12 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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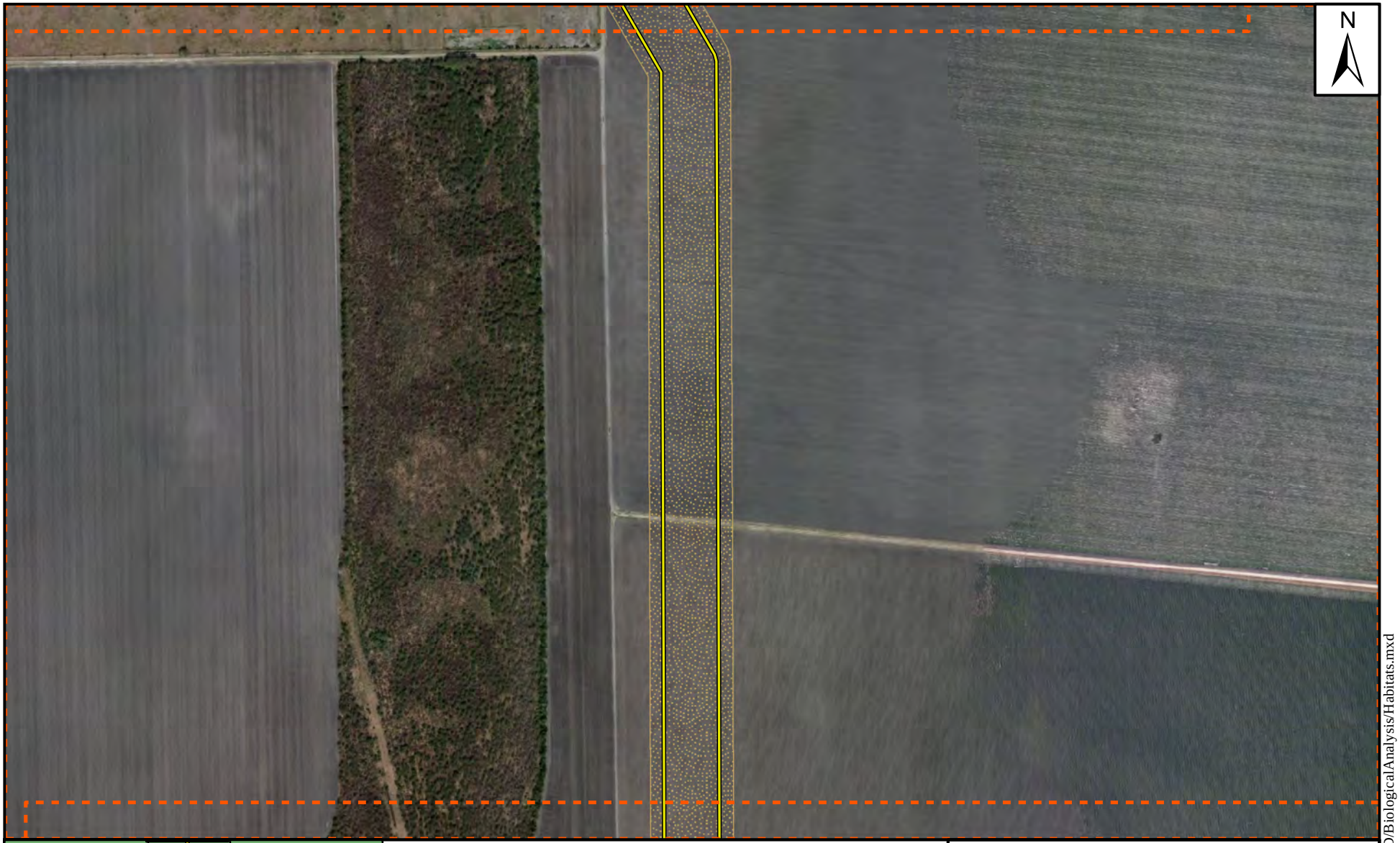
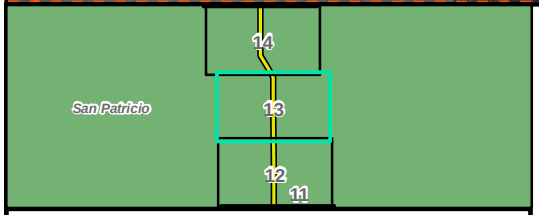




Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 13 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

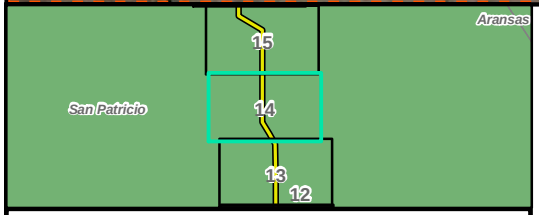
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 14 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

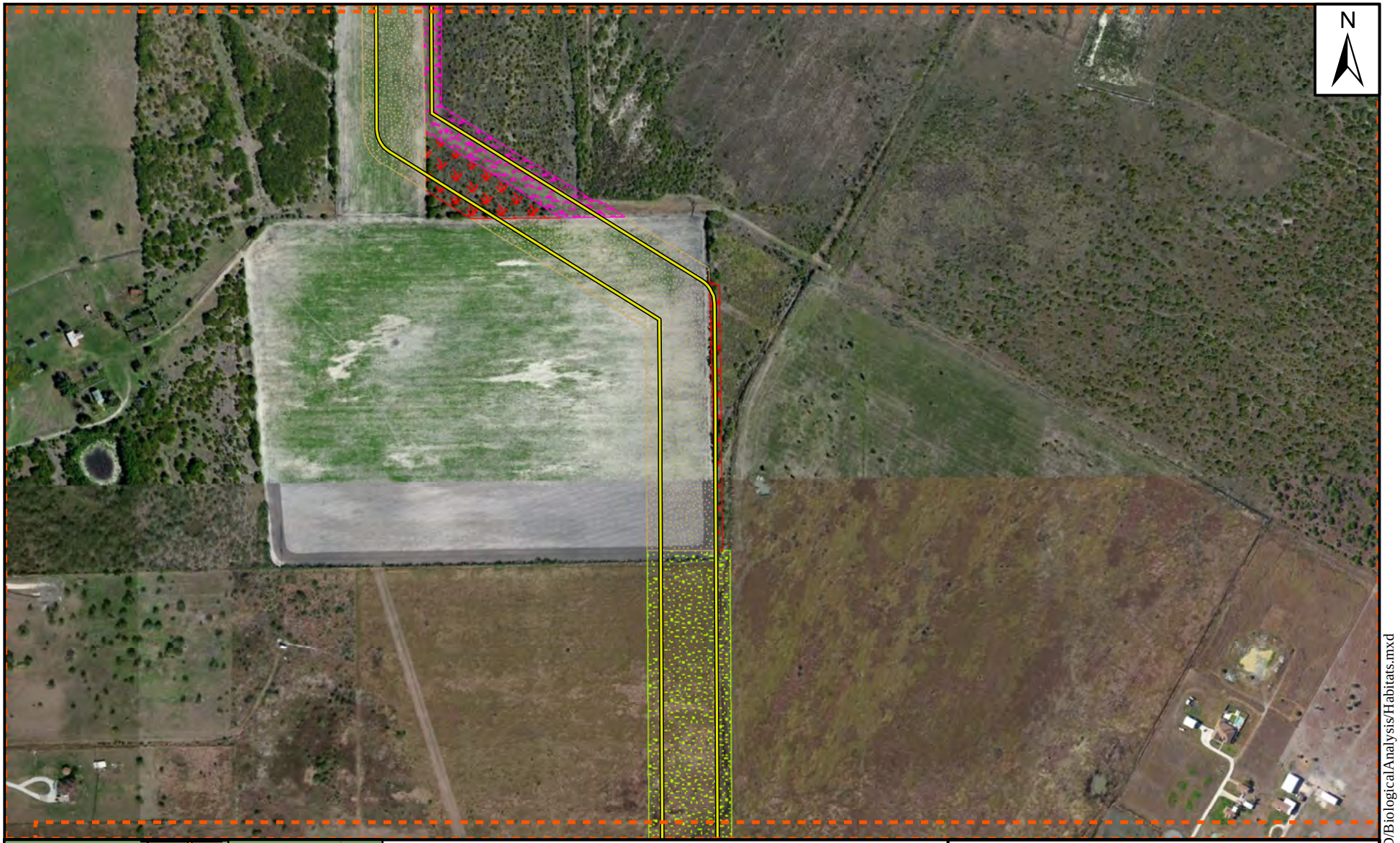
Prepared For: Occidental Chemical Corporation

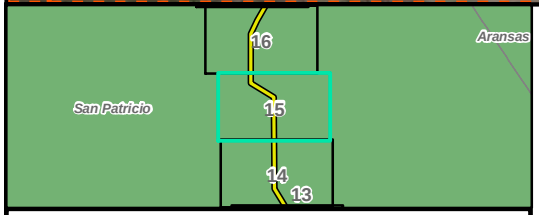
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 15 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

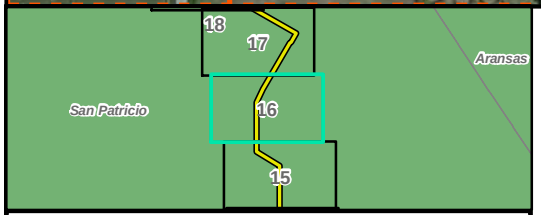
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

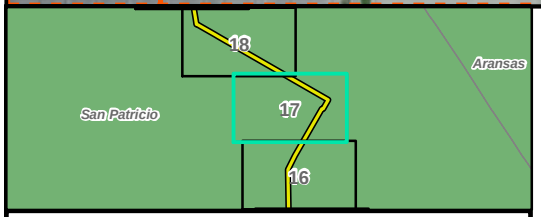
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

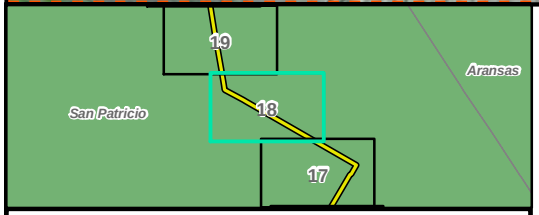
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

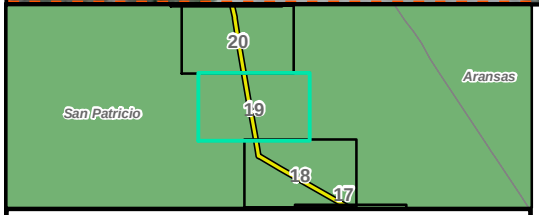
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

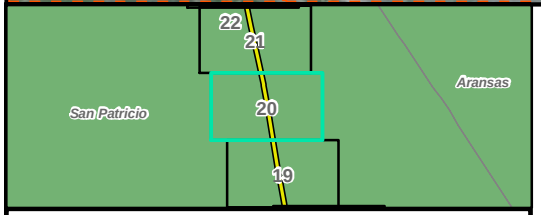
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

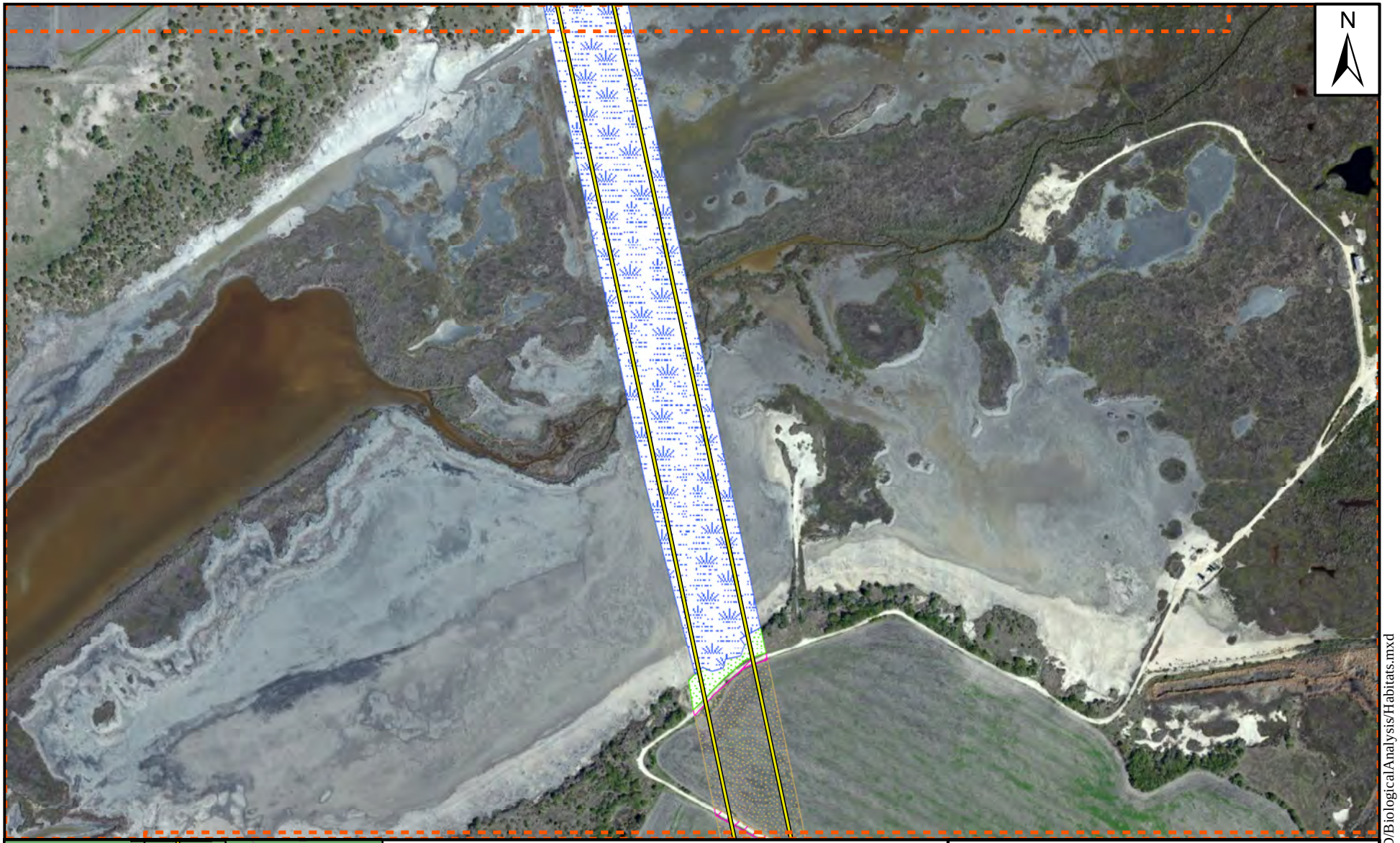
Prepared For: Occidental Chemical Corporation

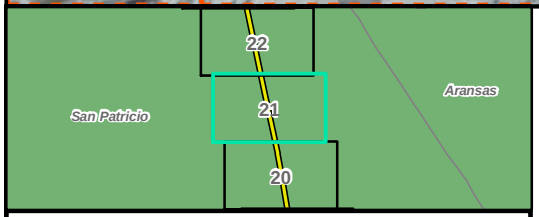
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

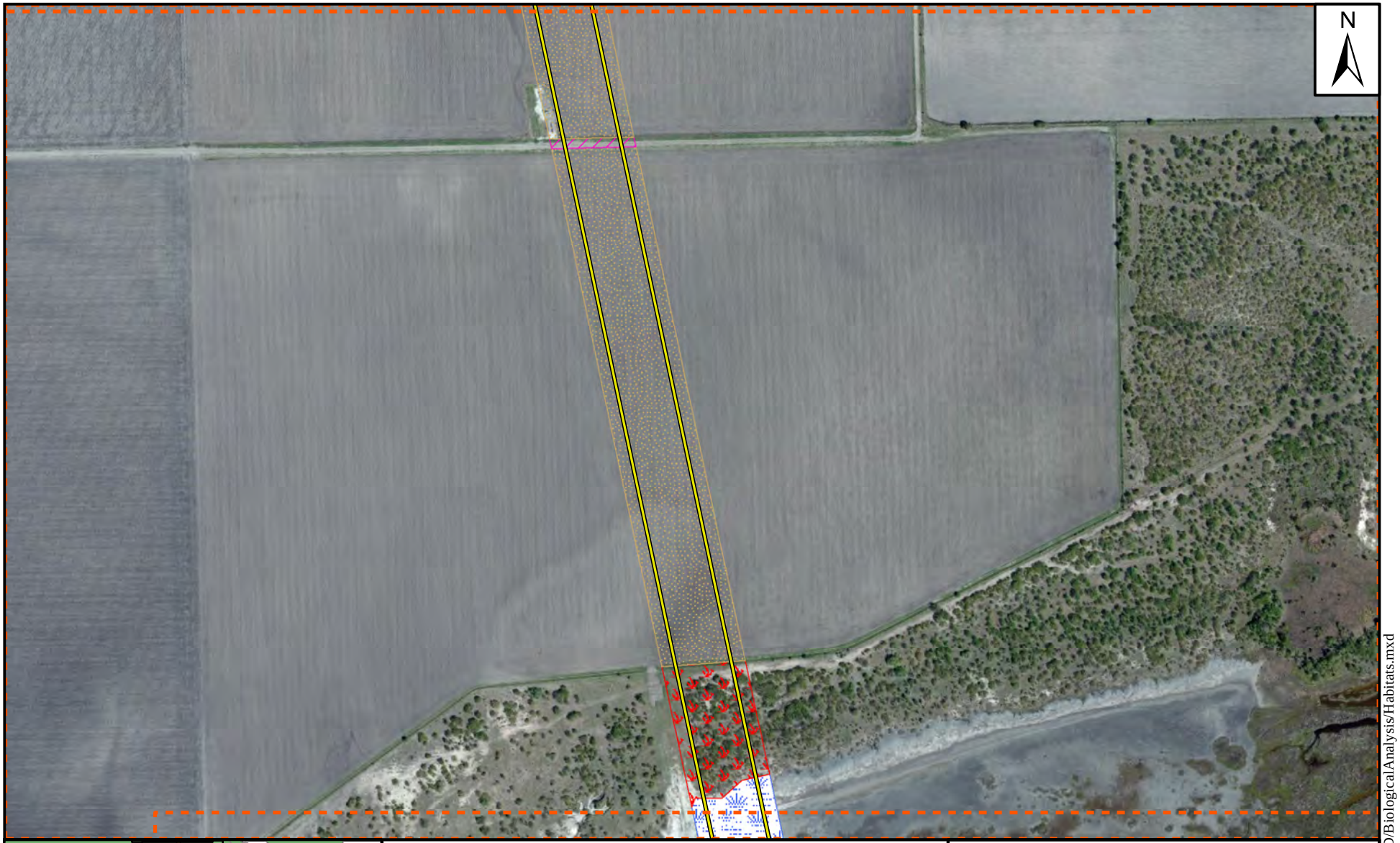
Prepared For: Occidental Chemical Corporation

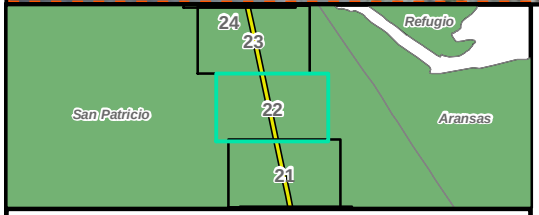
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

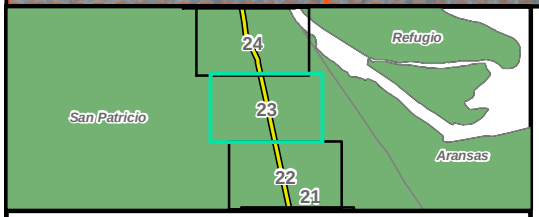
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

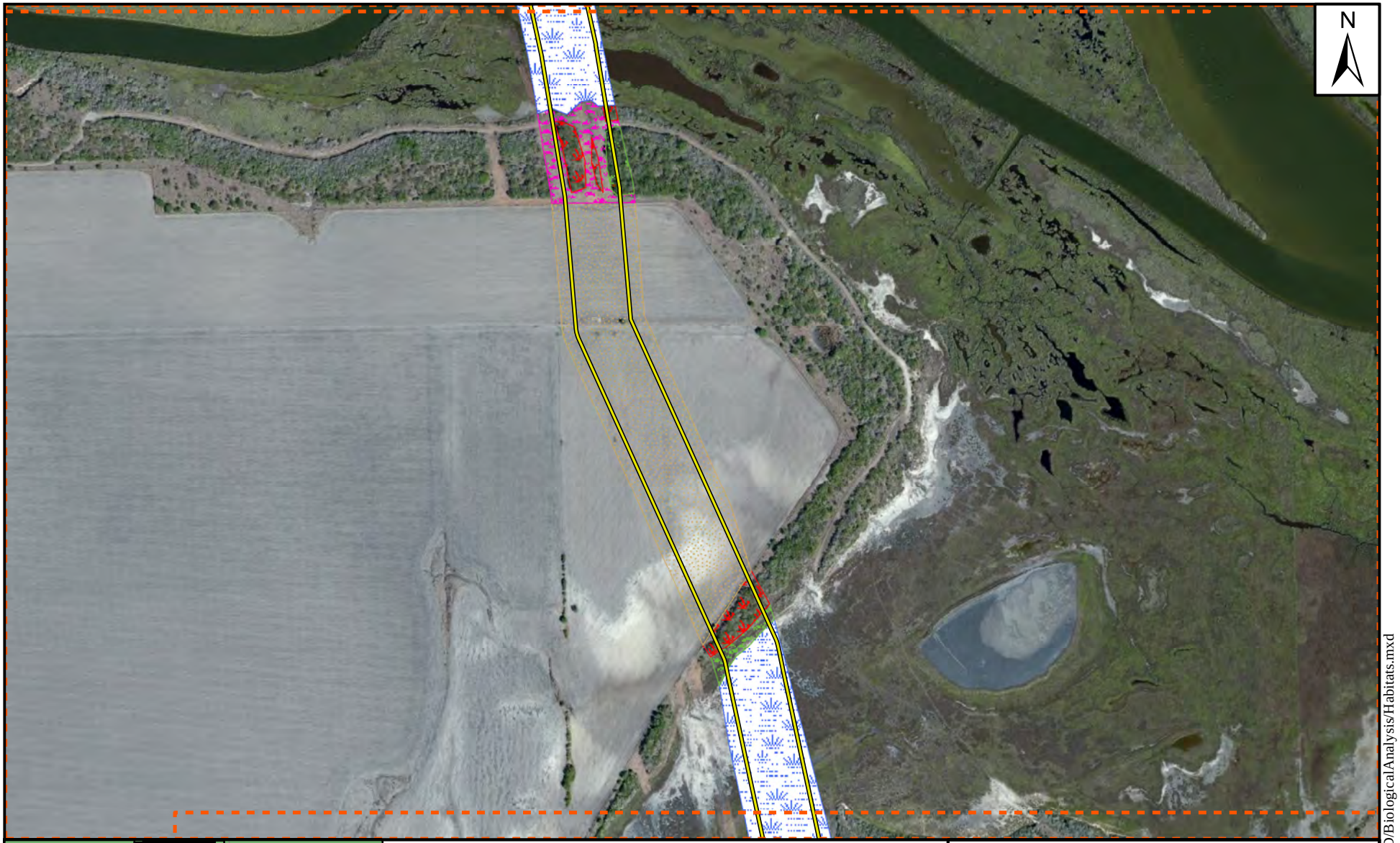
Prepared For: Occidental Chemical Corporation

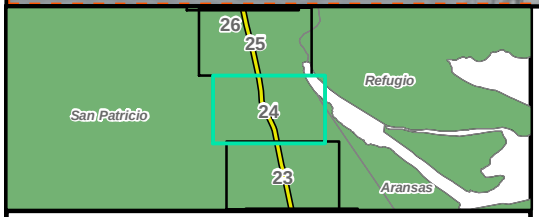
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

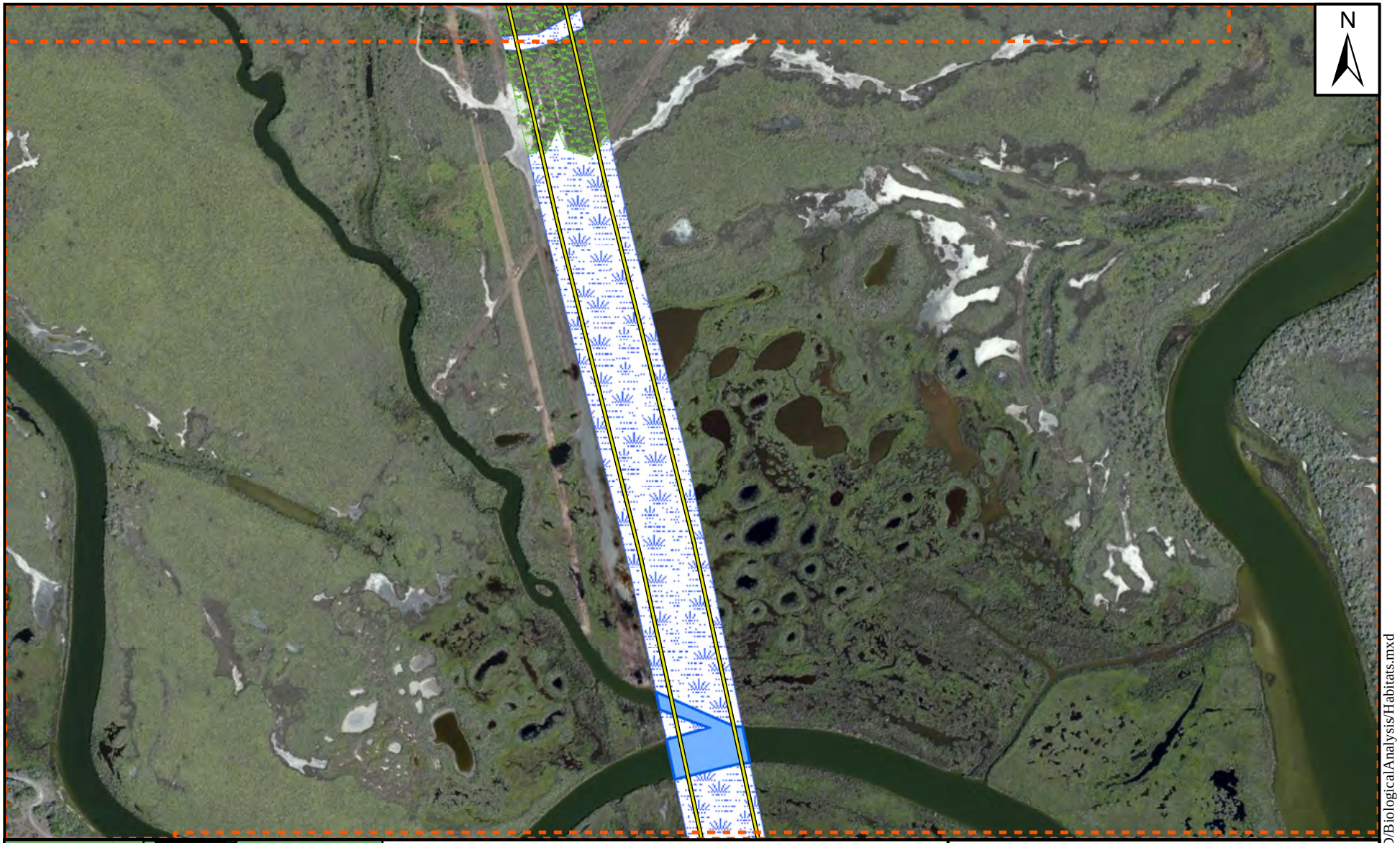
Prepared For: Occidental Chemical Corporation

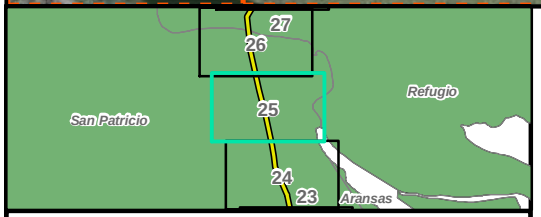
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

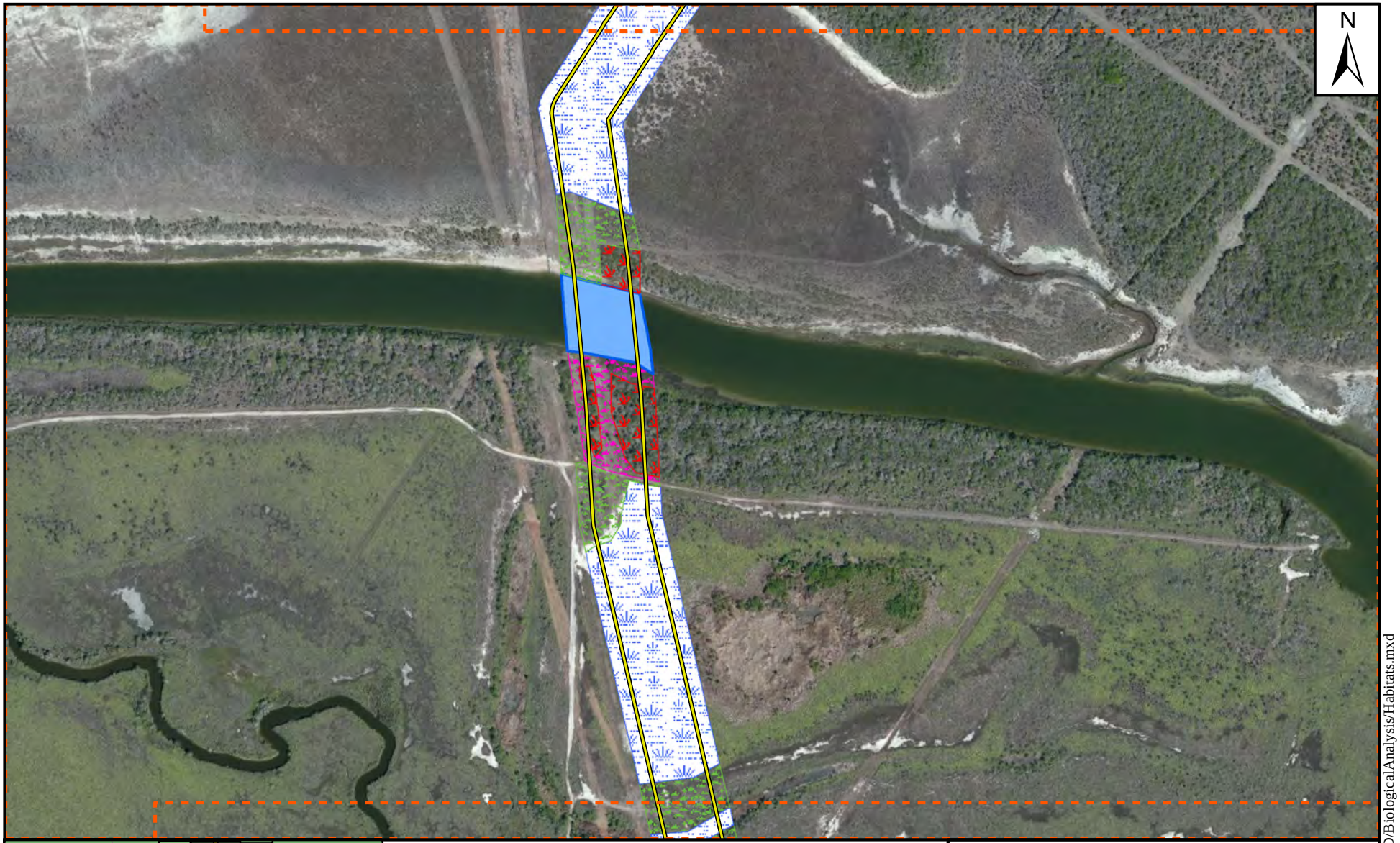
Prepared For: Occidental Chemical Corporation

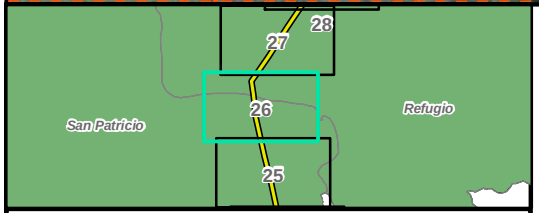
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 26 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

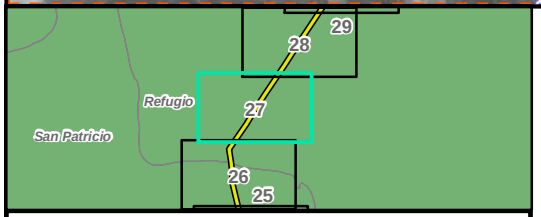
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 27 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

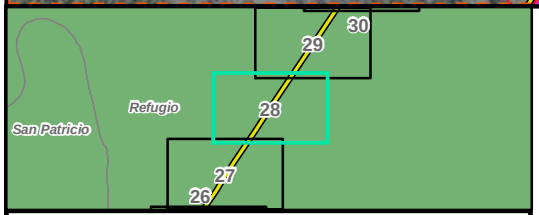
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 28 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

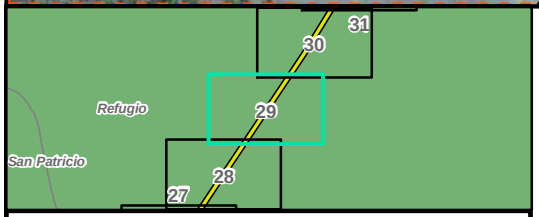
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 29 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

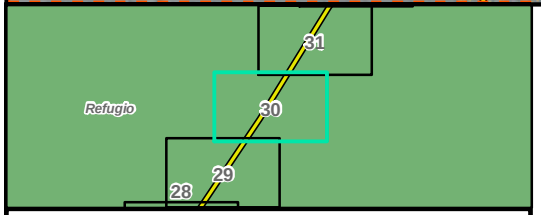
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 30 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

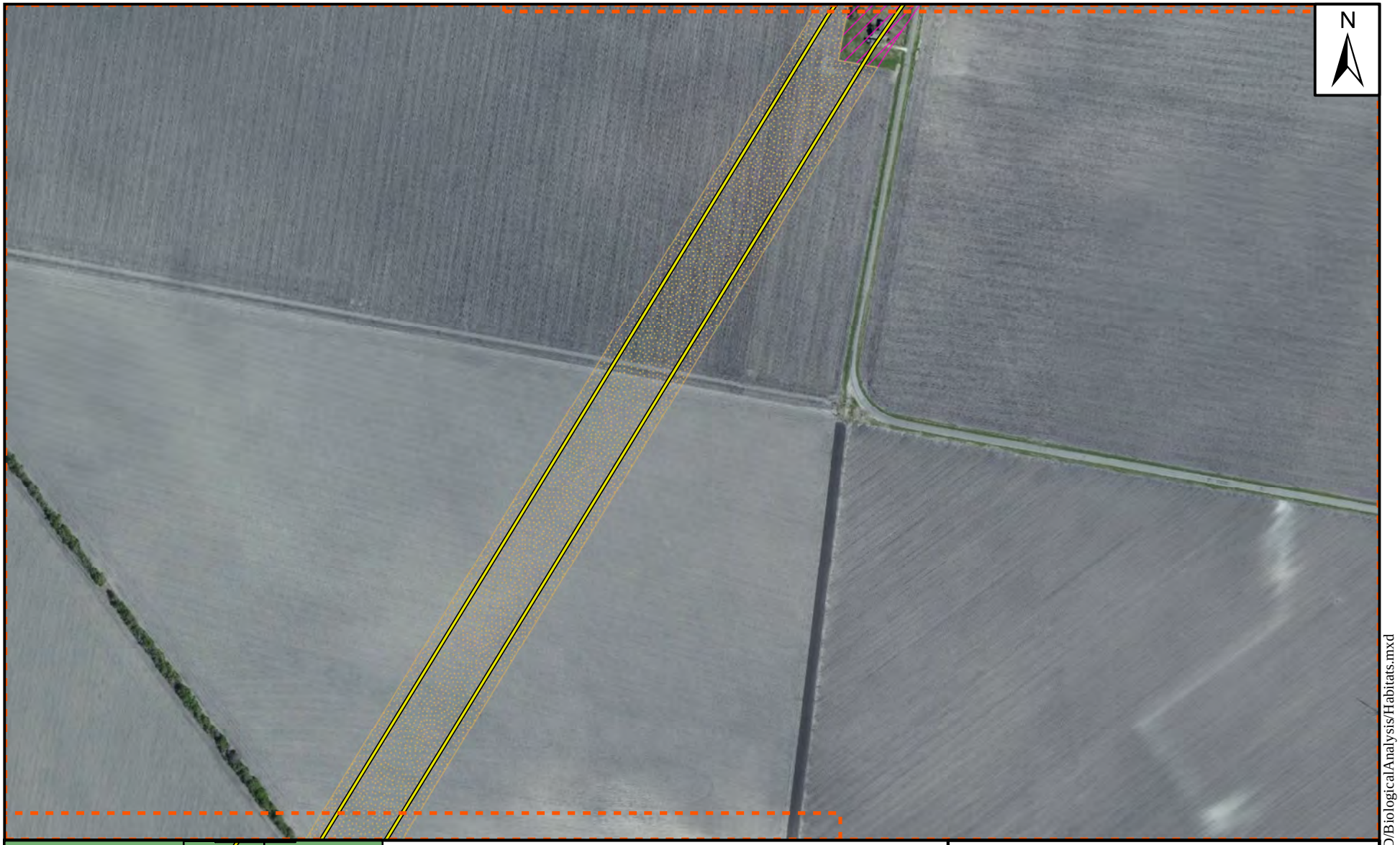
Prepared For: Occidental Chemical Corporation

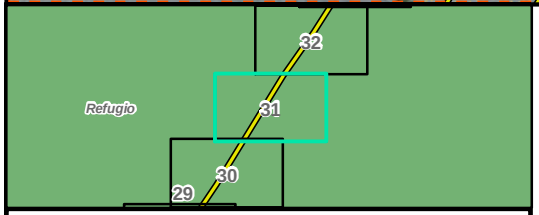
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

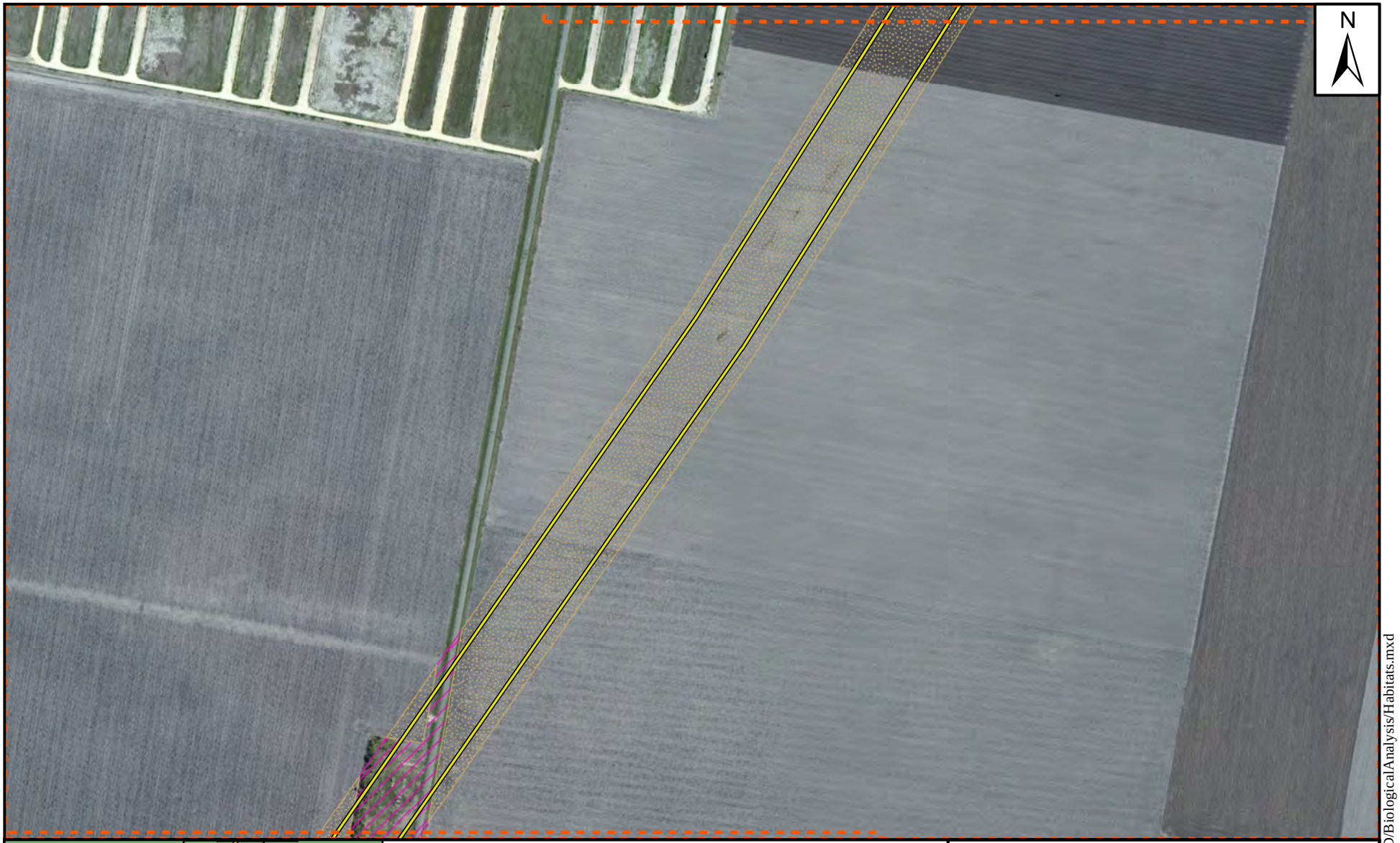
Prepared For: Occidental Chemical Corporation

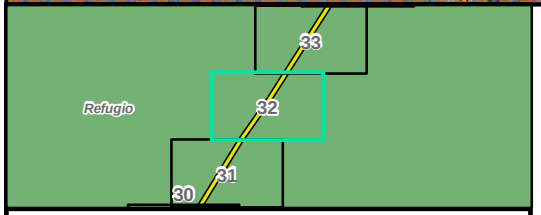
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

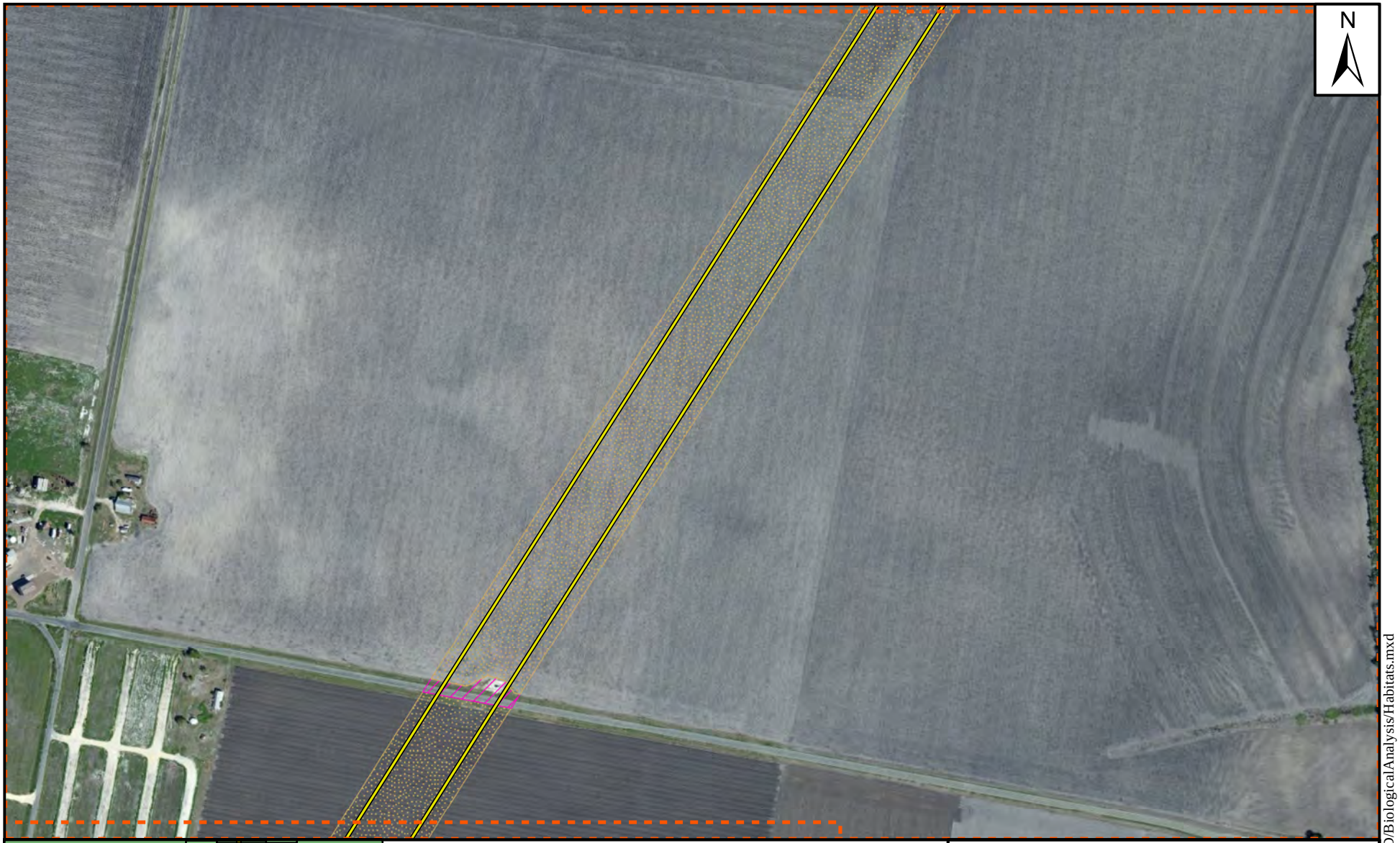
Prepared For: Occidental Chemical Corporation

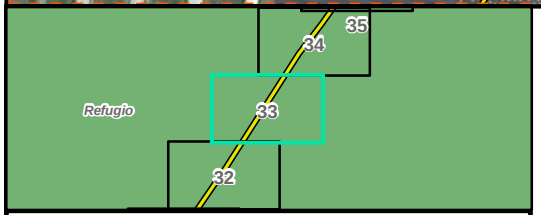
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 33 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

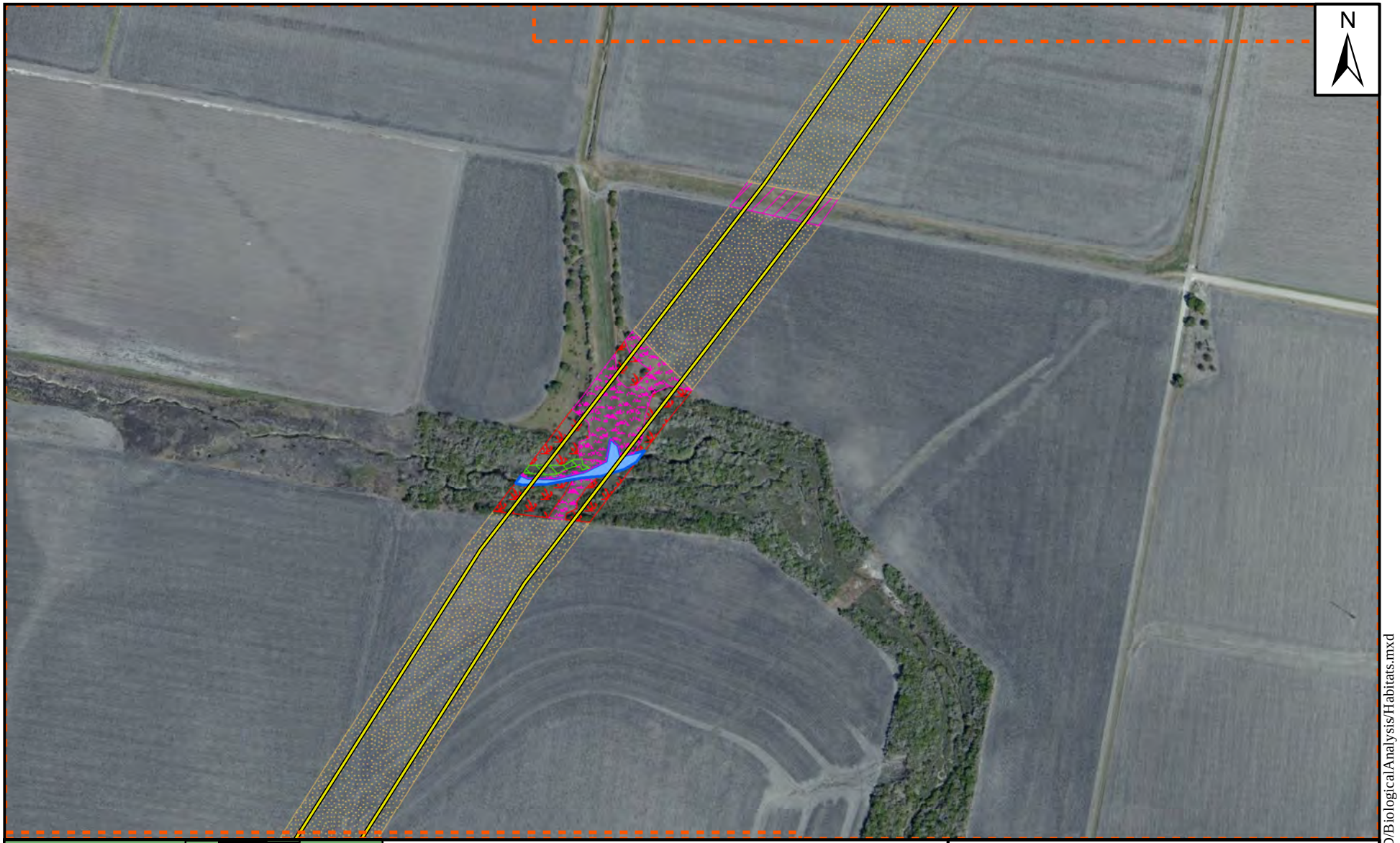
Prepared For: Occidental Chemical Corporation

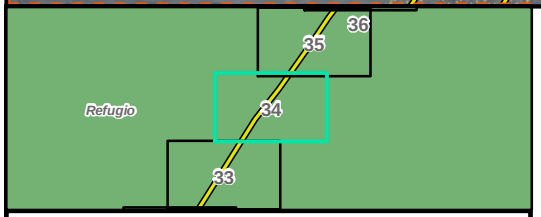
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

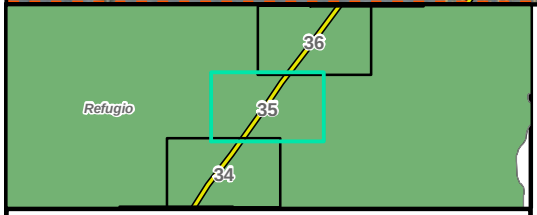
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 35 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

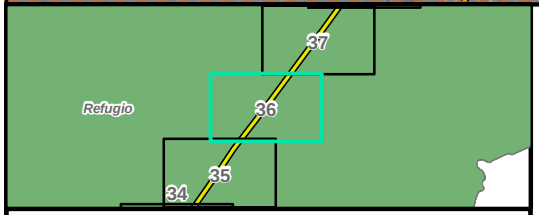
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 36 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

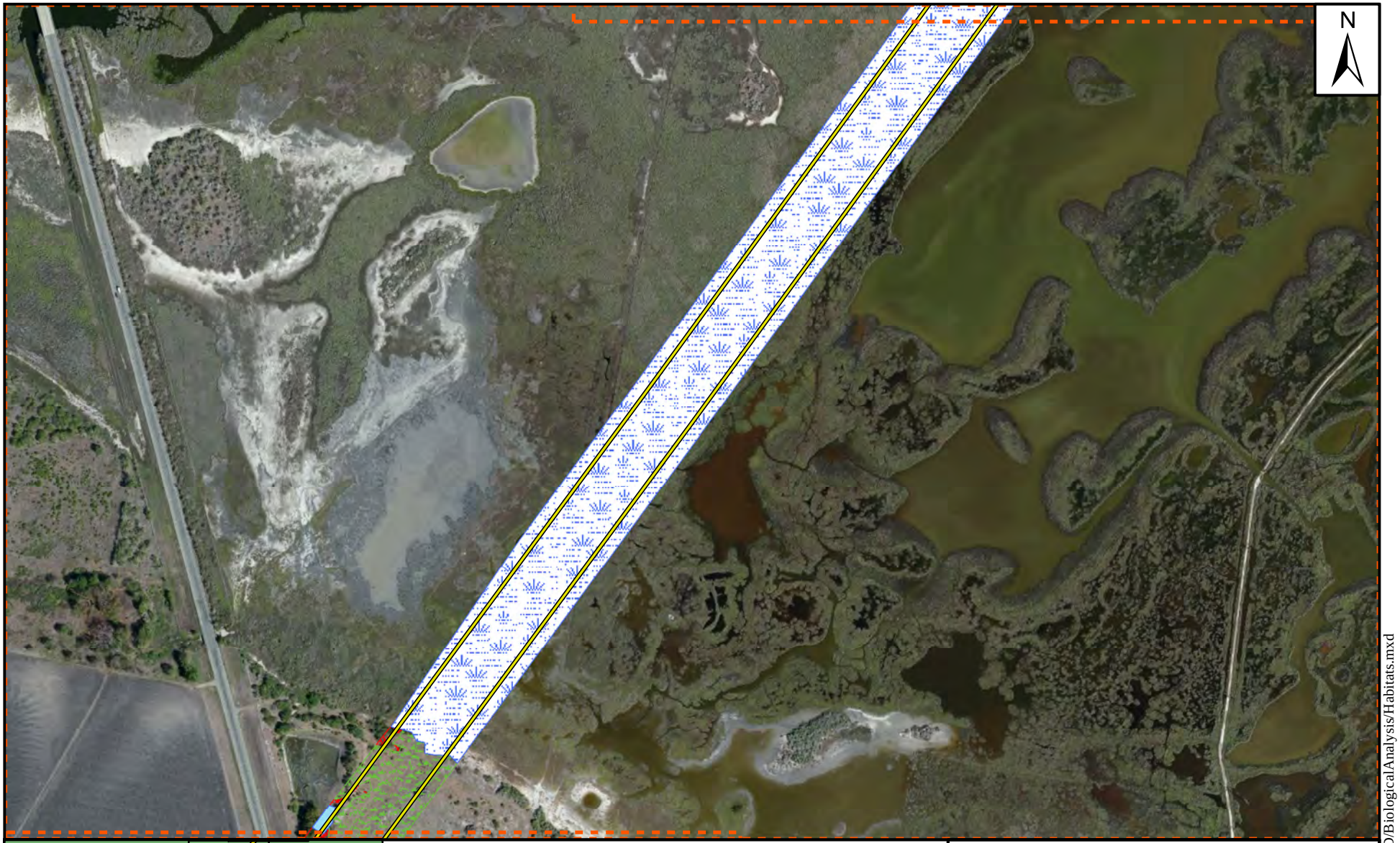
Prepared For: Occidental Chemical Corporation

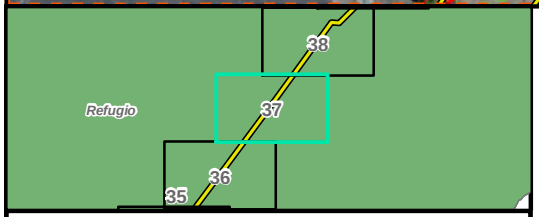
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 37 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

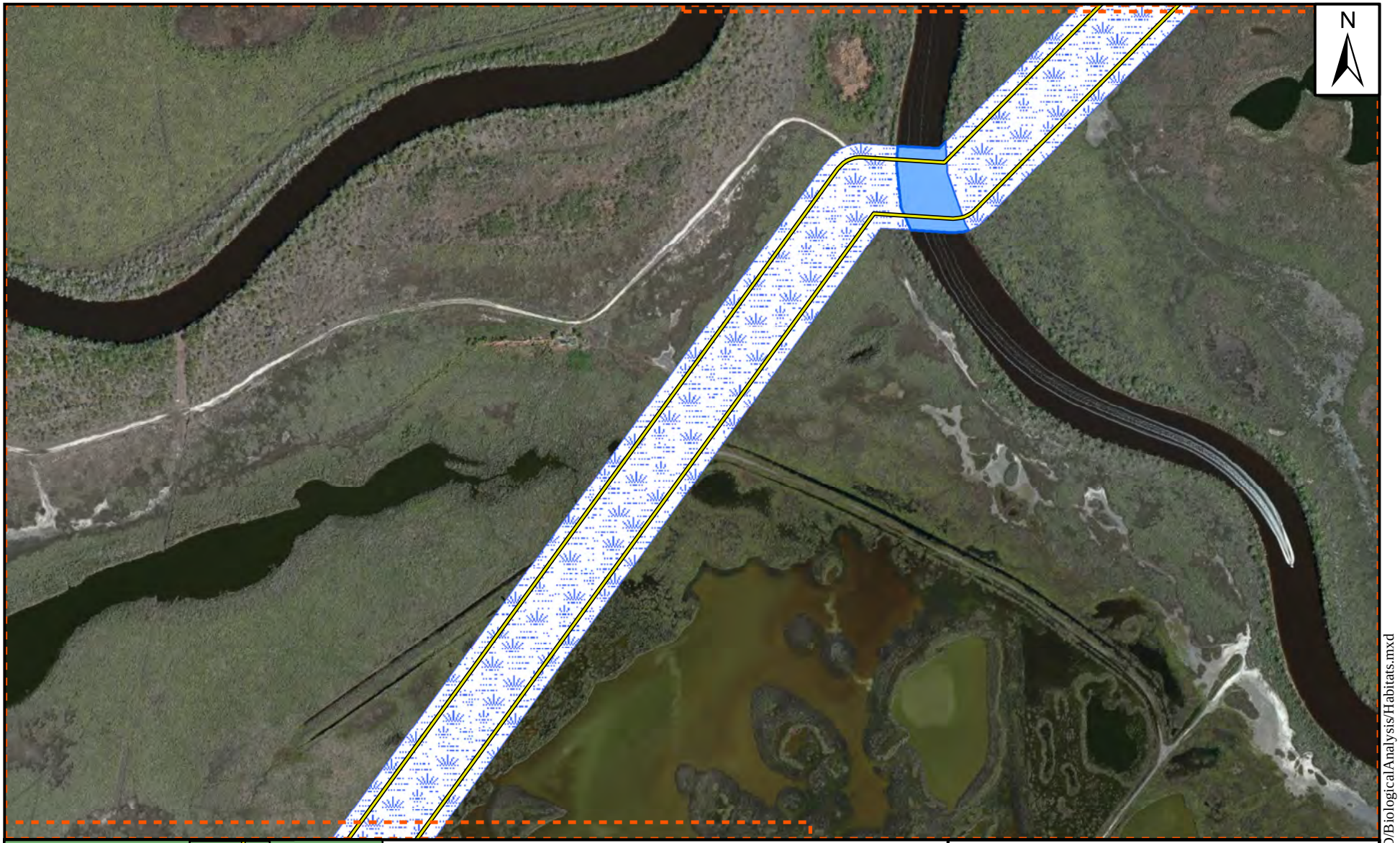
Prepared For: Occidental Chemical Corporation

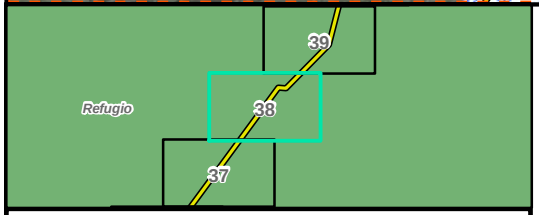
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

Feet
0 500 1,000 1,500

Scale = 1:6,000

SHEET 38 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

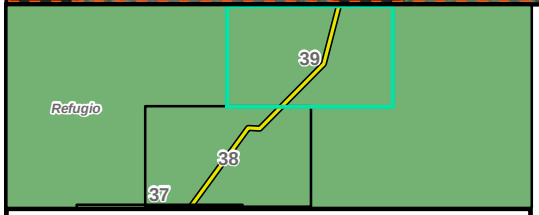
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

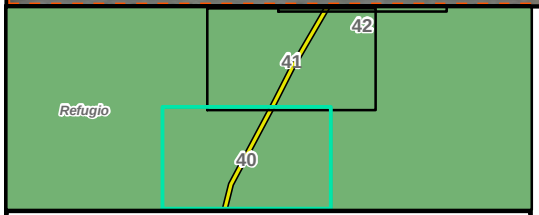
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

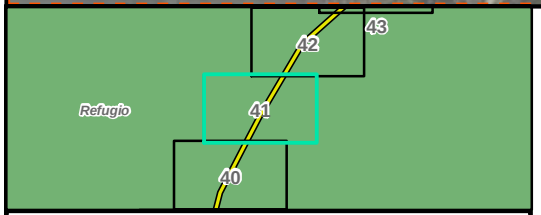
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

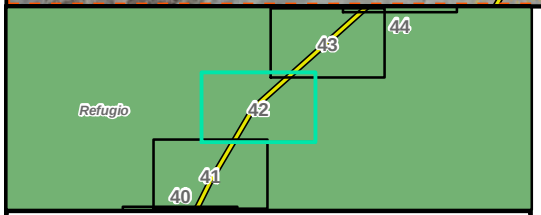
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 42 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

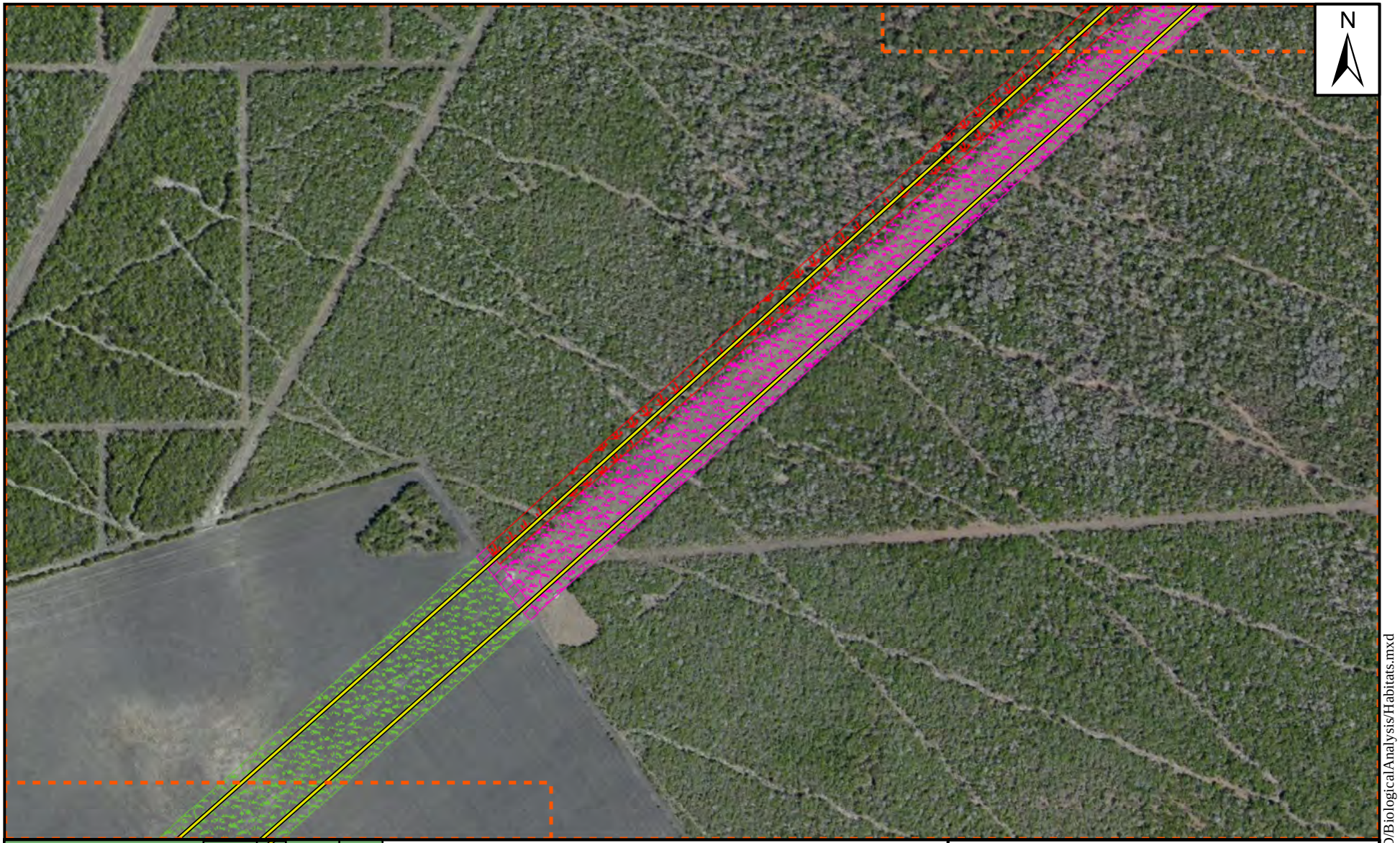
Prepared For: Occidental Chemical Corporation

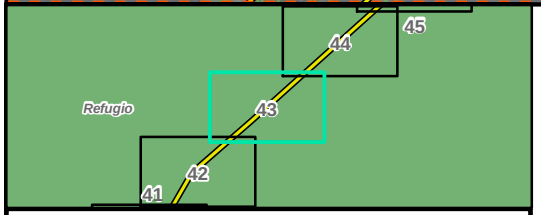
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 43 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

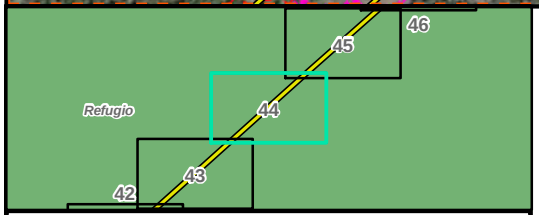
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 44 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

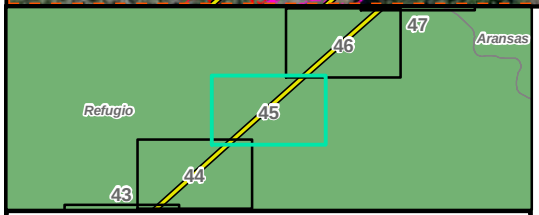
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 45 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

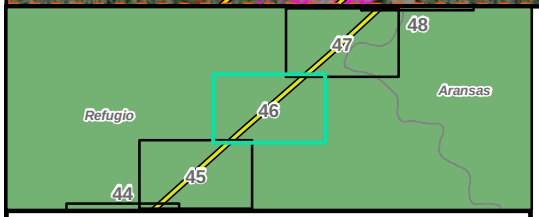
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 46 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

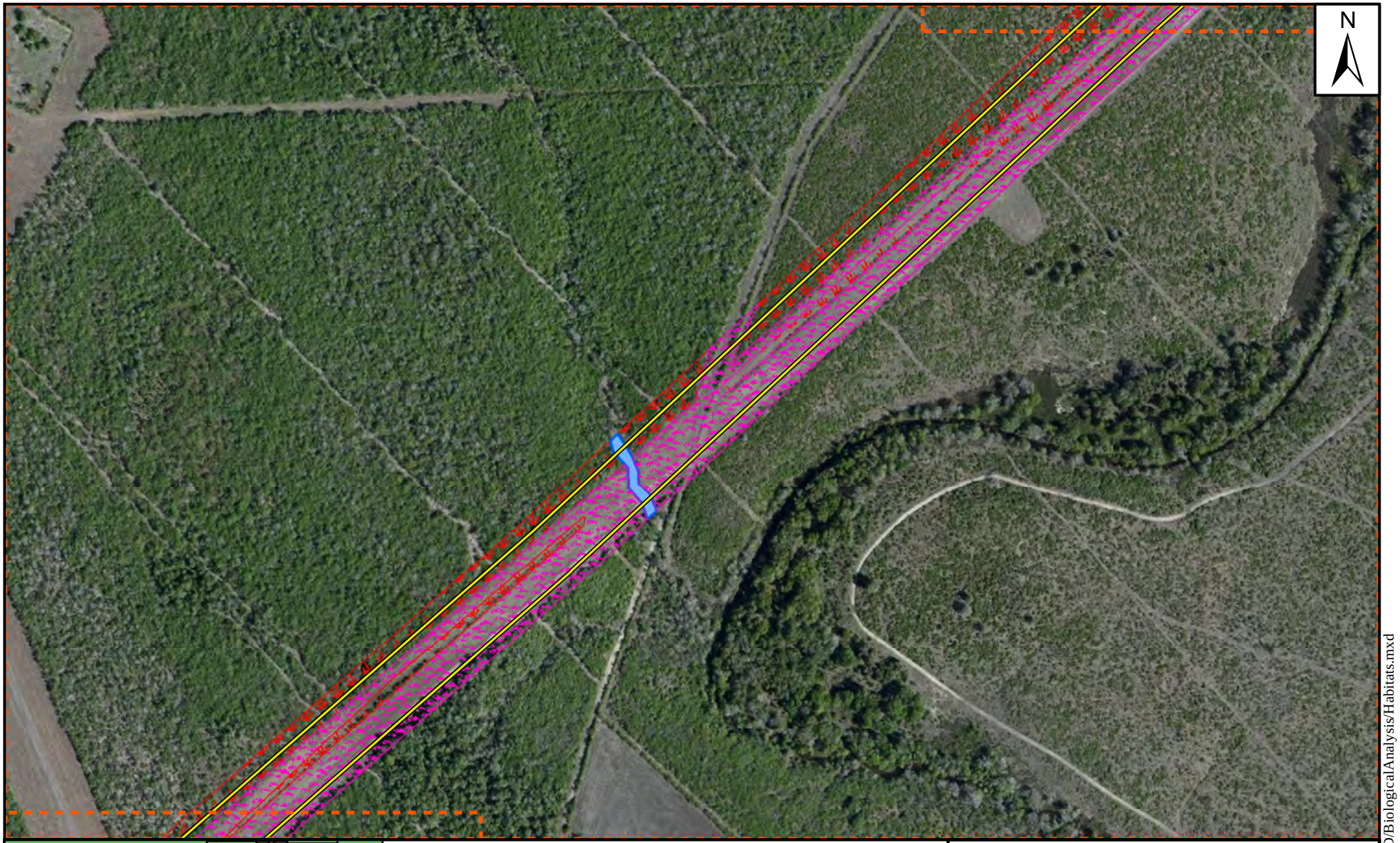
Prepared For: Occidental Chemical Corporation

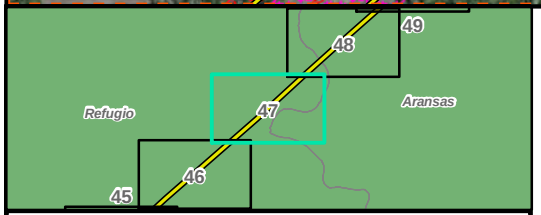
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 47 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

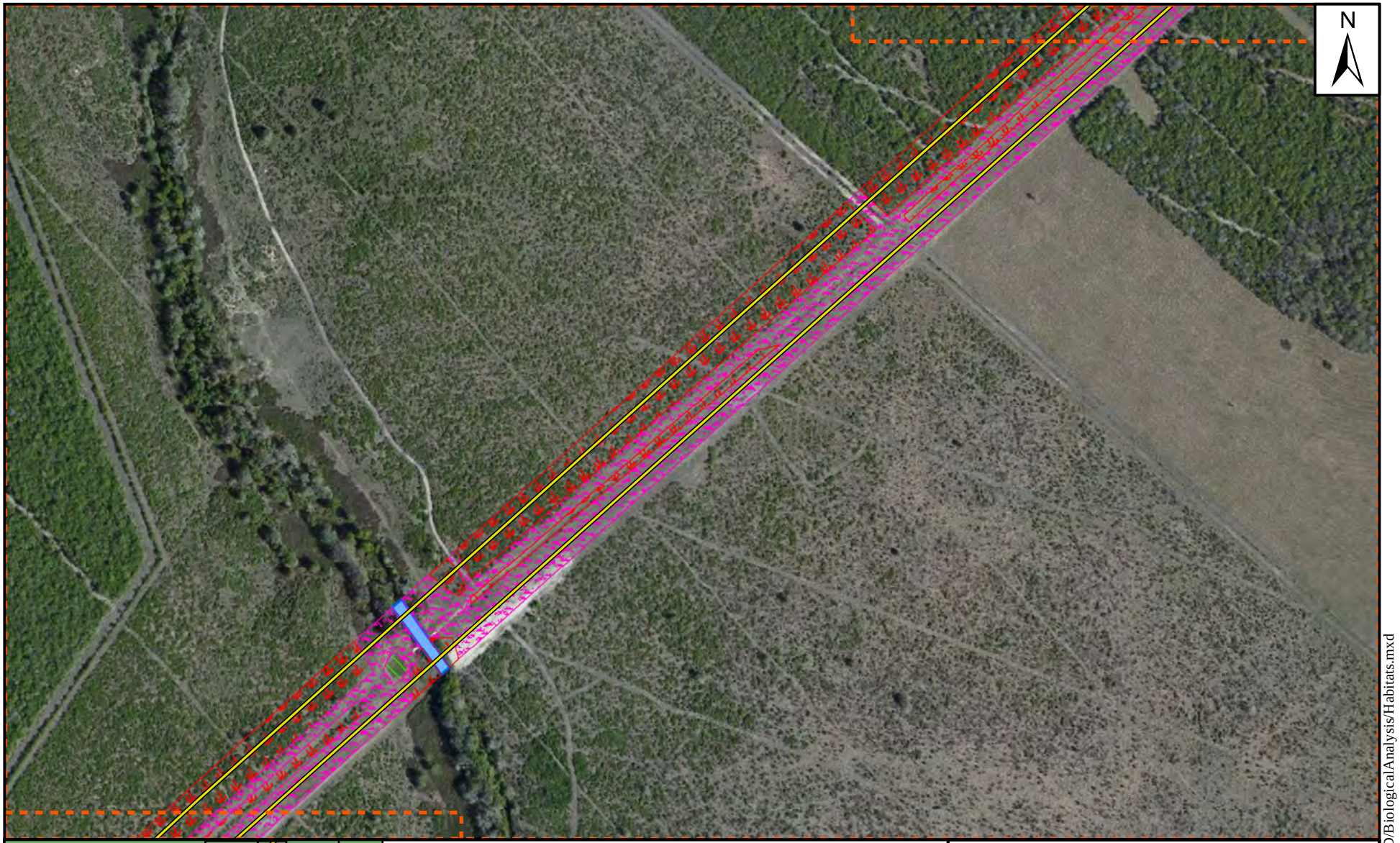
Prepared For: Occidental Chemical Corporation

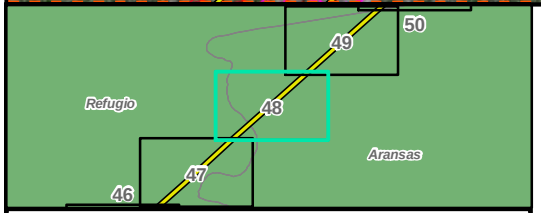
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 48 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

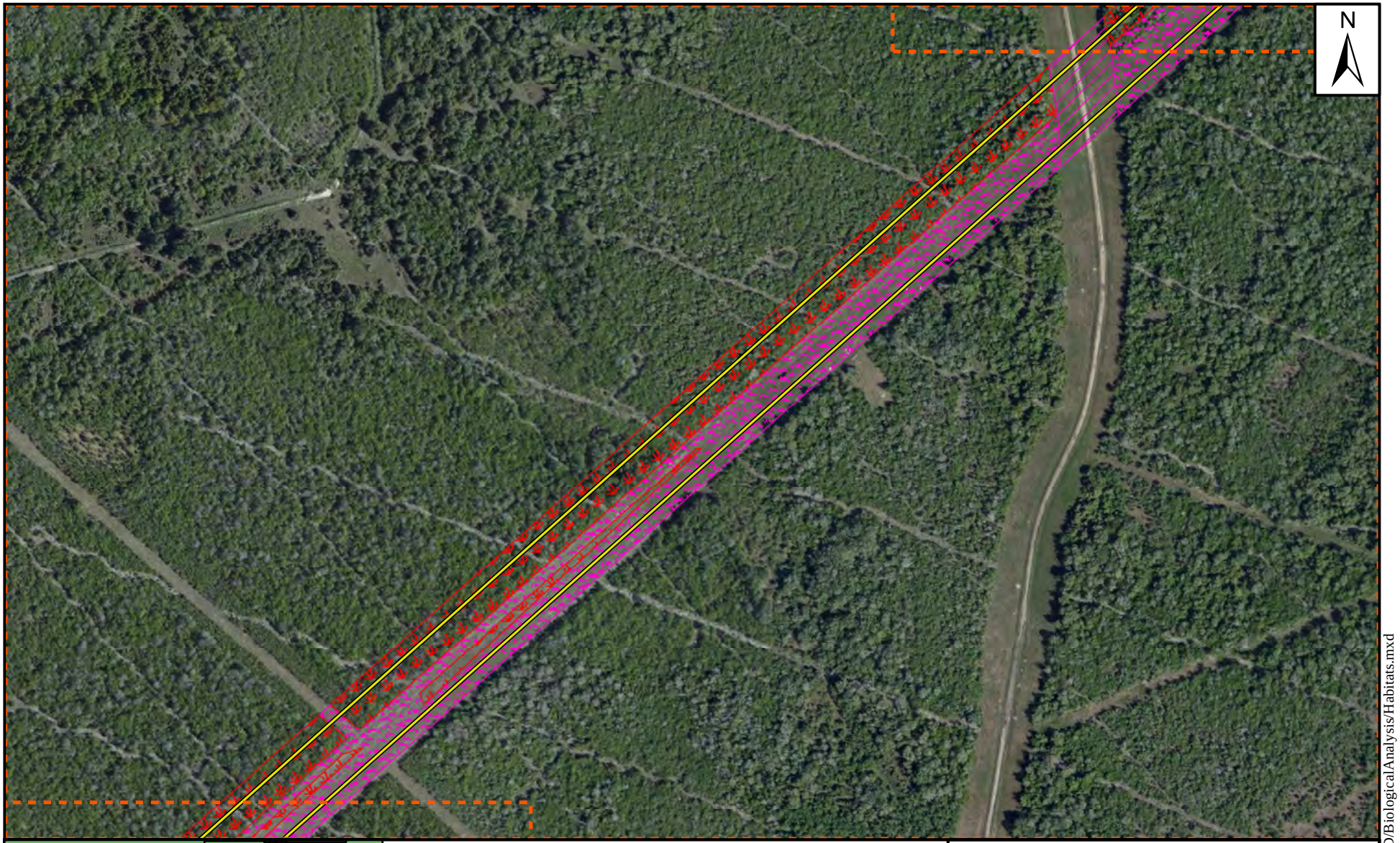
Prepared For: Occidental Chemical Corporation

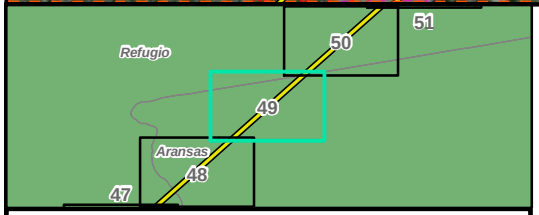
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 49 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

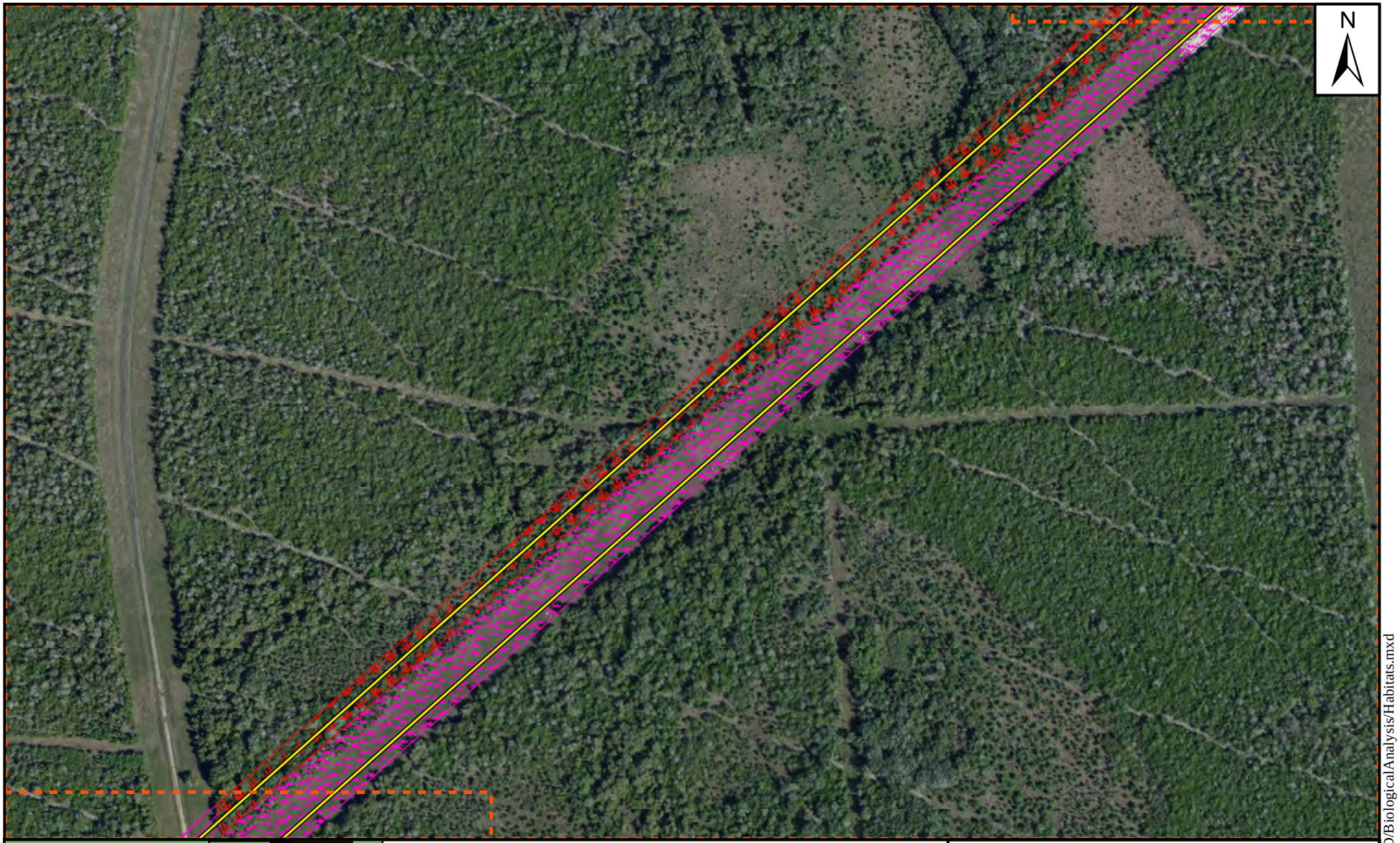
Prepared For: Occidental Chemical Corporation

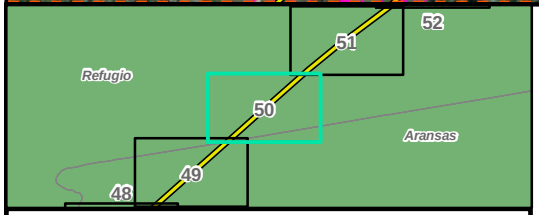
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

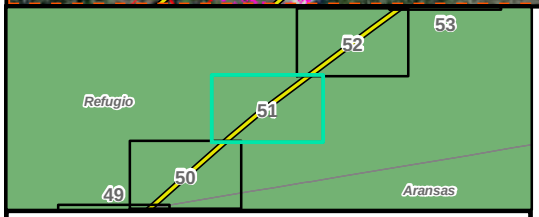
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 51 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

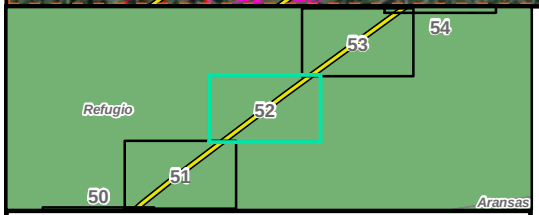
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 52 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

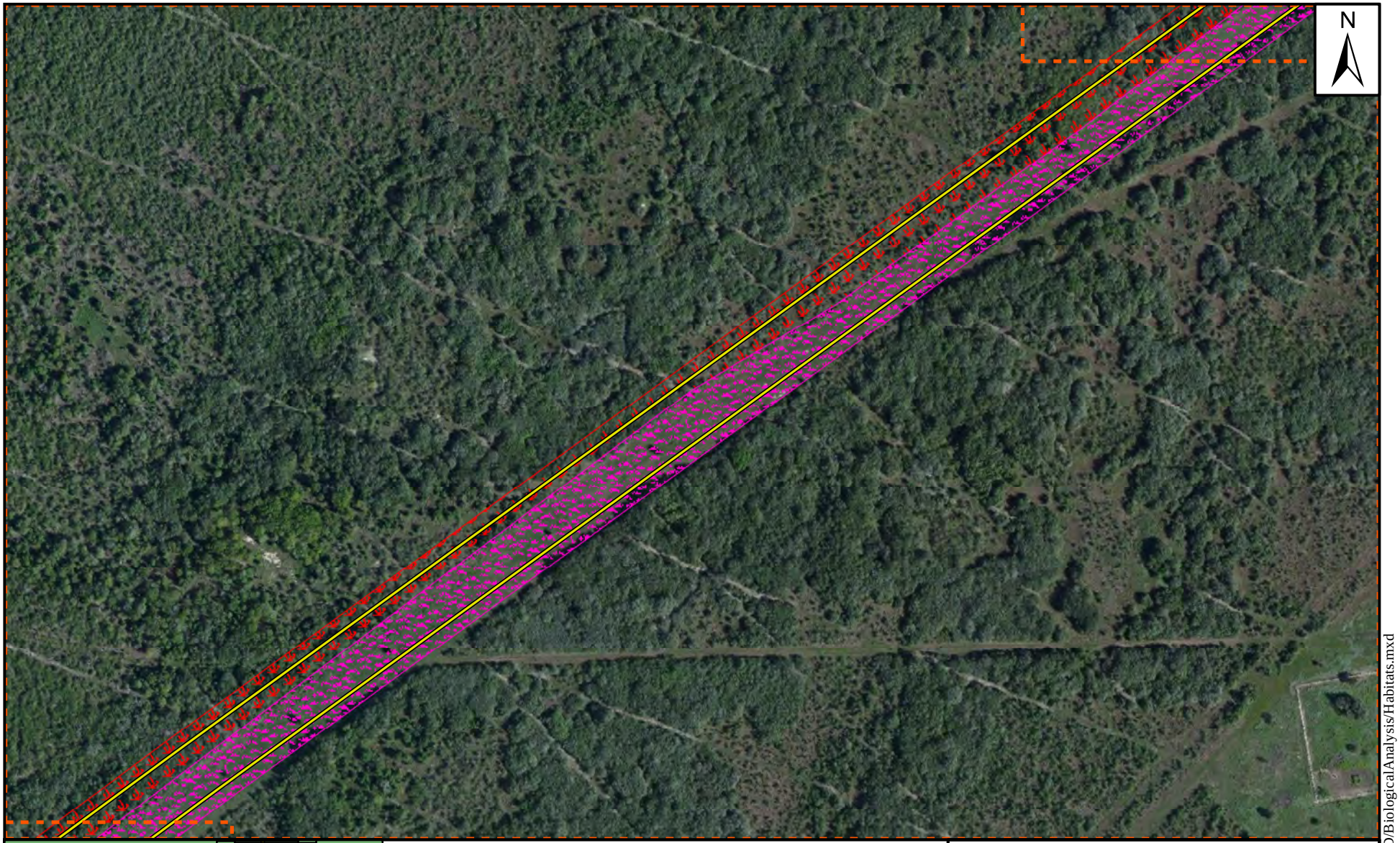
Prepared For: Occidental Chemical Corporation

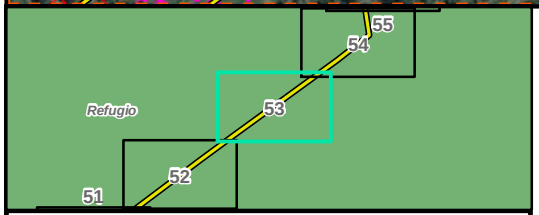
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

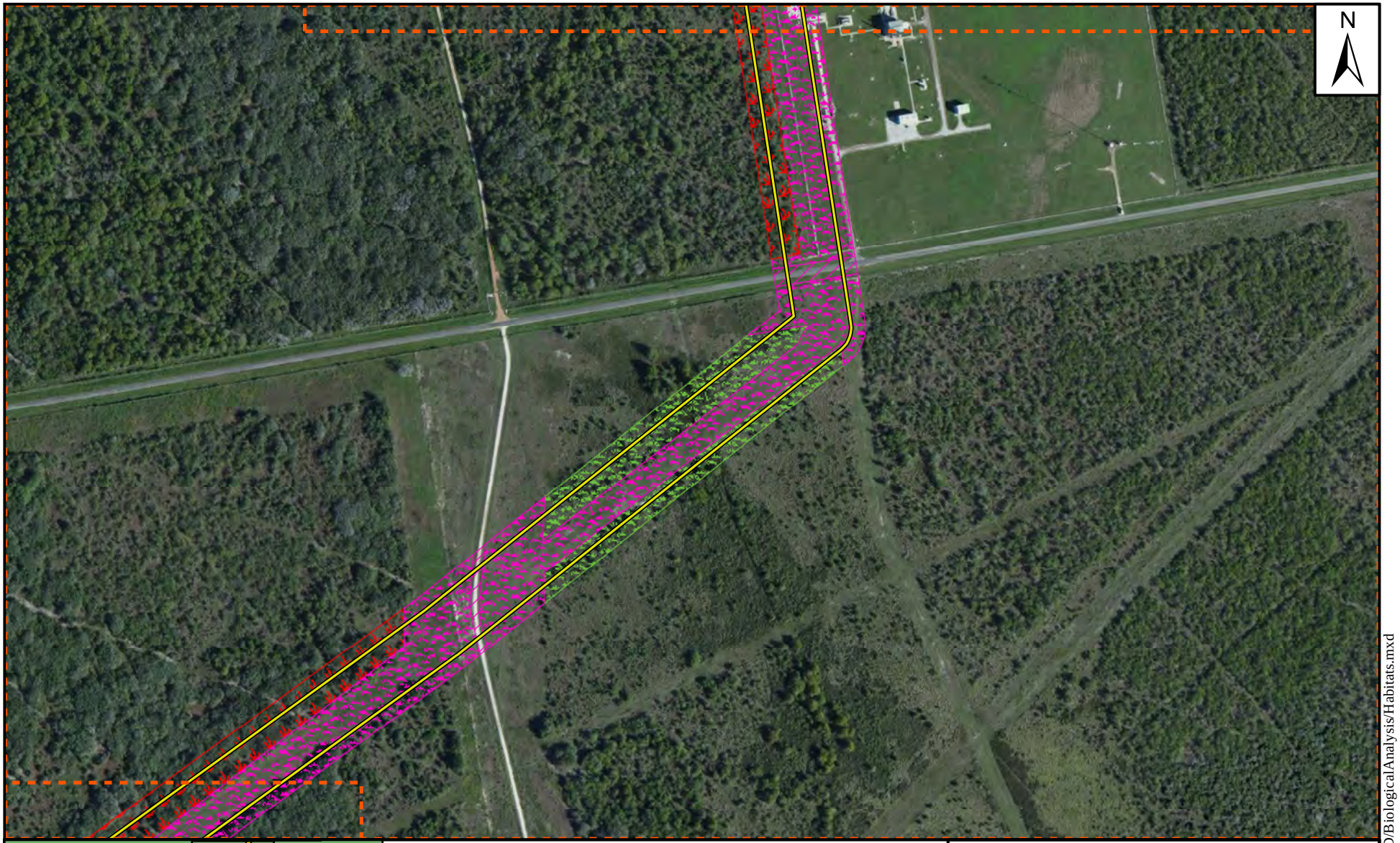
Prepared For: Occidental Chemical Corporation

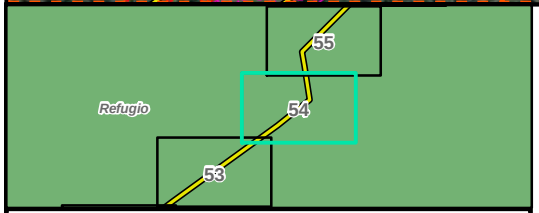
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

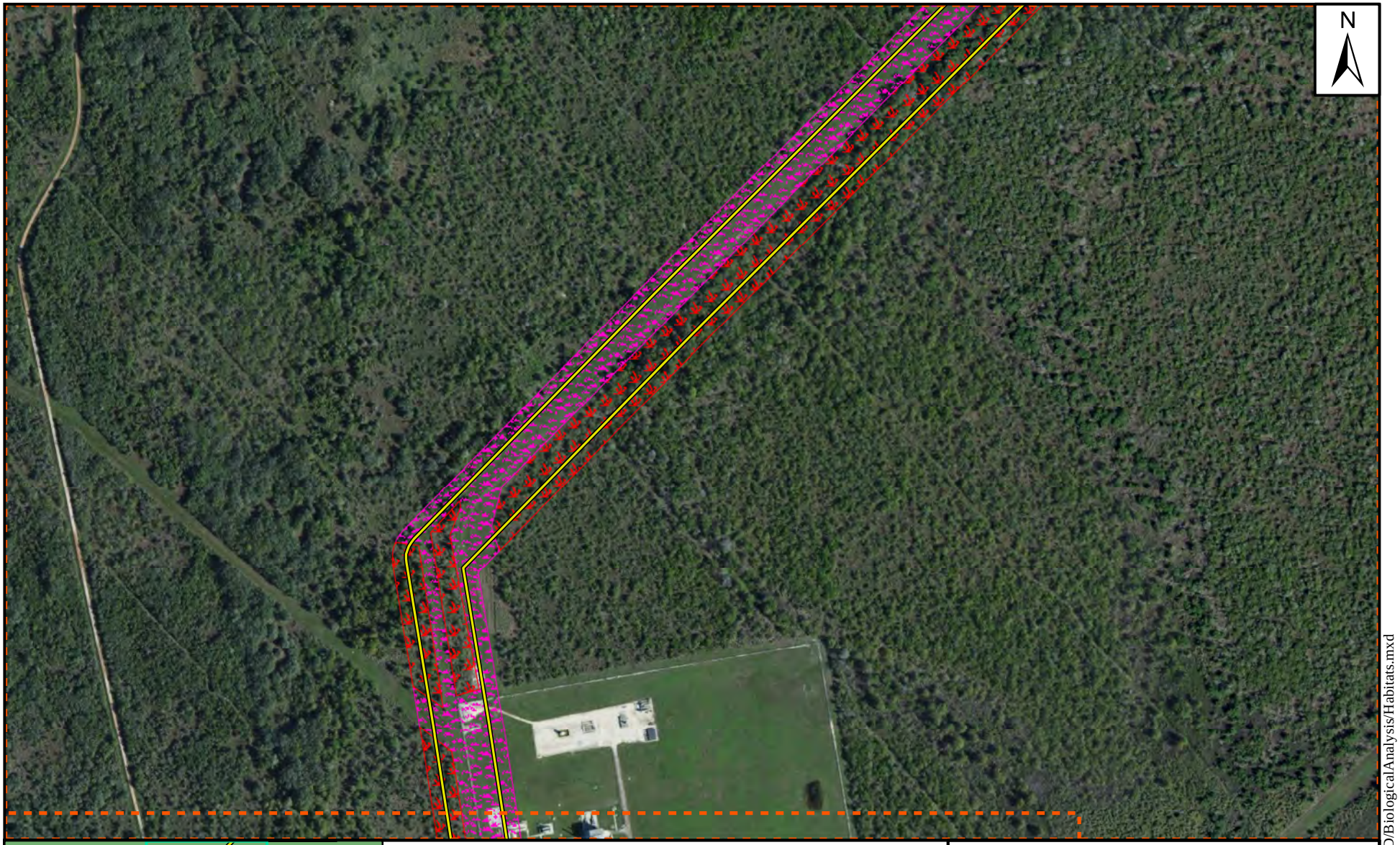
Prepared For: Occidental Chemical Corporation

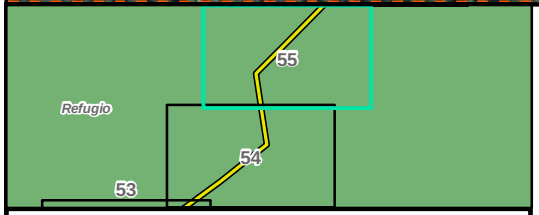
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

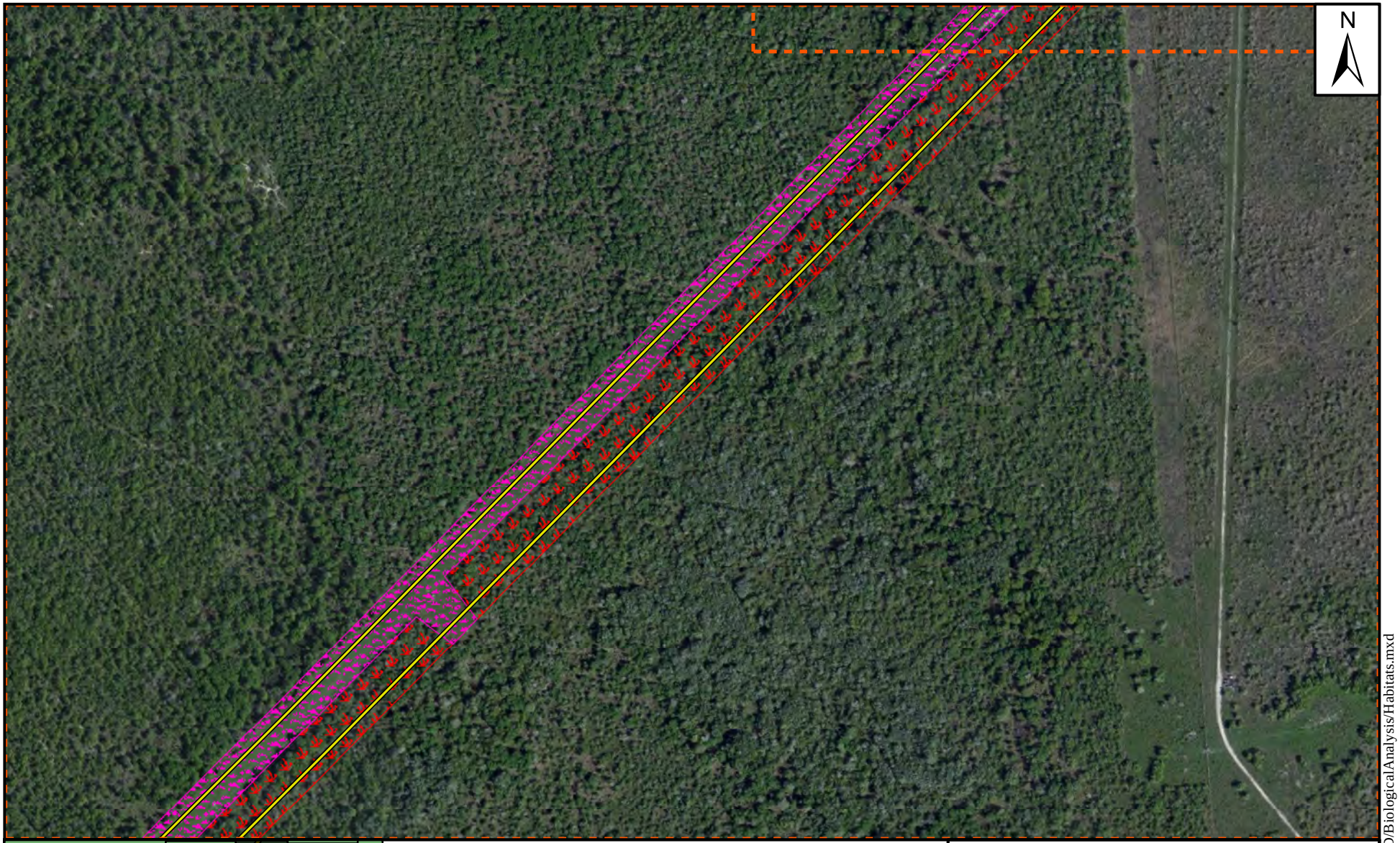
Prepared For: Occidental Chemical Corporation

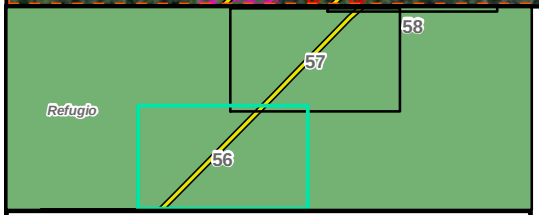
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 56 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

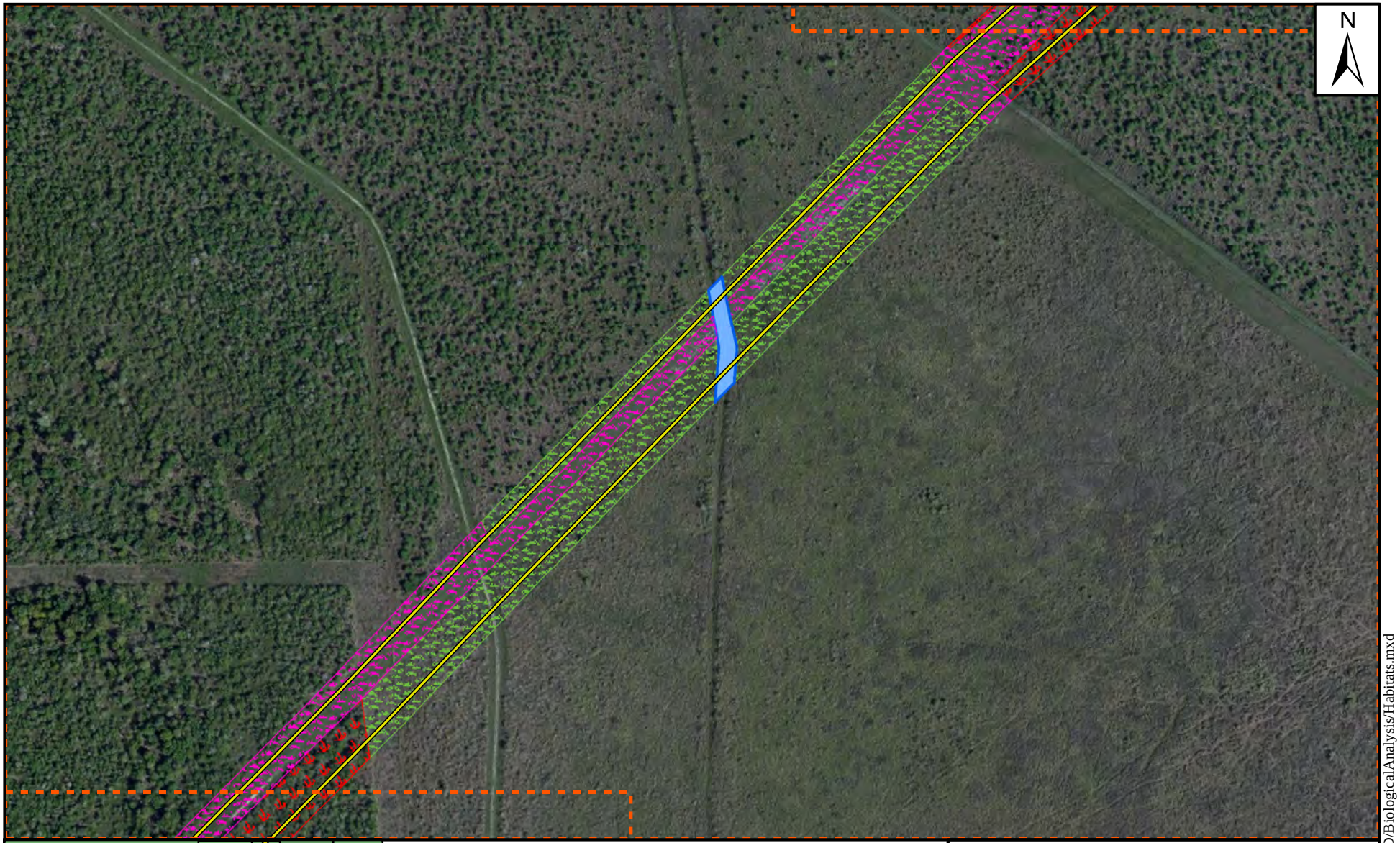
Prepared For: Occidental Chemical Corporation

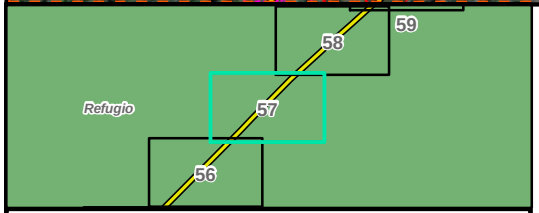
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

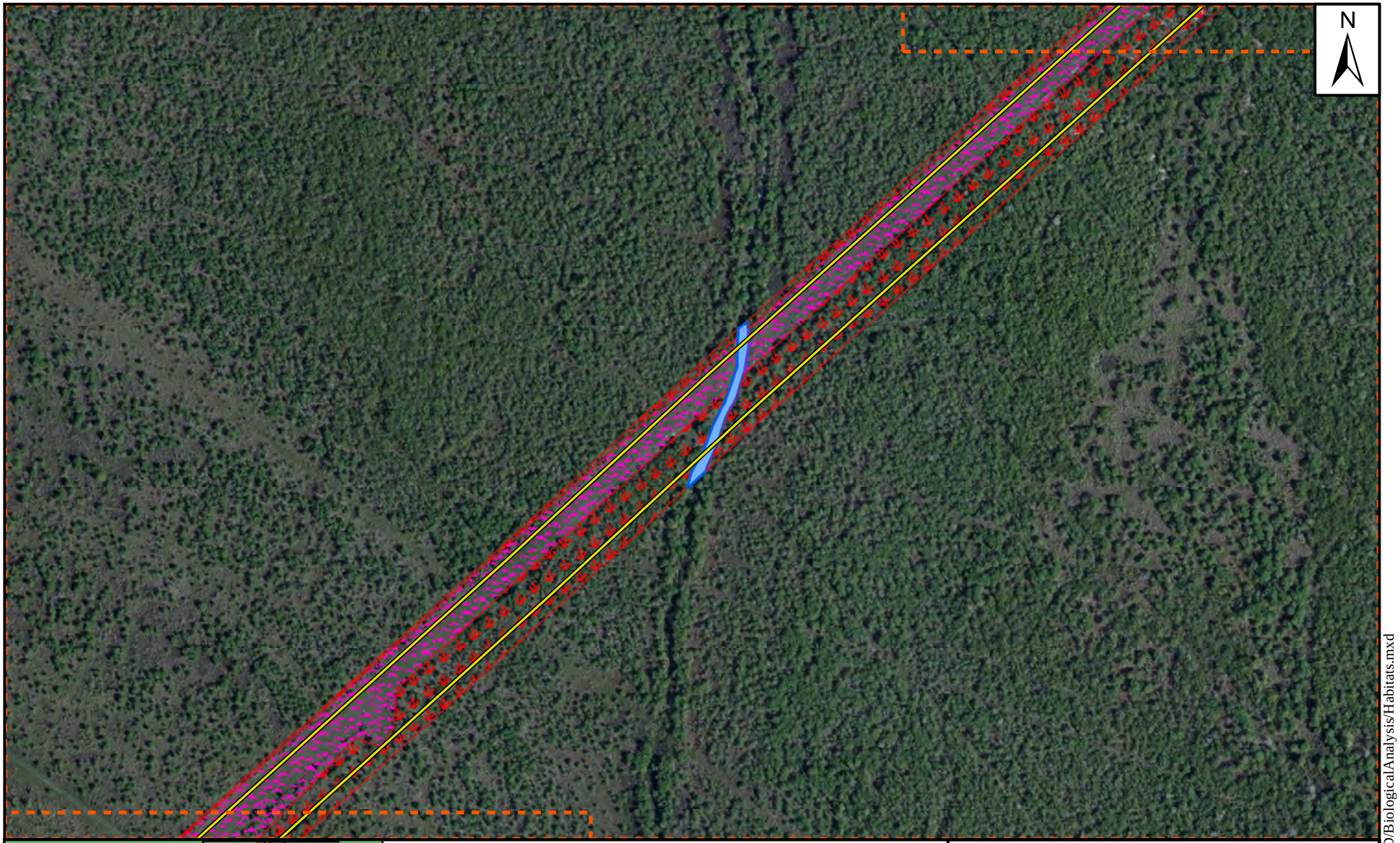
Prepared For: Occidental Chemical Corporation

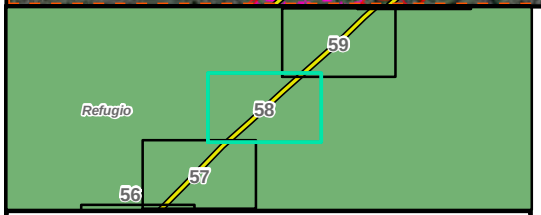
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 58 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

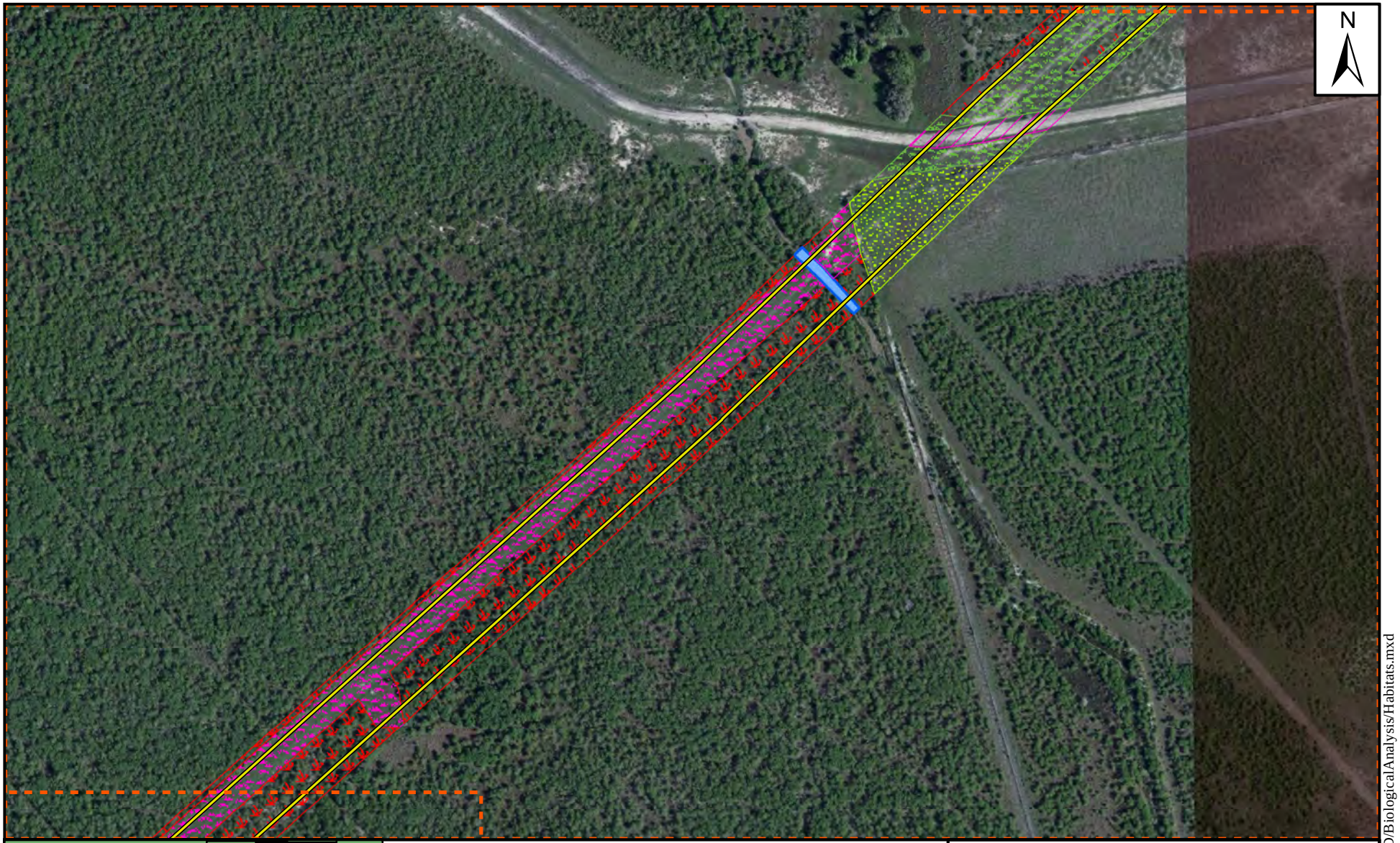
Prepared For: Occidental Chemical Corporation

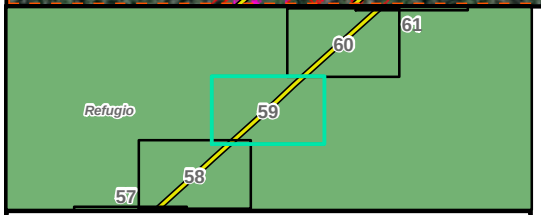
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 59 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

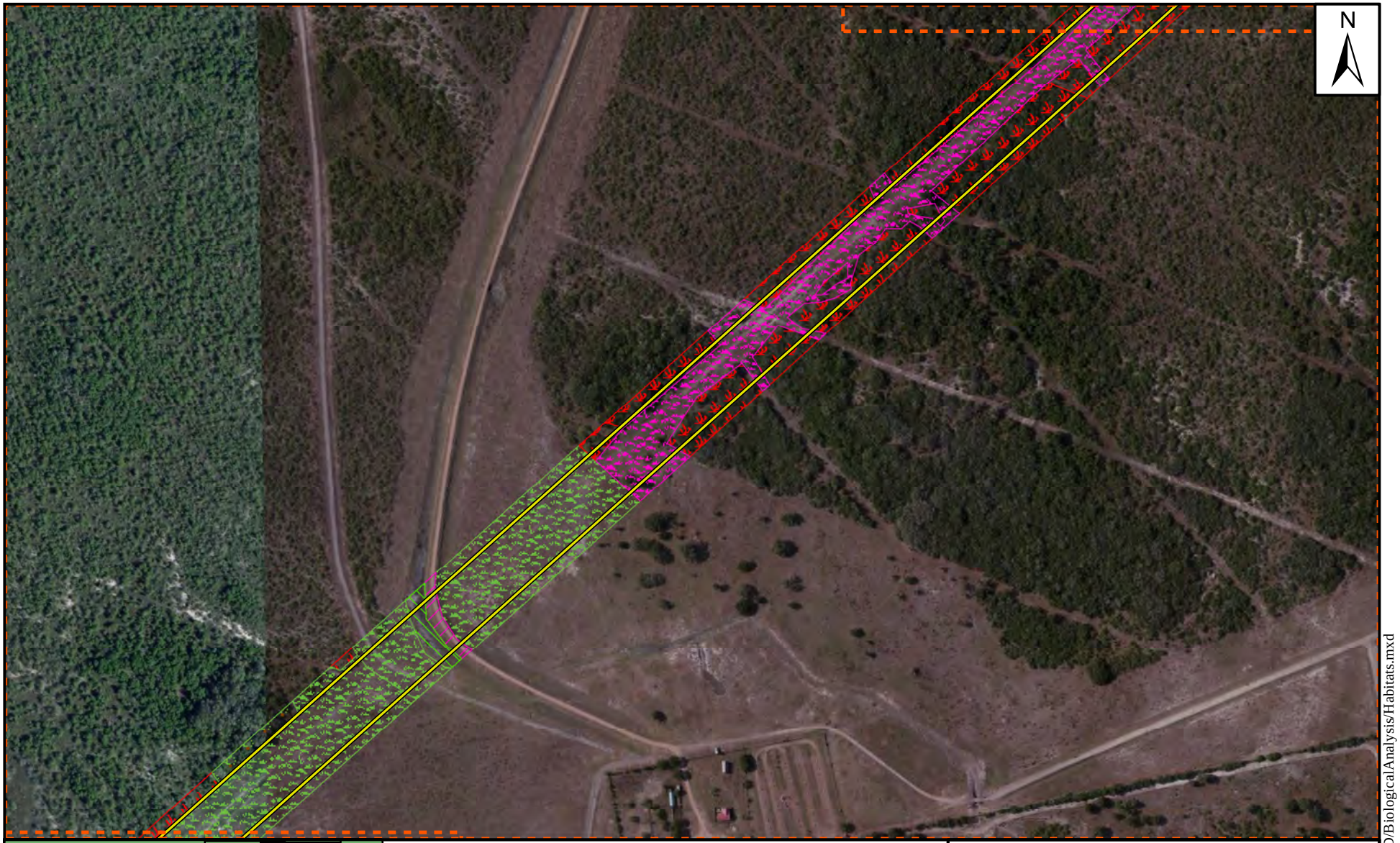
Prepared For: Occidental Chemical Corporation

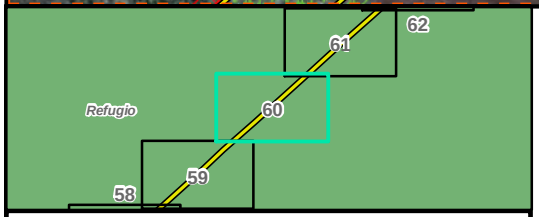
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 60 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

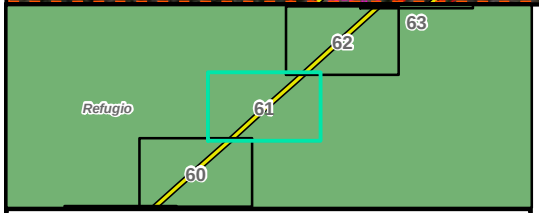
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 61 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

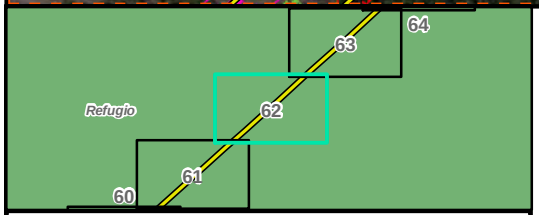
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 62 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

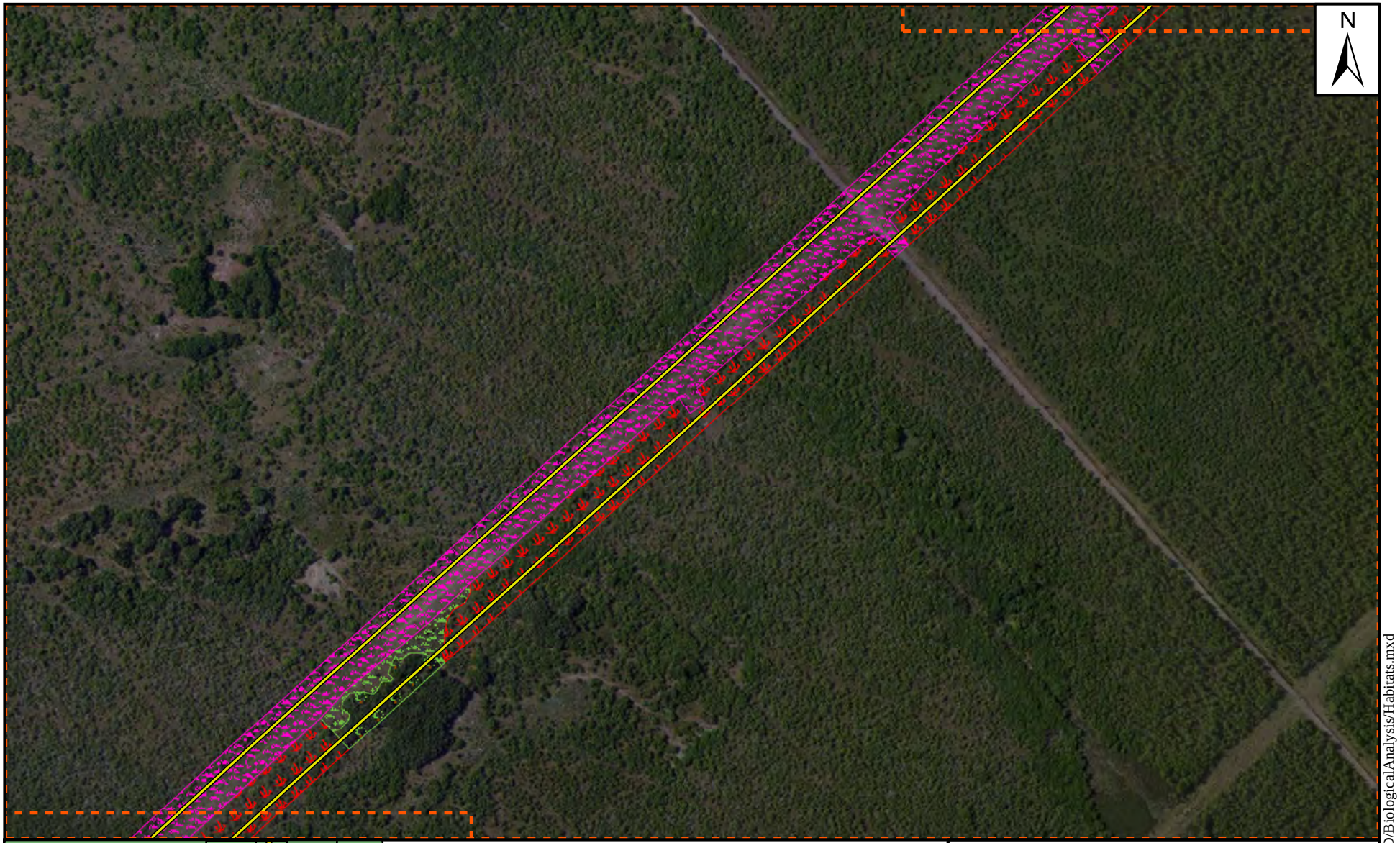
Prepared For: Occidental Chemical Corporation

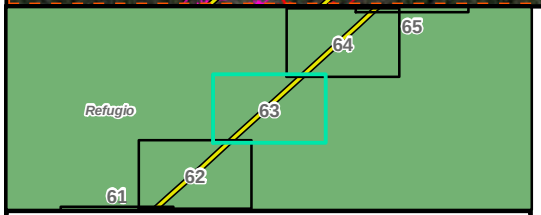
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 63 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

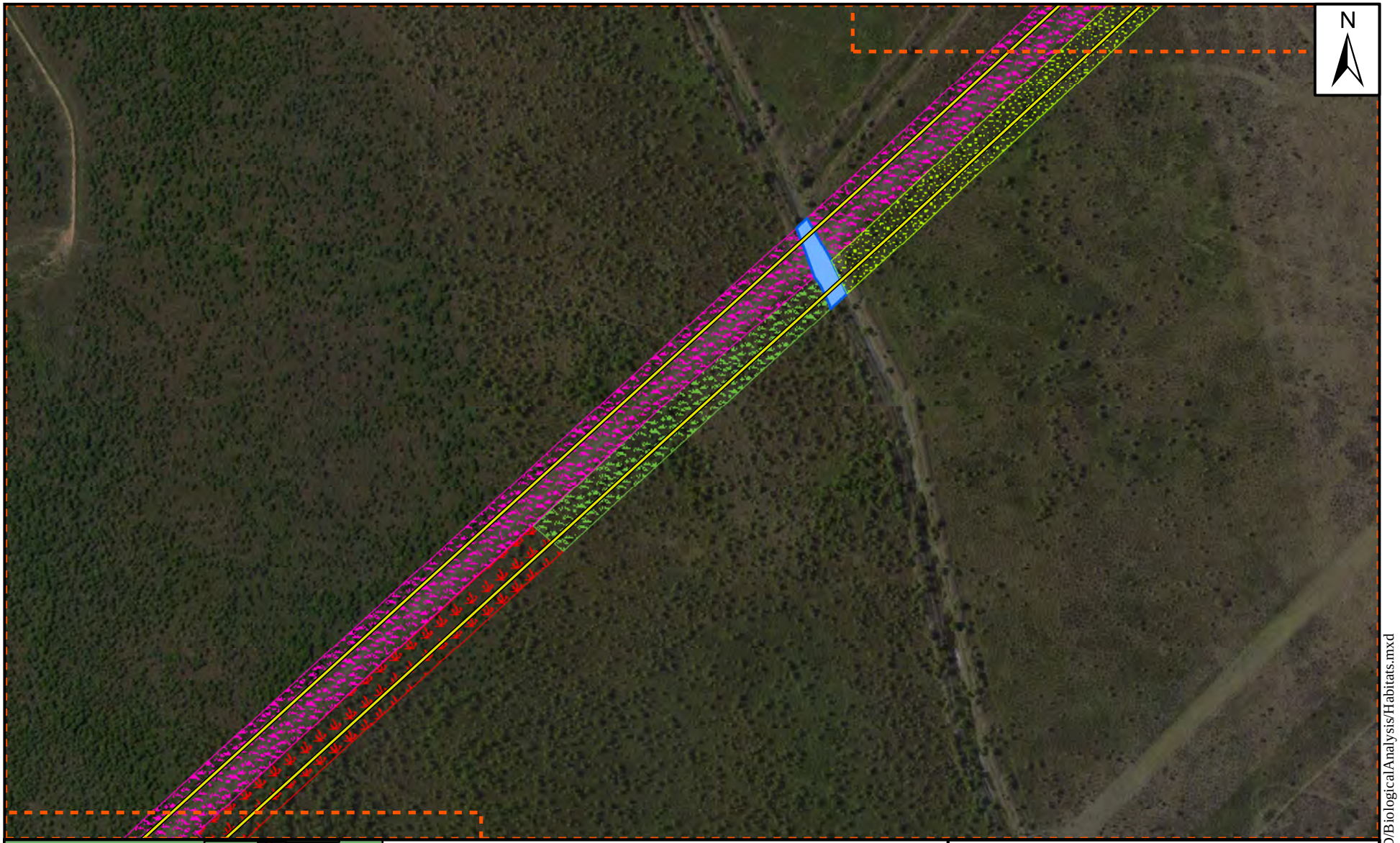
Prepared For: Occidental Chemical Corporation

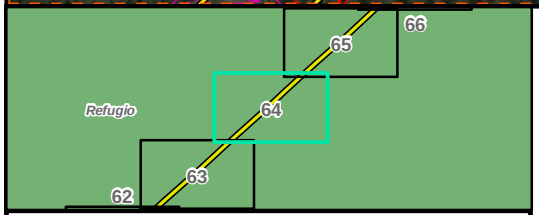
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 64 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

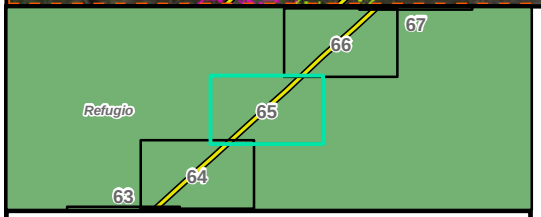
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 65 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

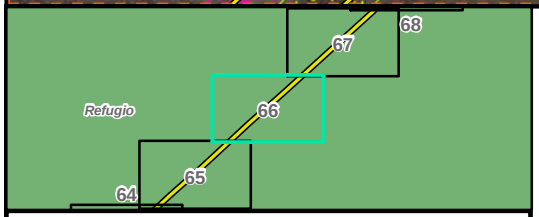
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 66 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

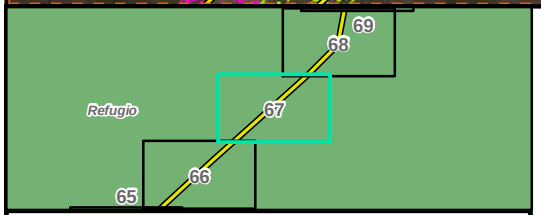
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 67 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

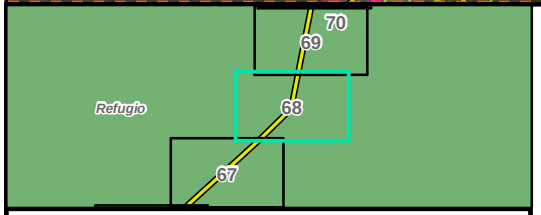
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 68 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

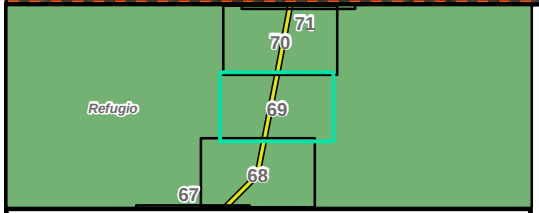
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 69 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

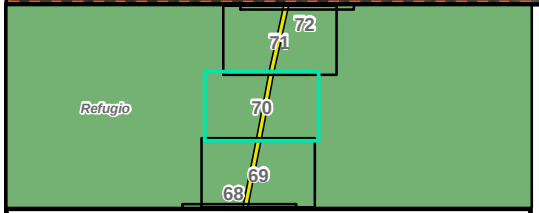
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 70 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

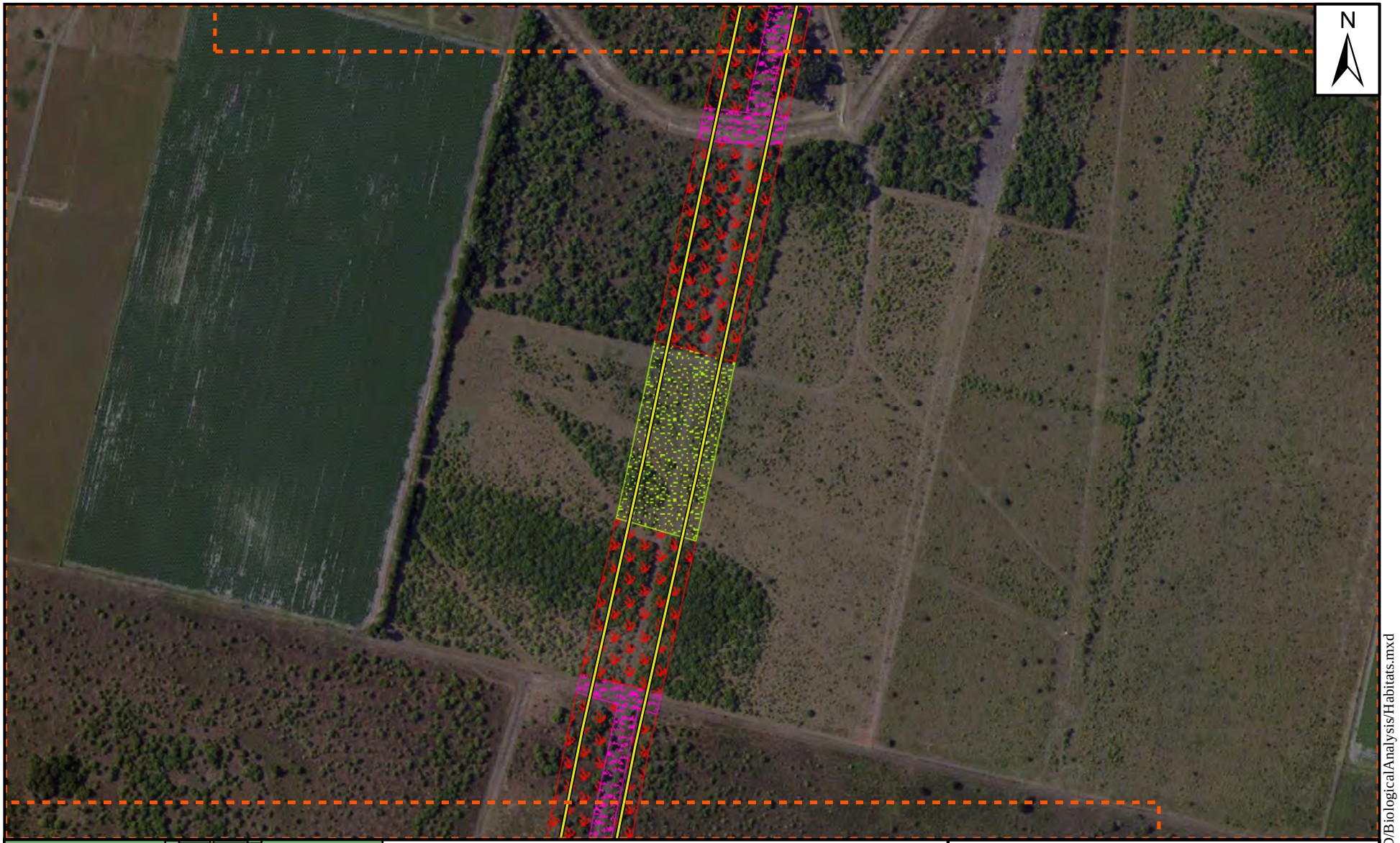
Prepared For: Occidental Chemical Corporation

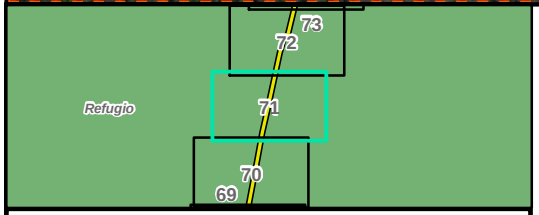
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 71 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

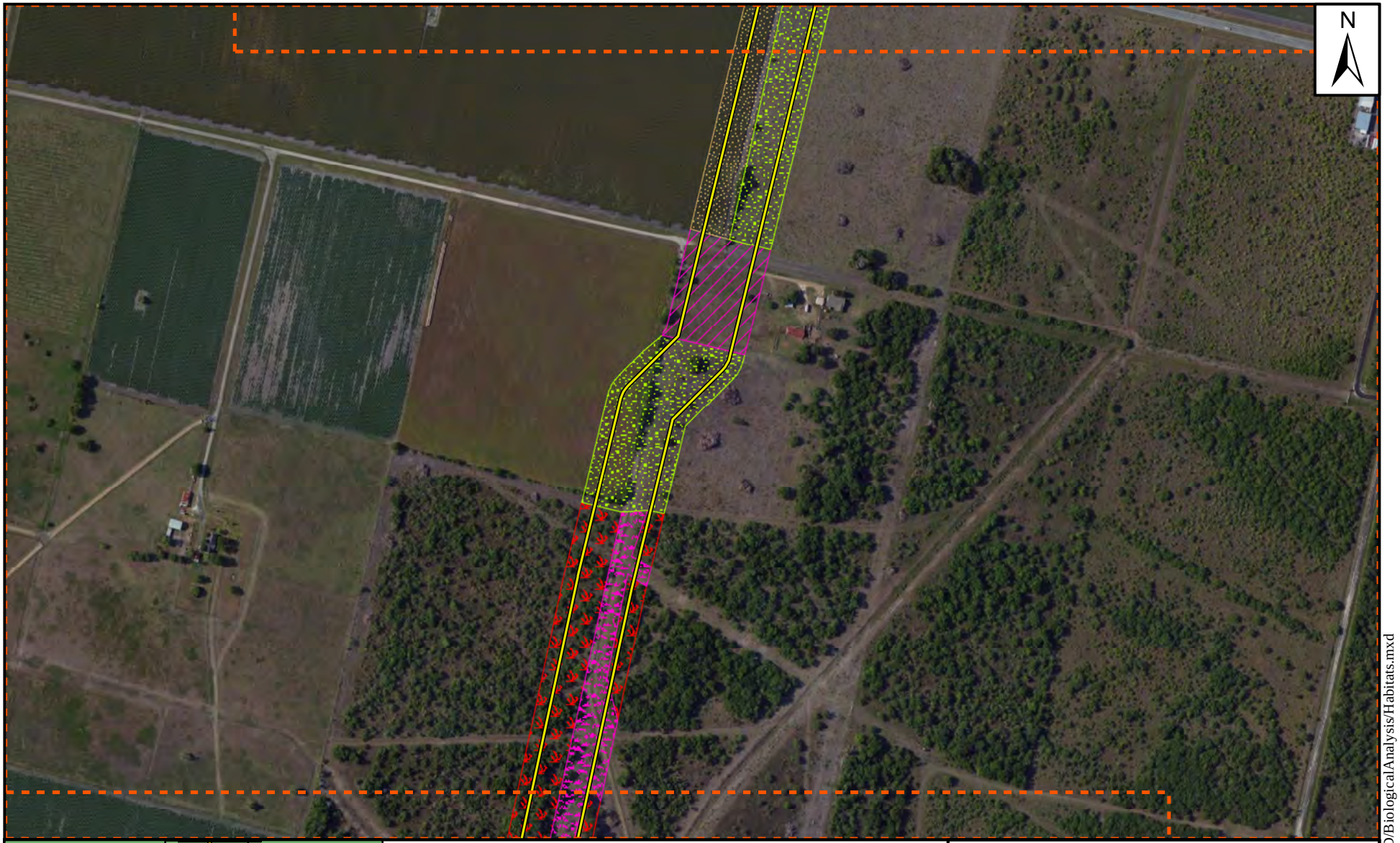
Prepared For: Occidental Chemical Corporation

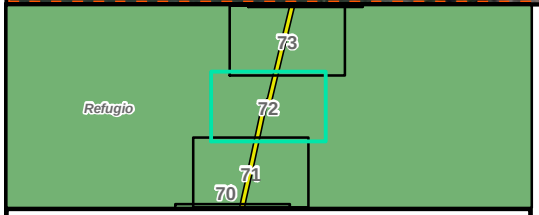
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

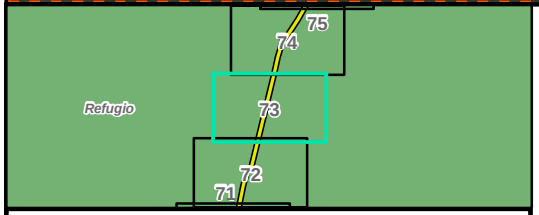
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

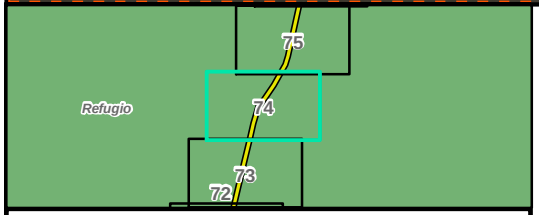
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

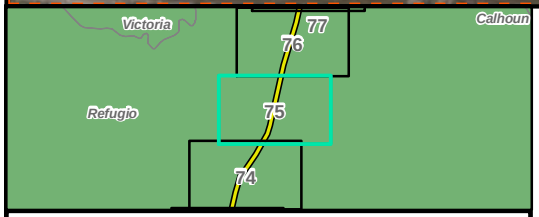
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

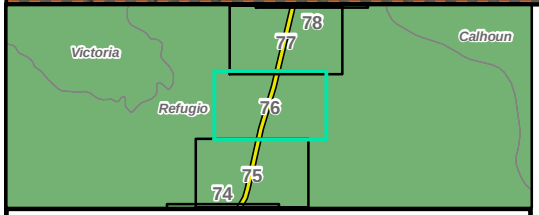
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

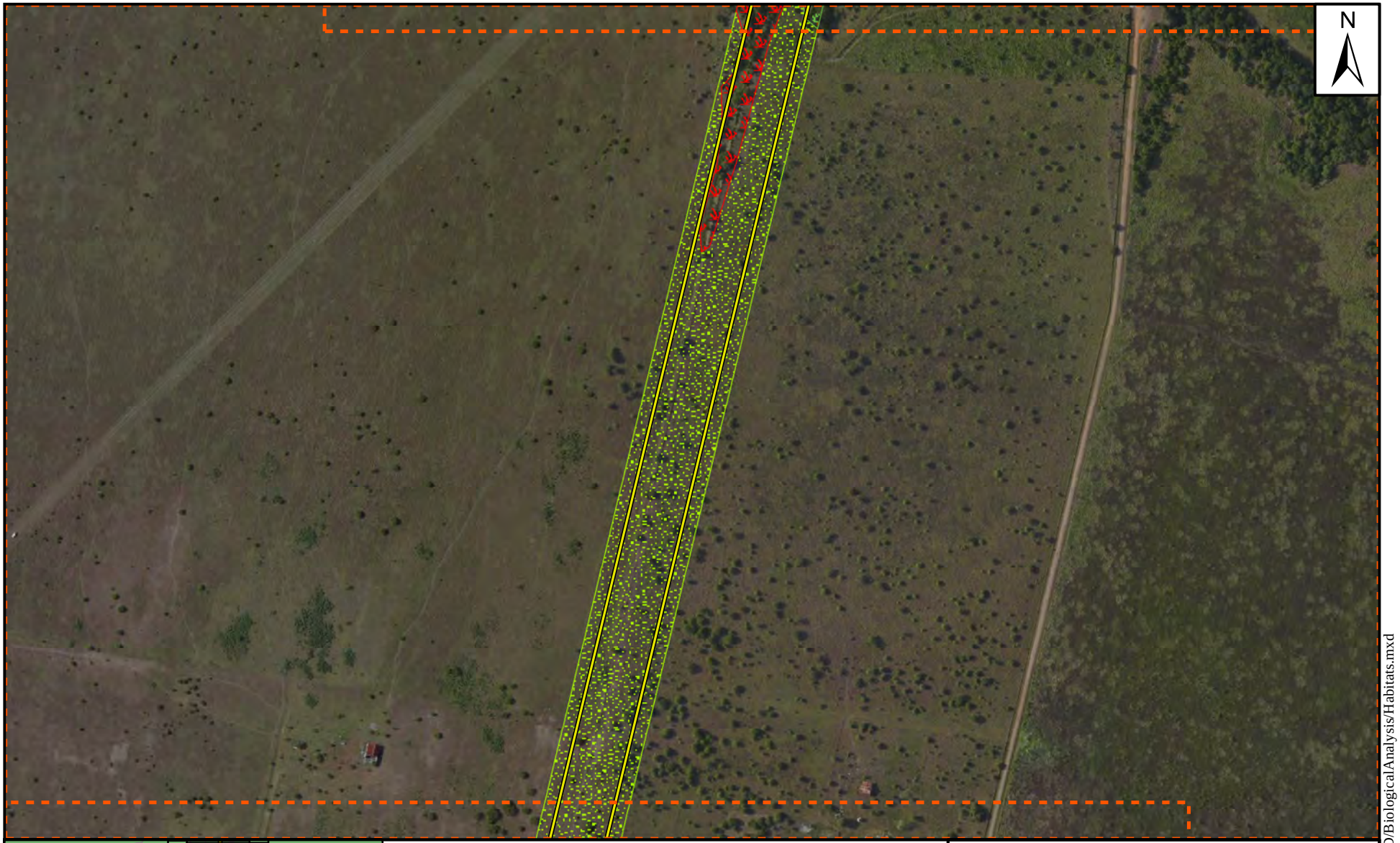
Prepared For: Occidental Chemical Corporation

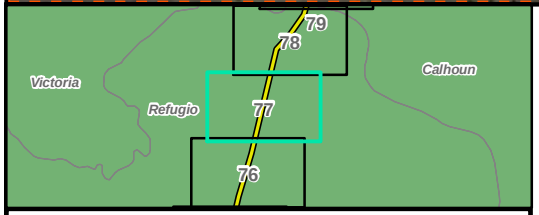
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

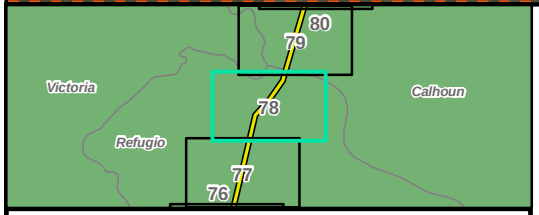
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 78 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

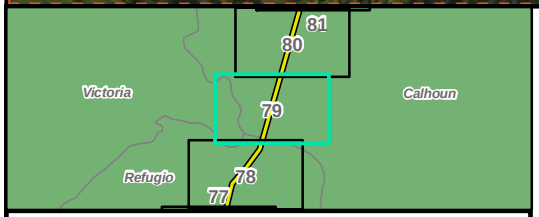
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

Feet
0 500 1,000 1,500

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

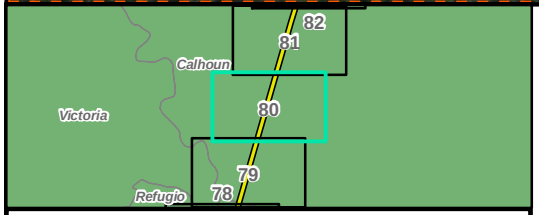
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

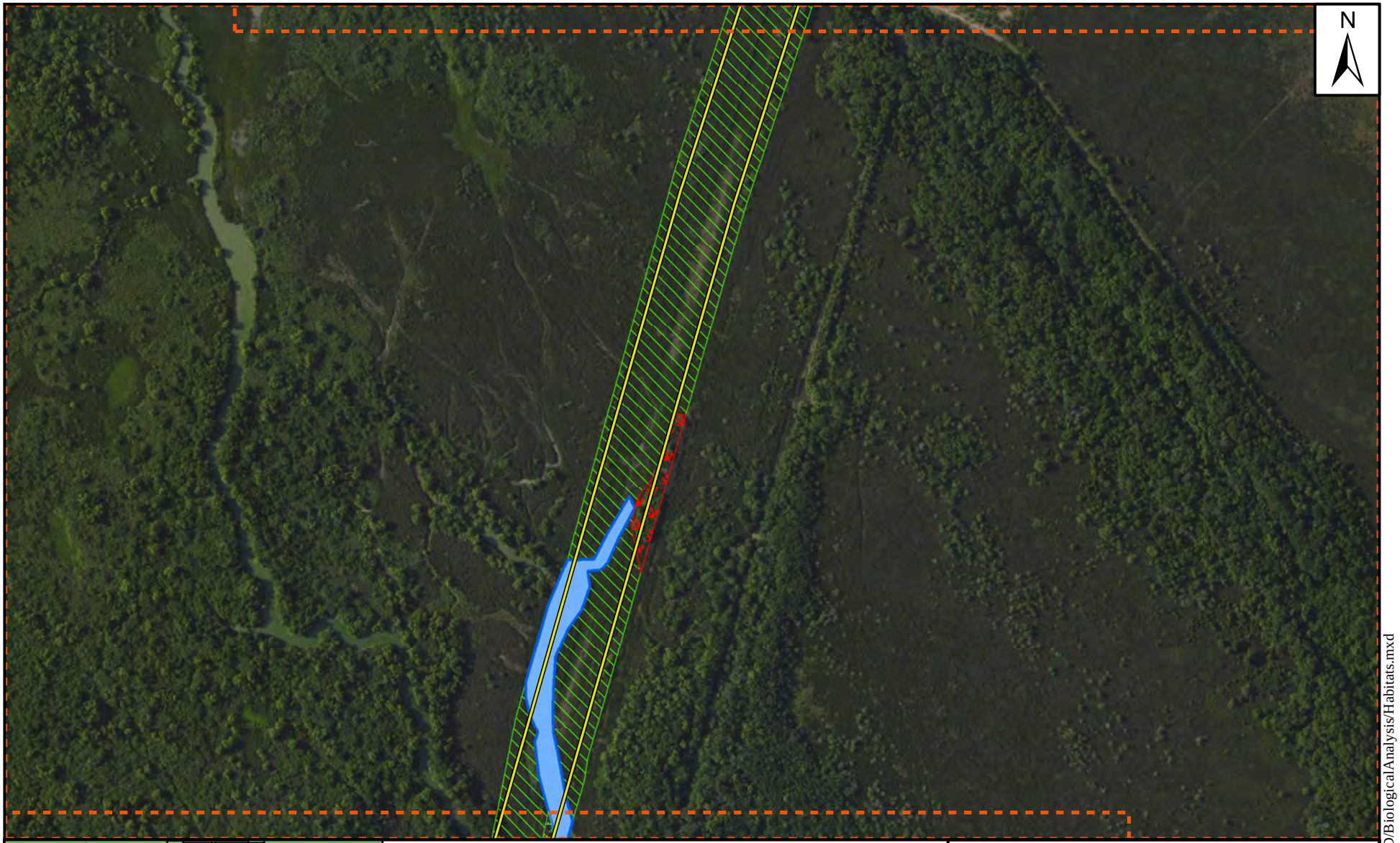
Prepared For: Occidental Chemical Corporation

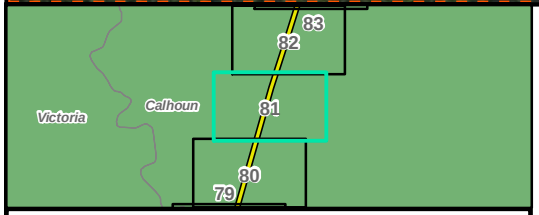
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

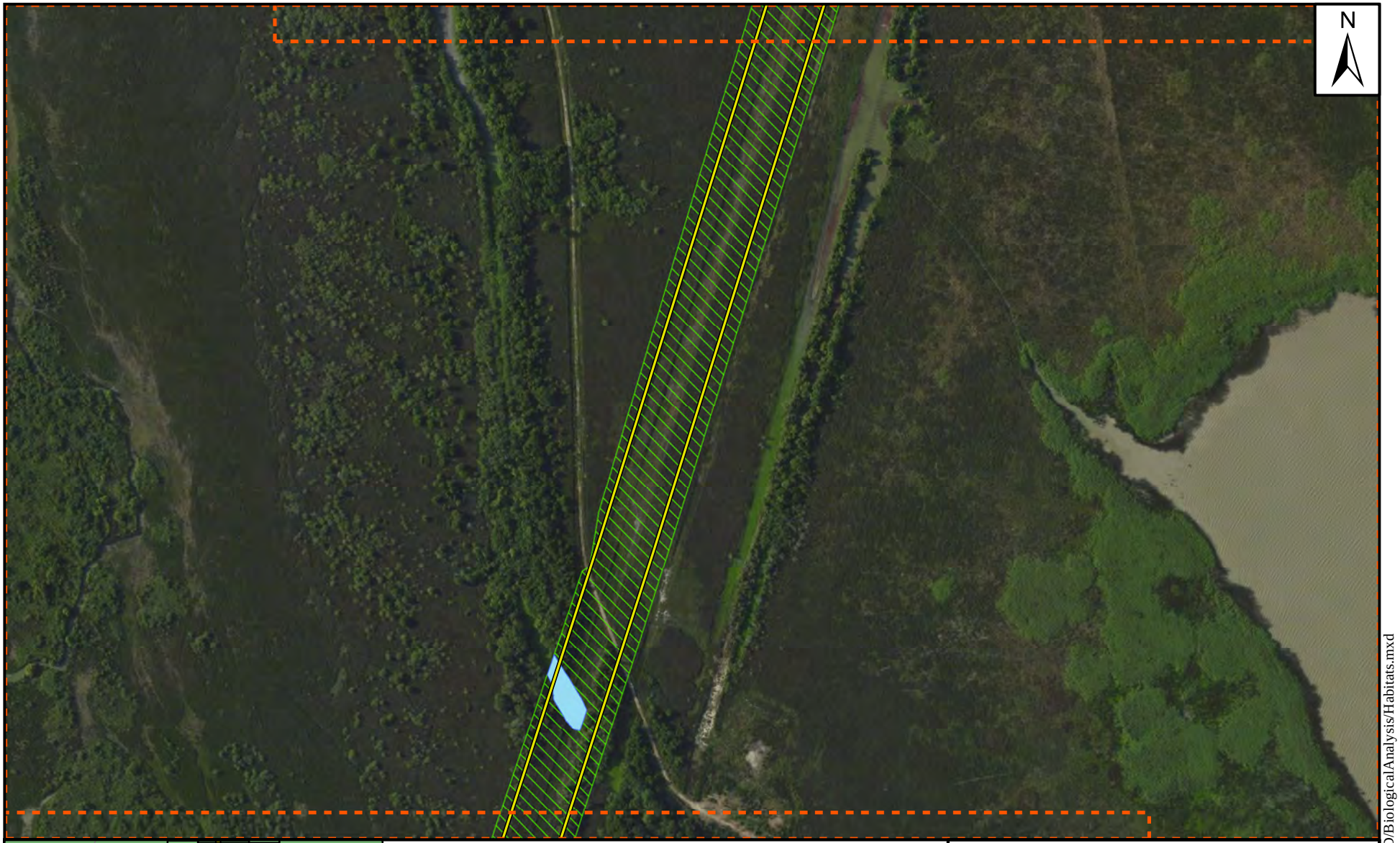
Prepared For: Occidental Chemical Corporation

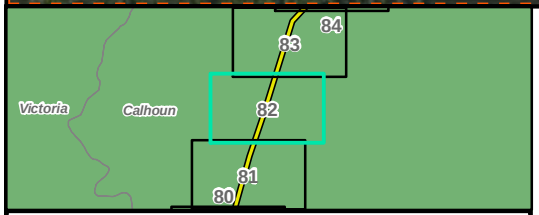
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

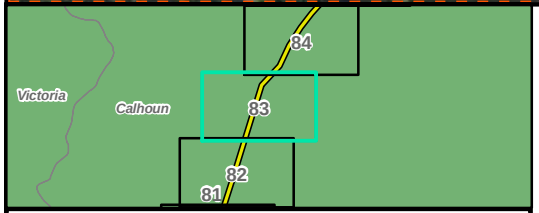
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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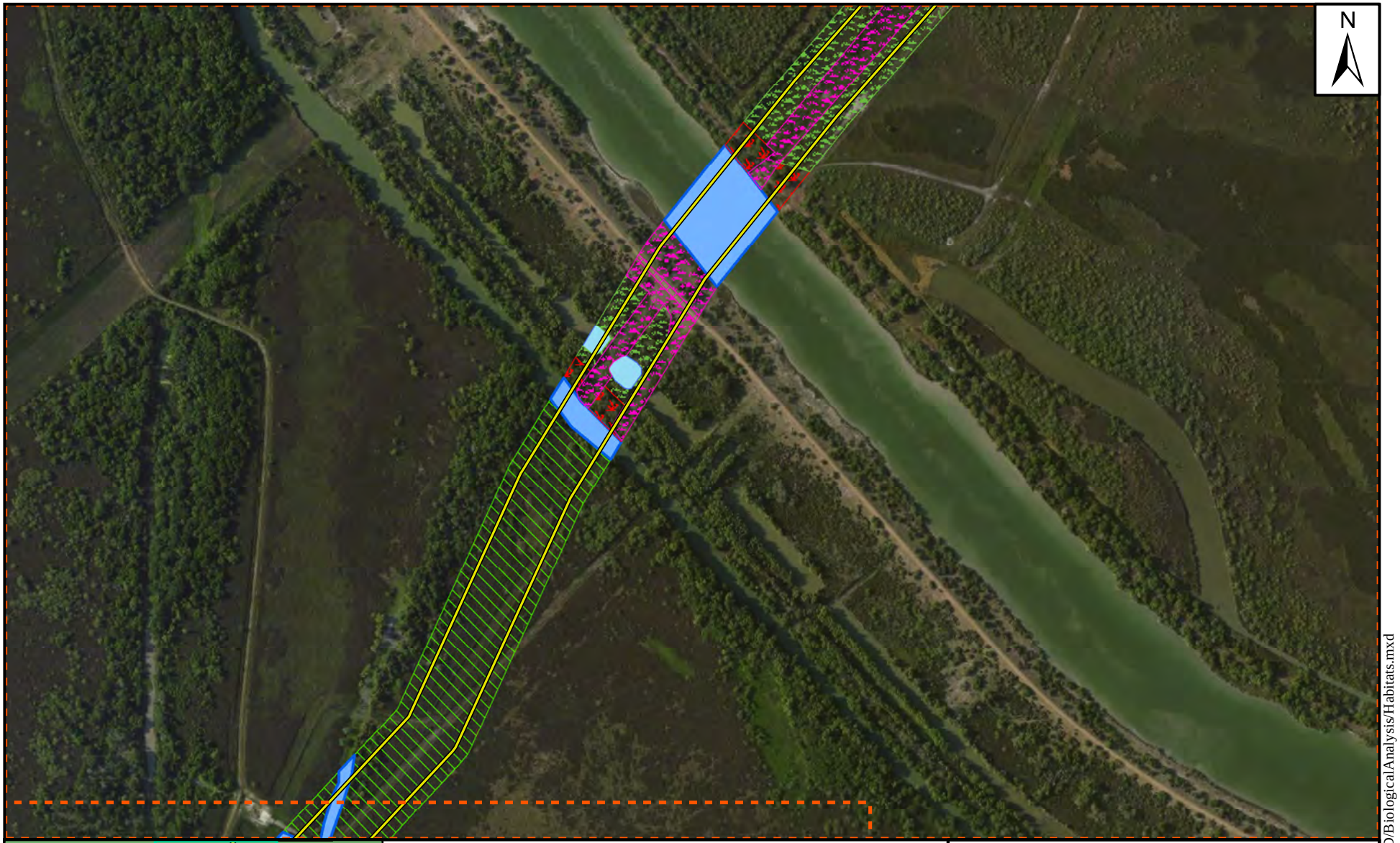

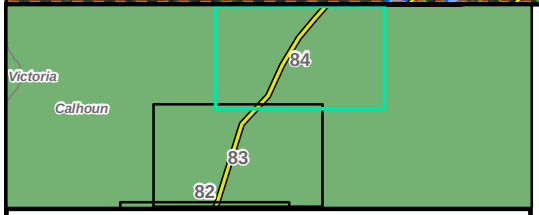

Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

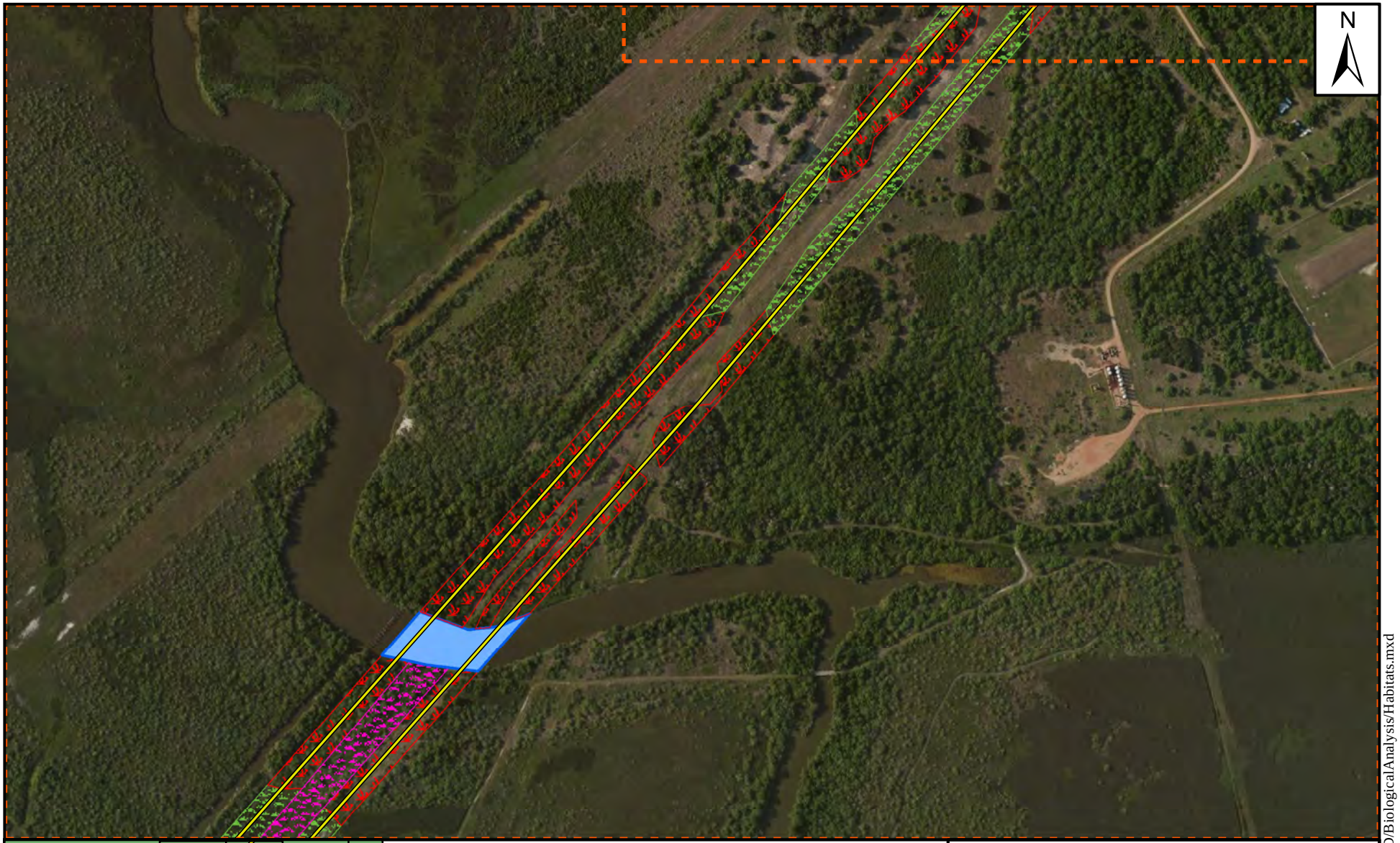
Prepared For: Occidental Chemical Corporation

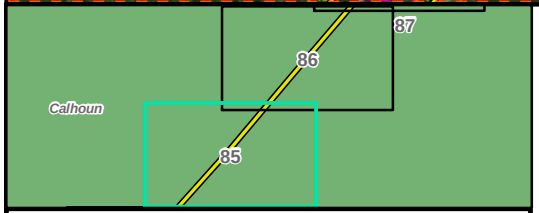
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

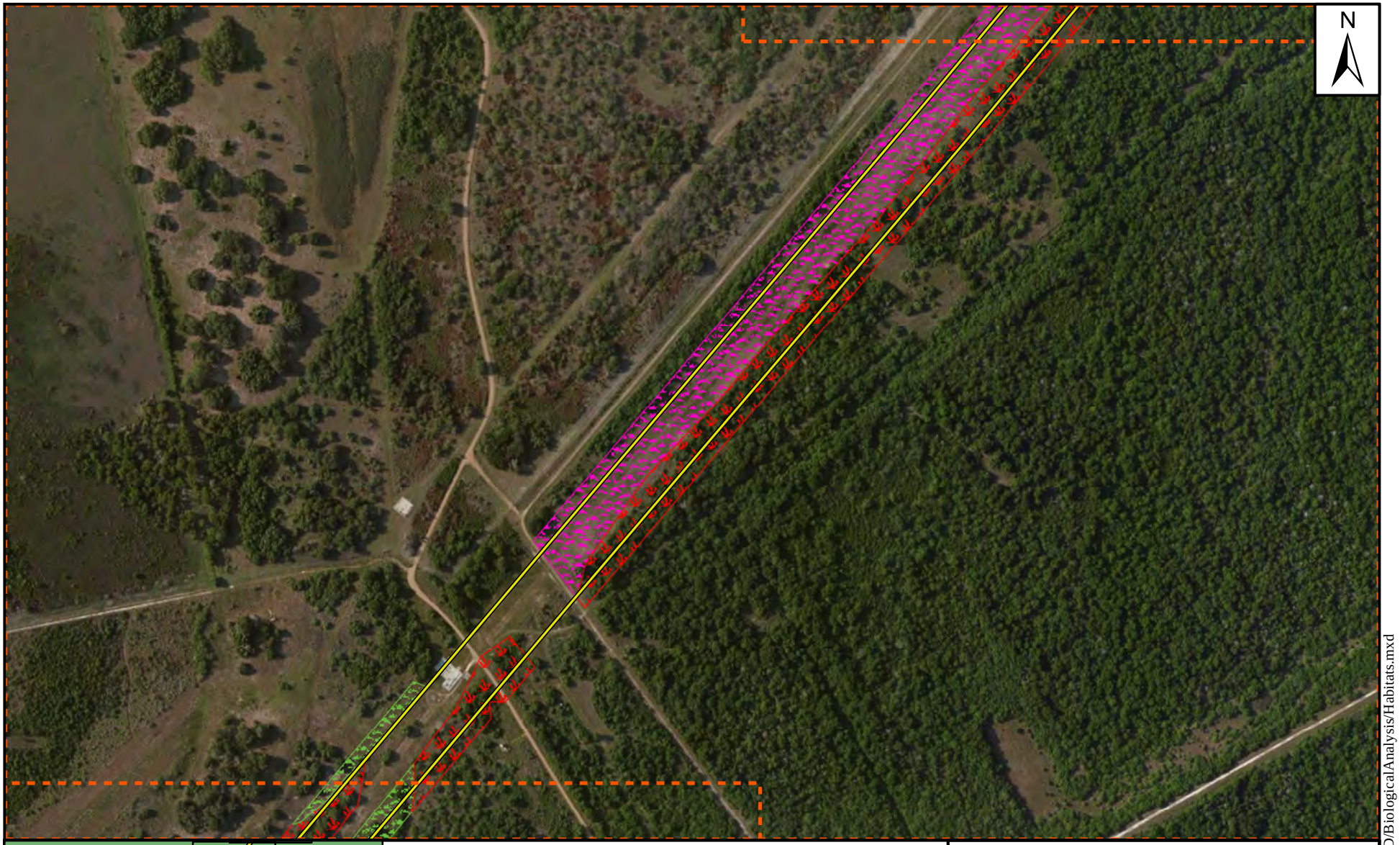
Prepared For: Occidental Chemical Corporation

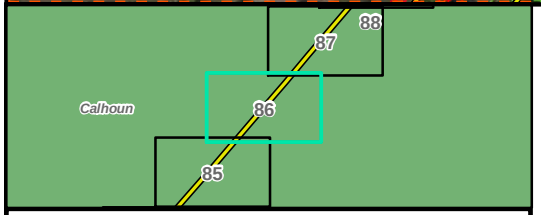
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

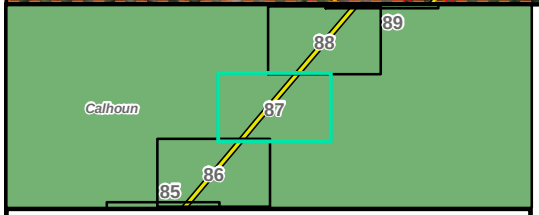
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 87 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

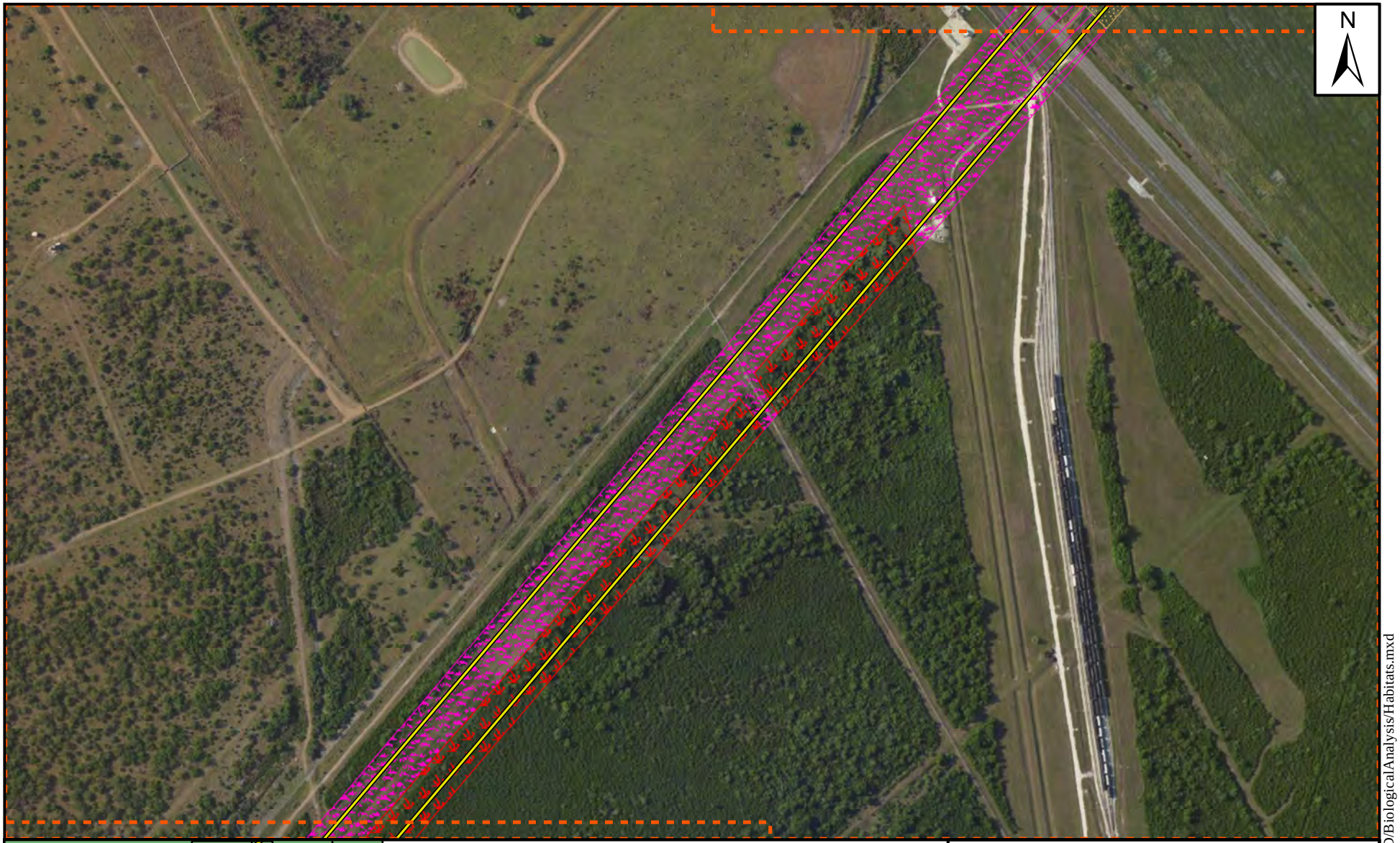
Prepared For: Occidental Chemical Corporation

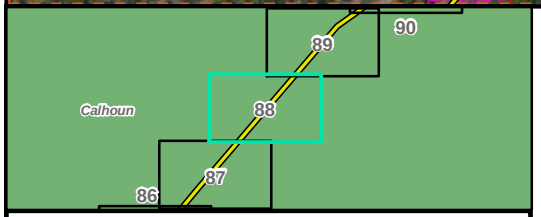
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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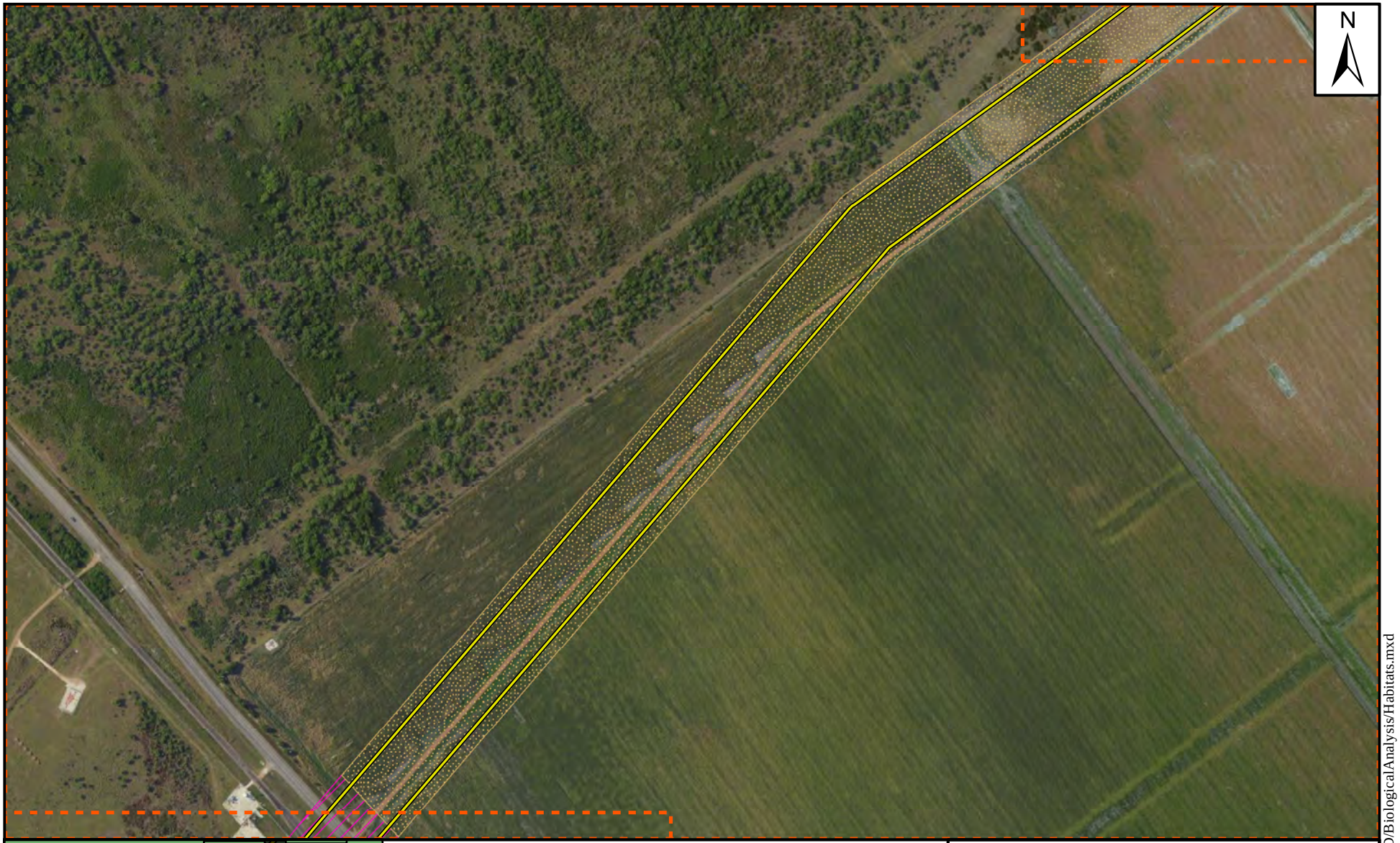

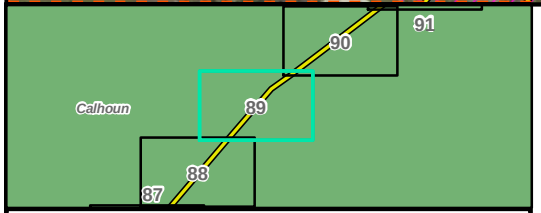

Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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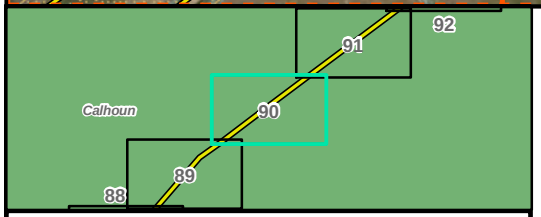

Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

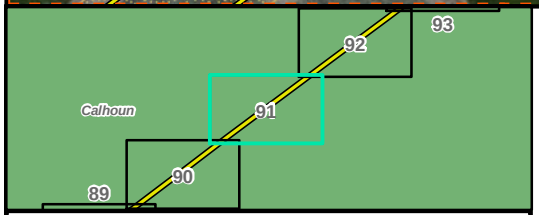
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

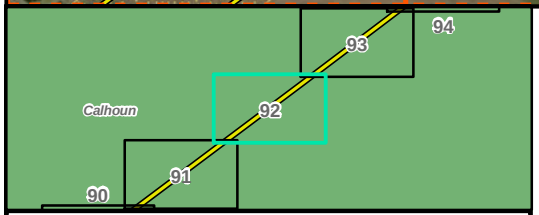
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

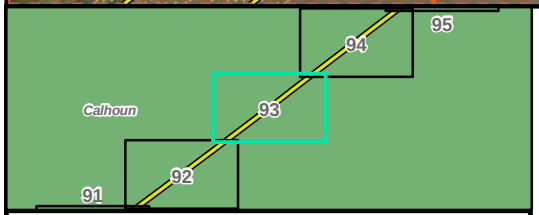
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

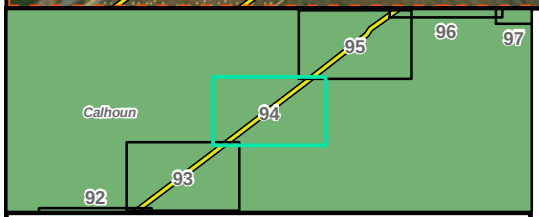
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

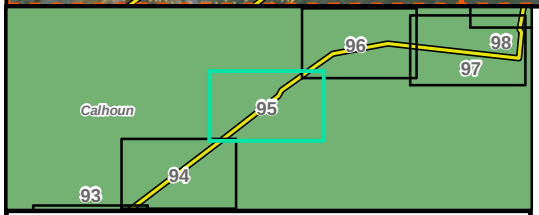
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

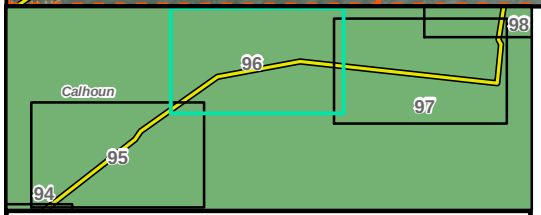
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 96 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

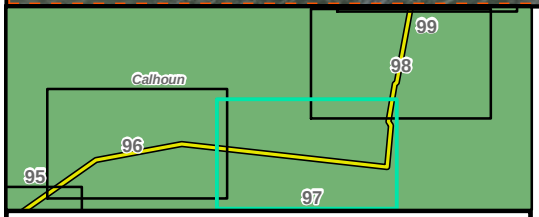
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 97 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

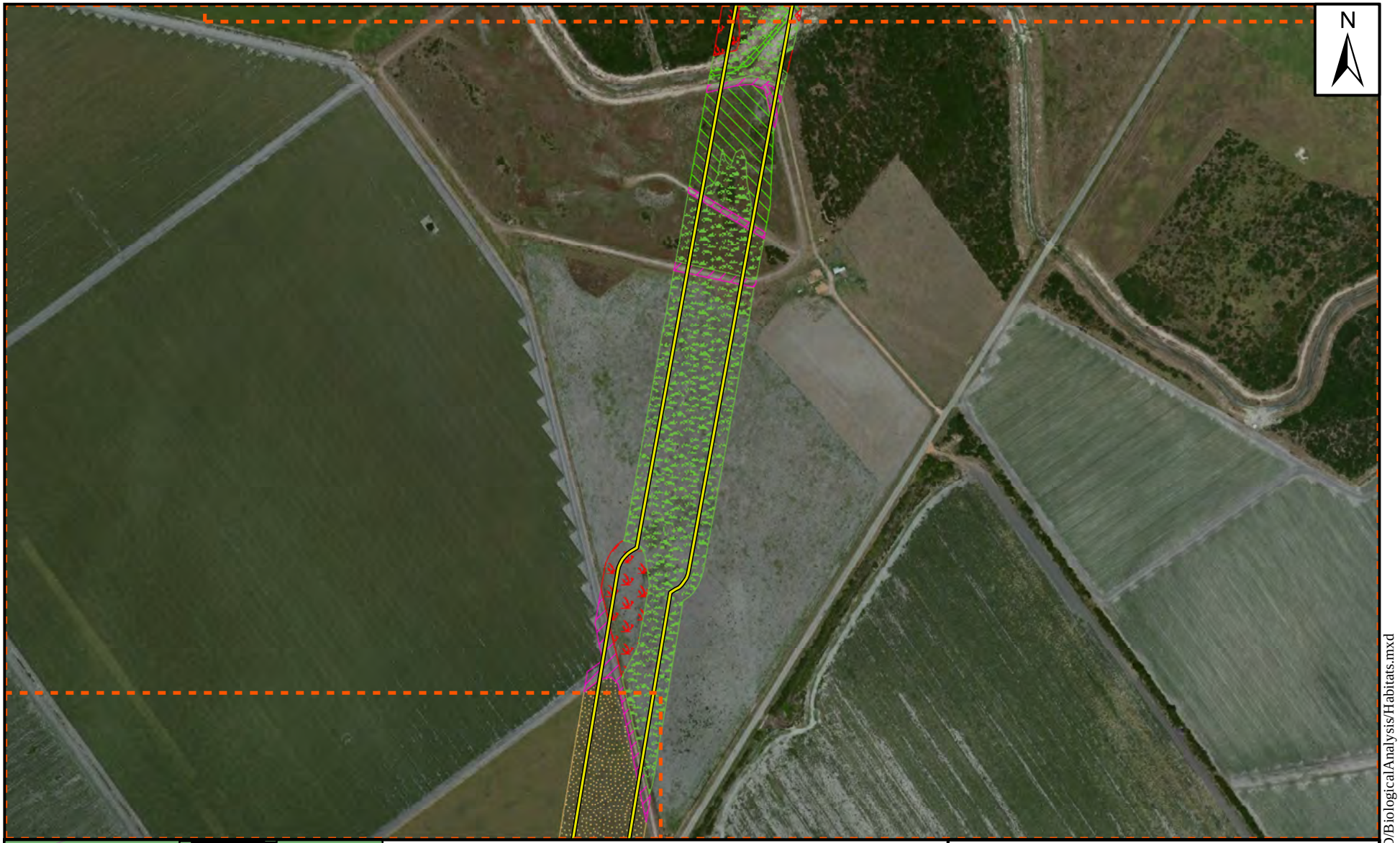
Prepared For: Occidental Chemical Corporation

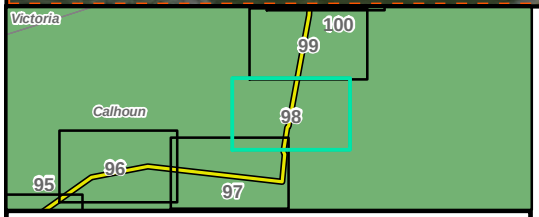
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 98 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

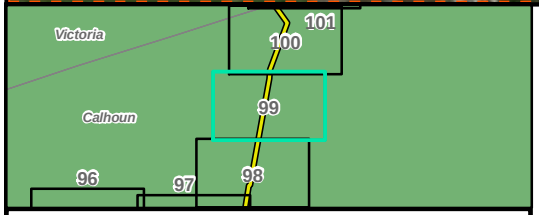
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 99 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

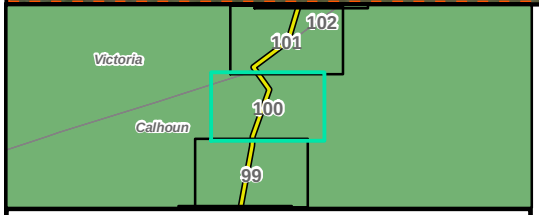
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 100 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

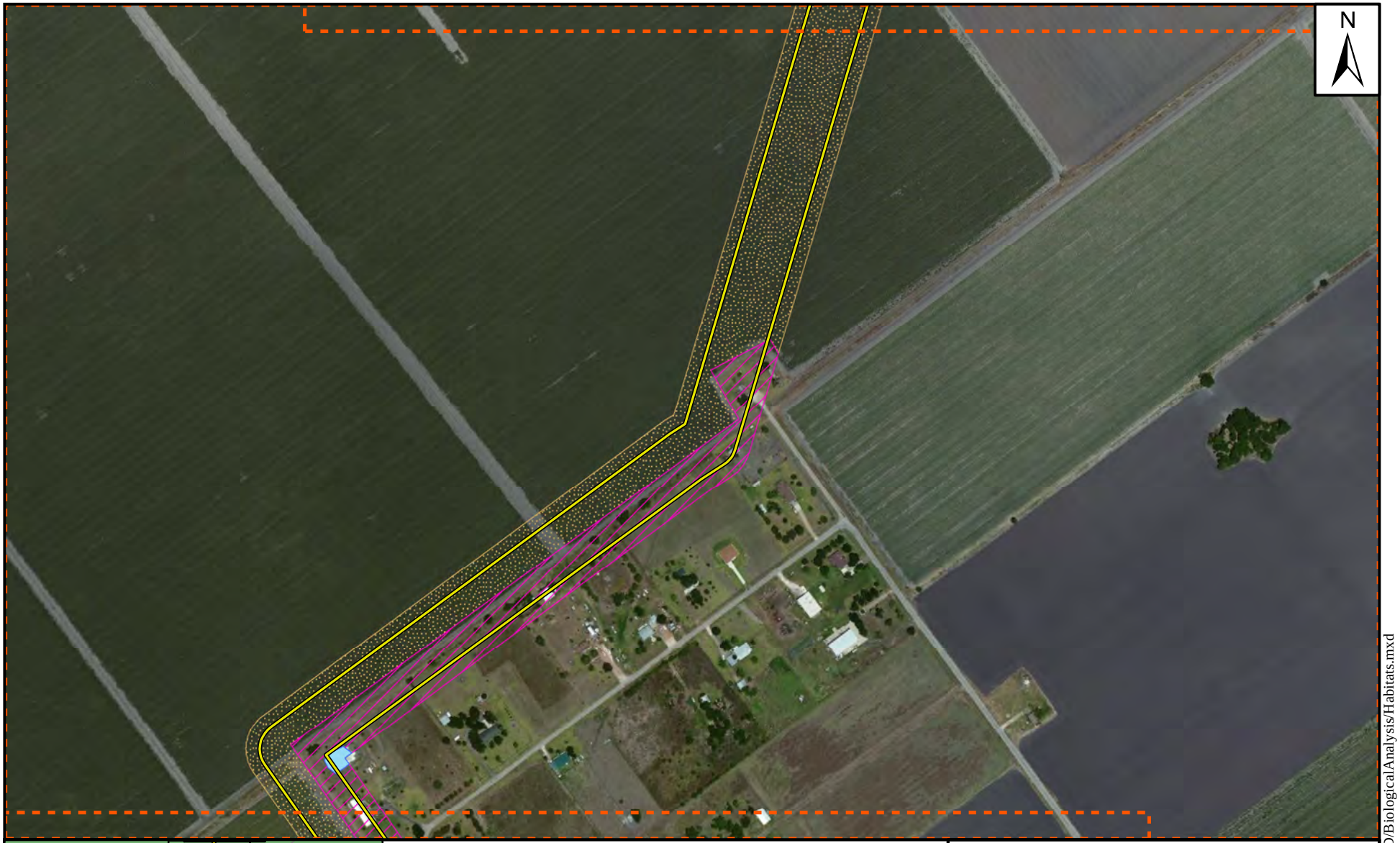
Prepared For: Occidental Chemical Corporation

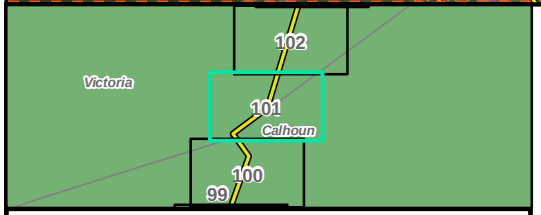
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 101 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

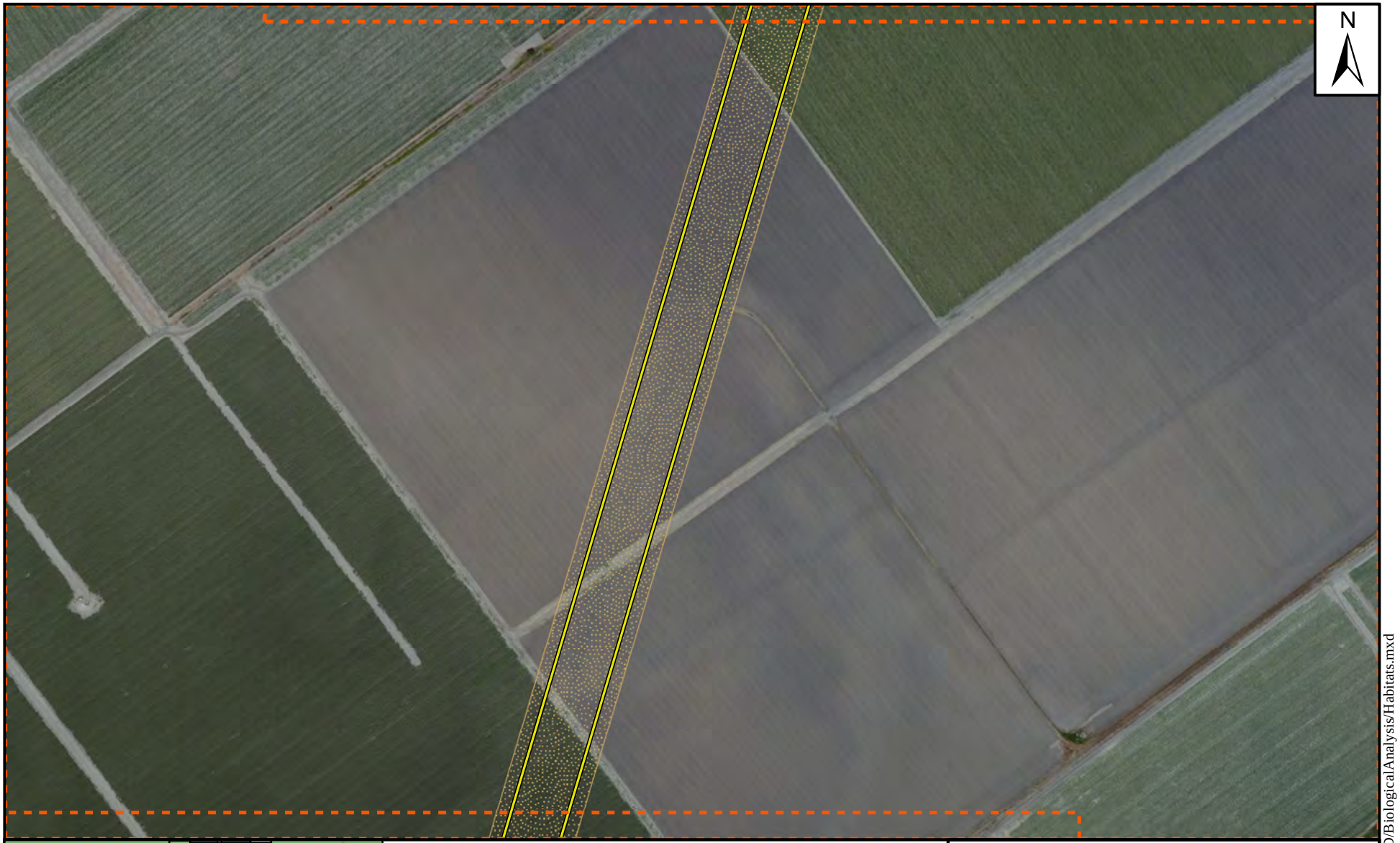
Prepared For: Occidental Chemical Corporation

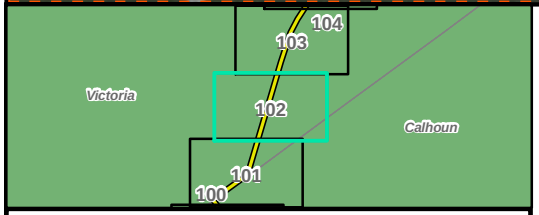
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 102 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

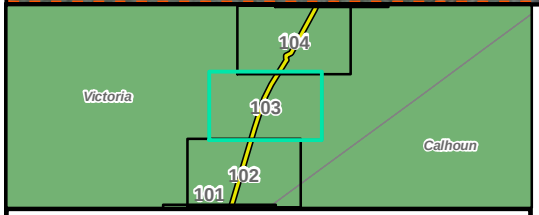
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 103 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

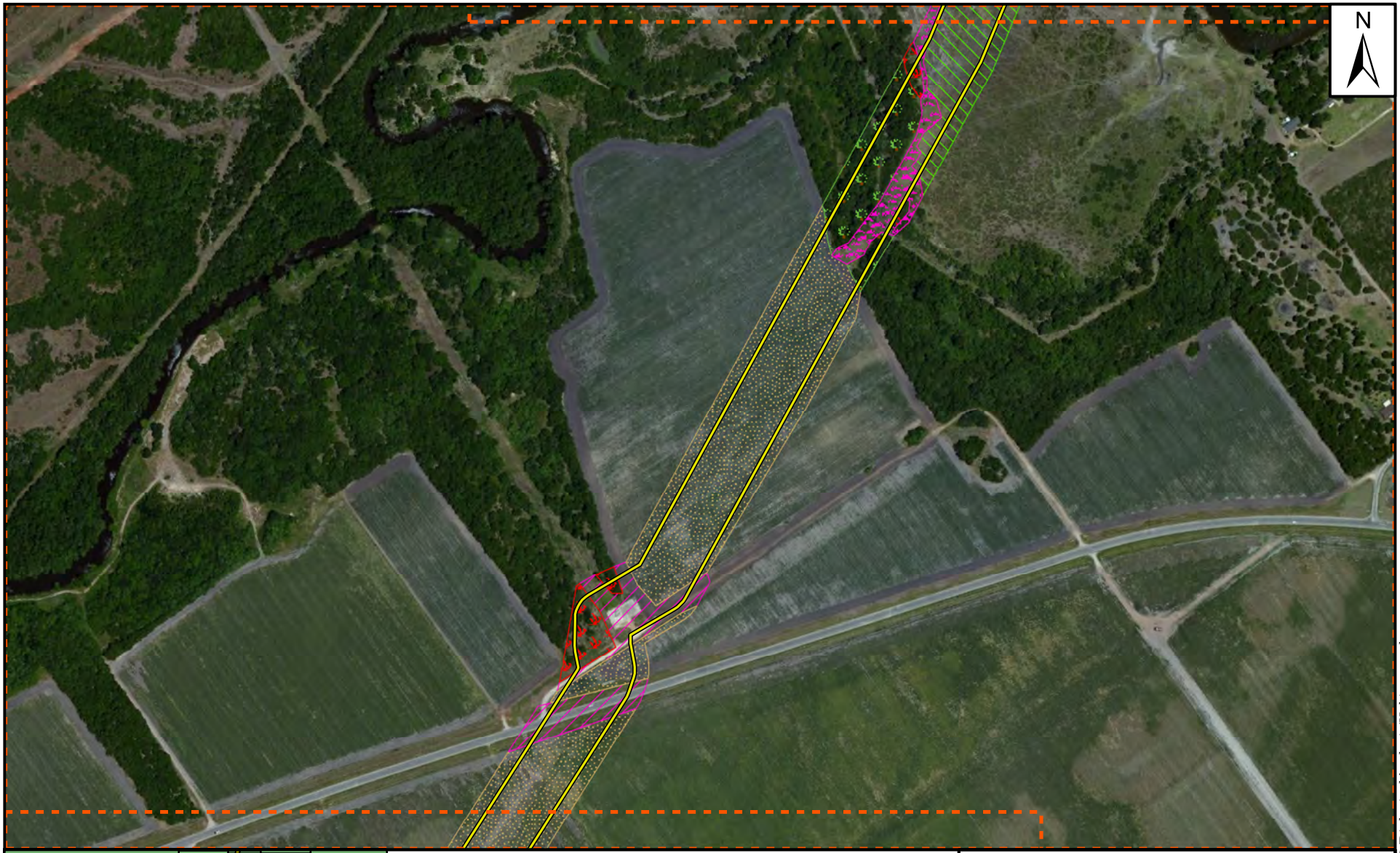
Prepared For: Occidental Chemical Corporation

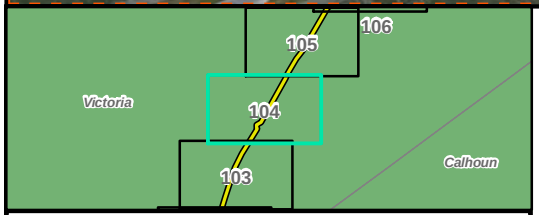
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 104 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

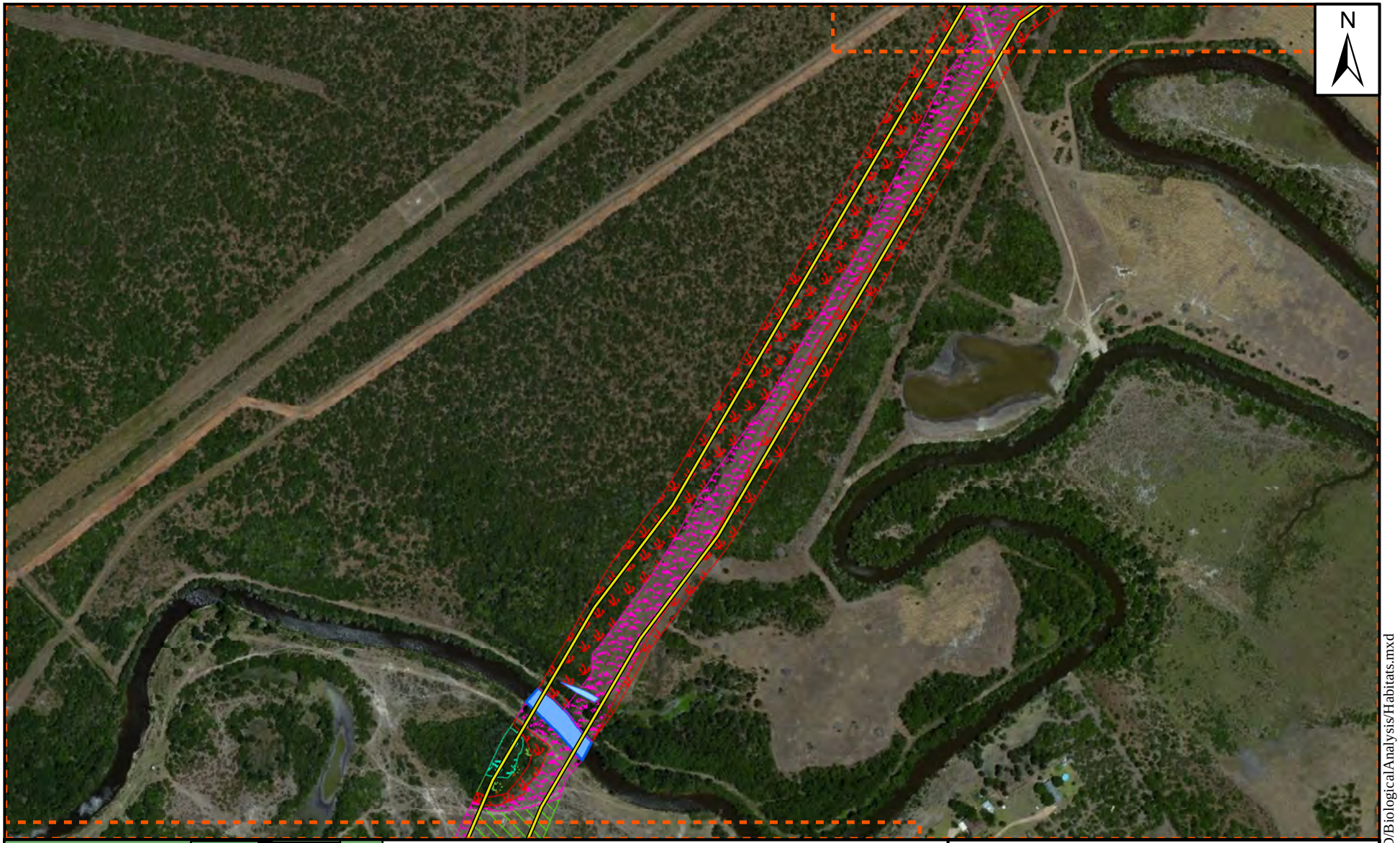
Prepared For: Occidental Chemical Corporation

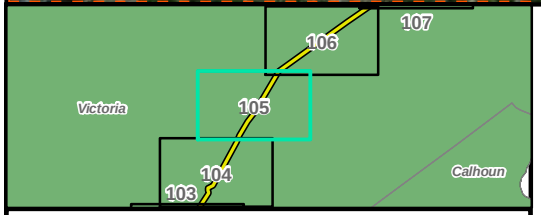
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 105 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

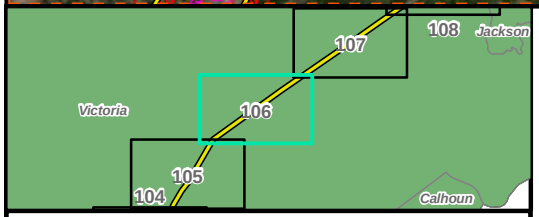
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 106 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

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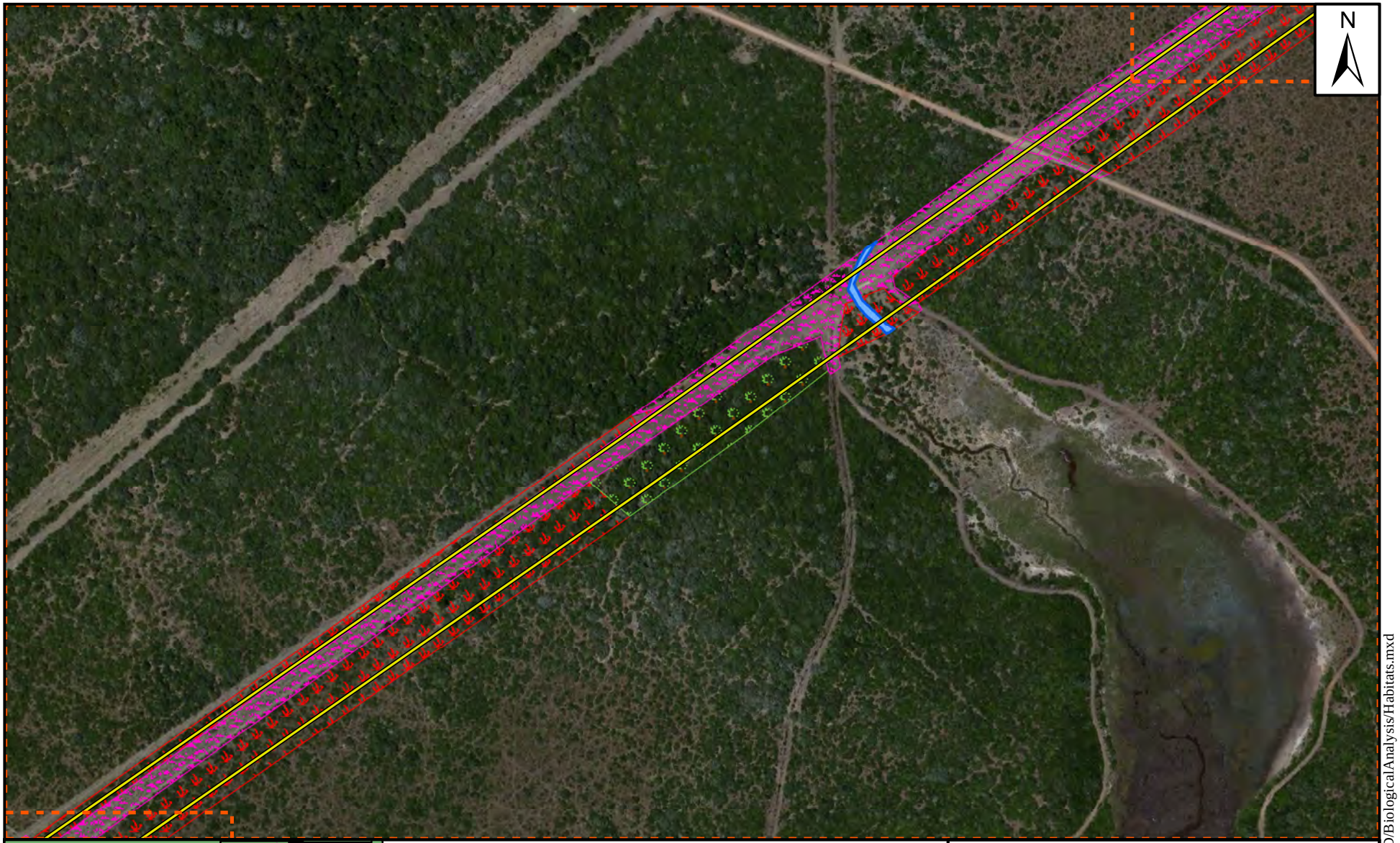
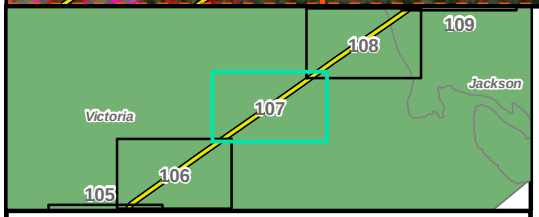
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 107 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

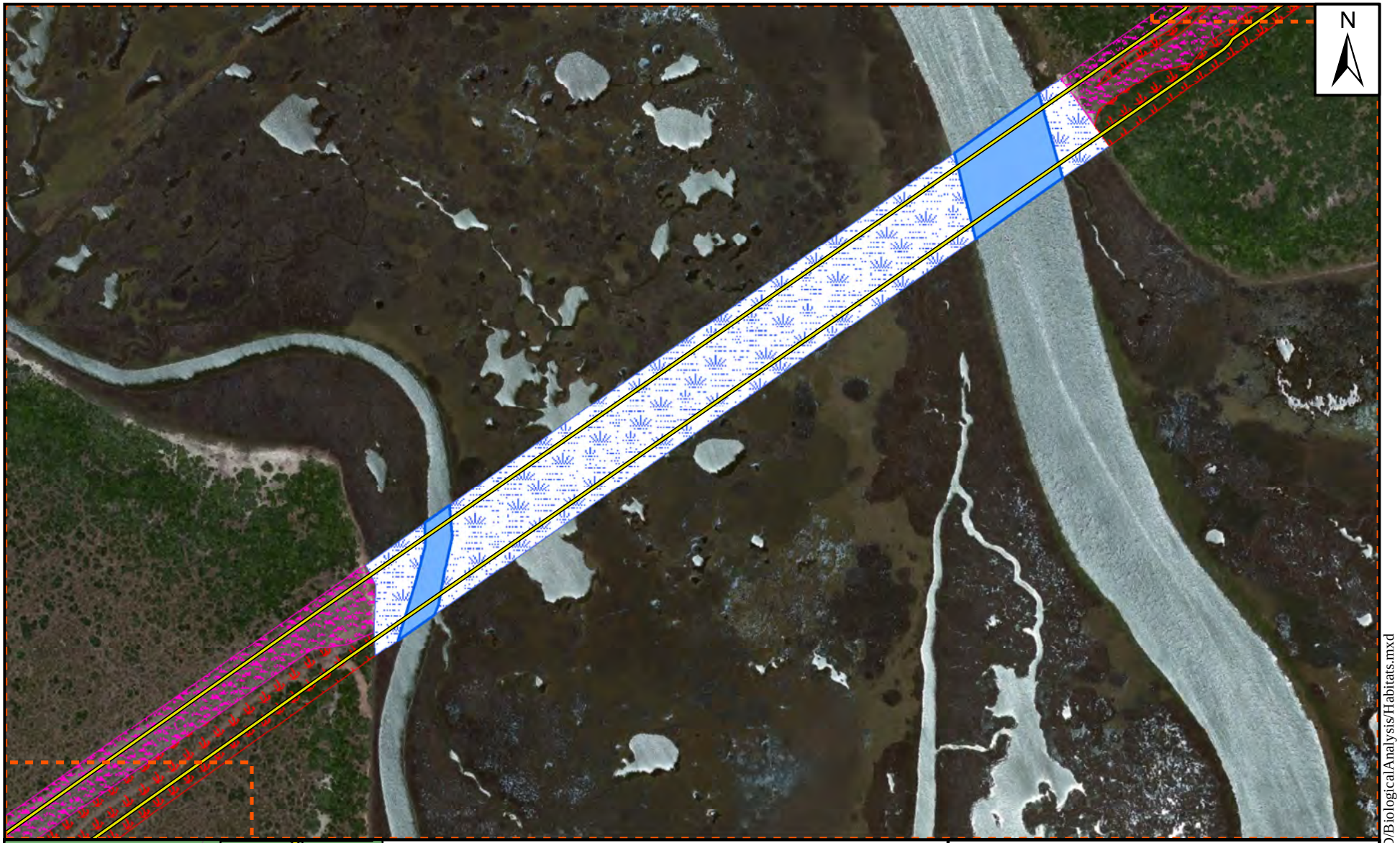
Prepared For: Occidental Chemical Corporation

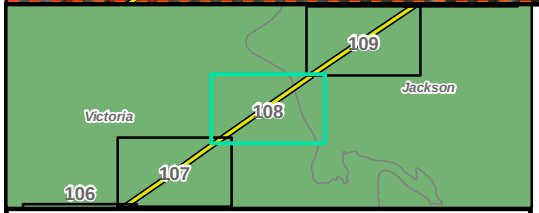
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 108 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

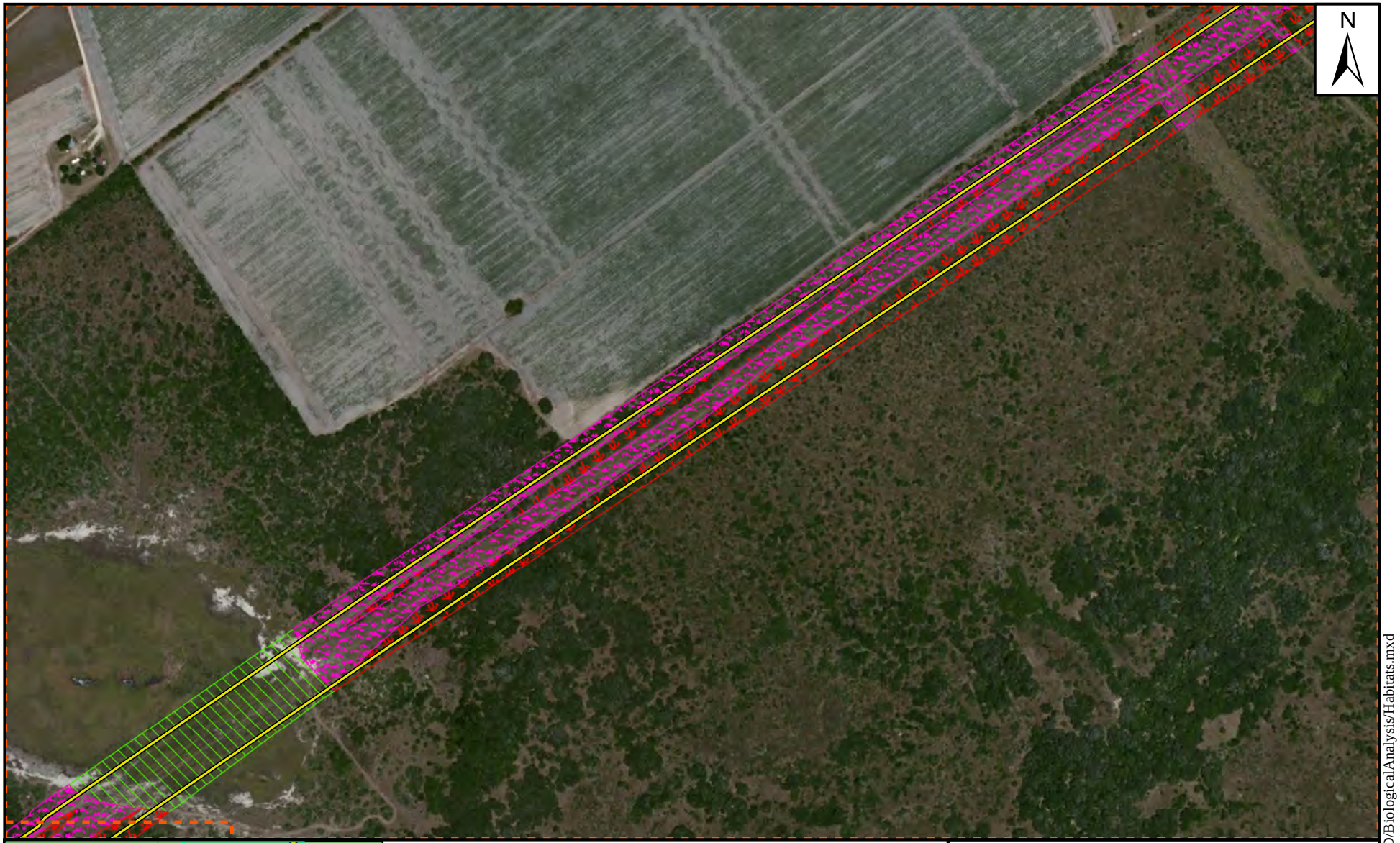
Prepared For: Occidental Chemical Corporation

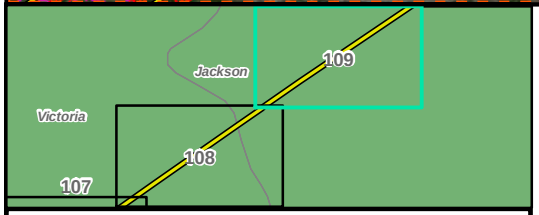
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 109 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

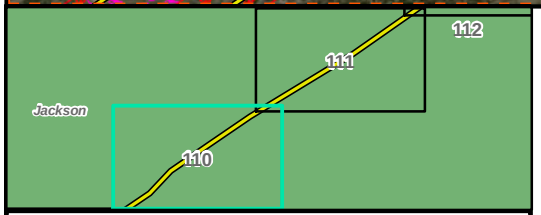
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 110 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

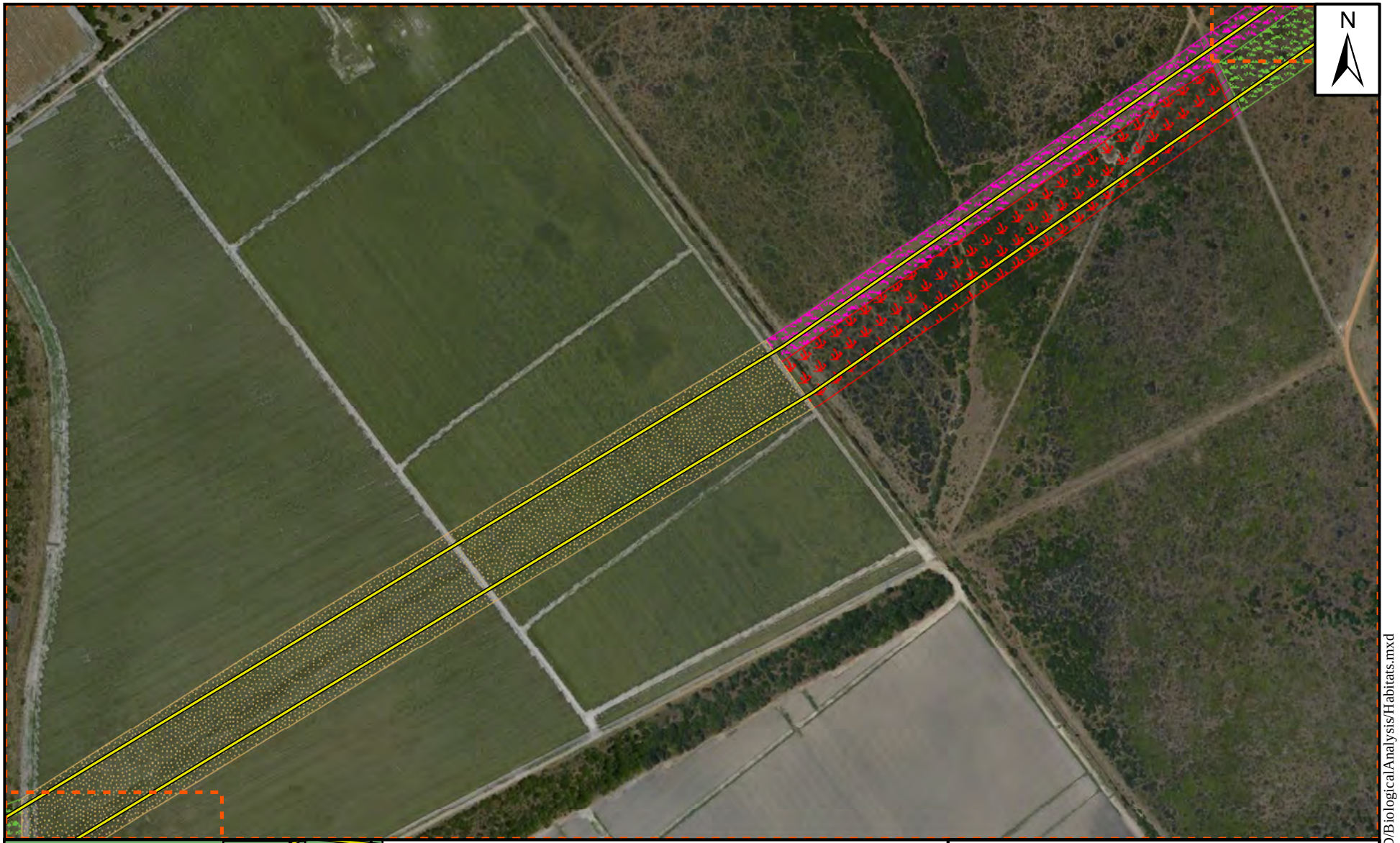
Prepared For: Occidental Chemical Corporation

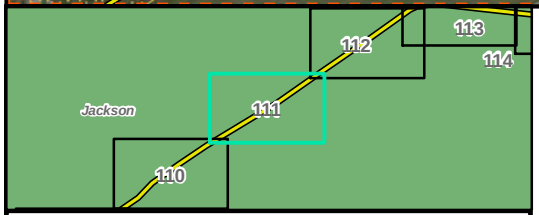
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 111 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

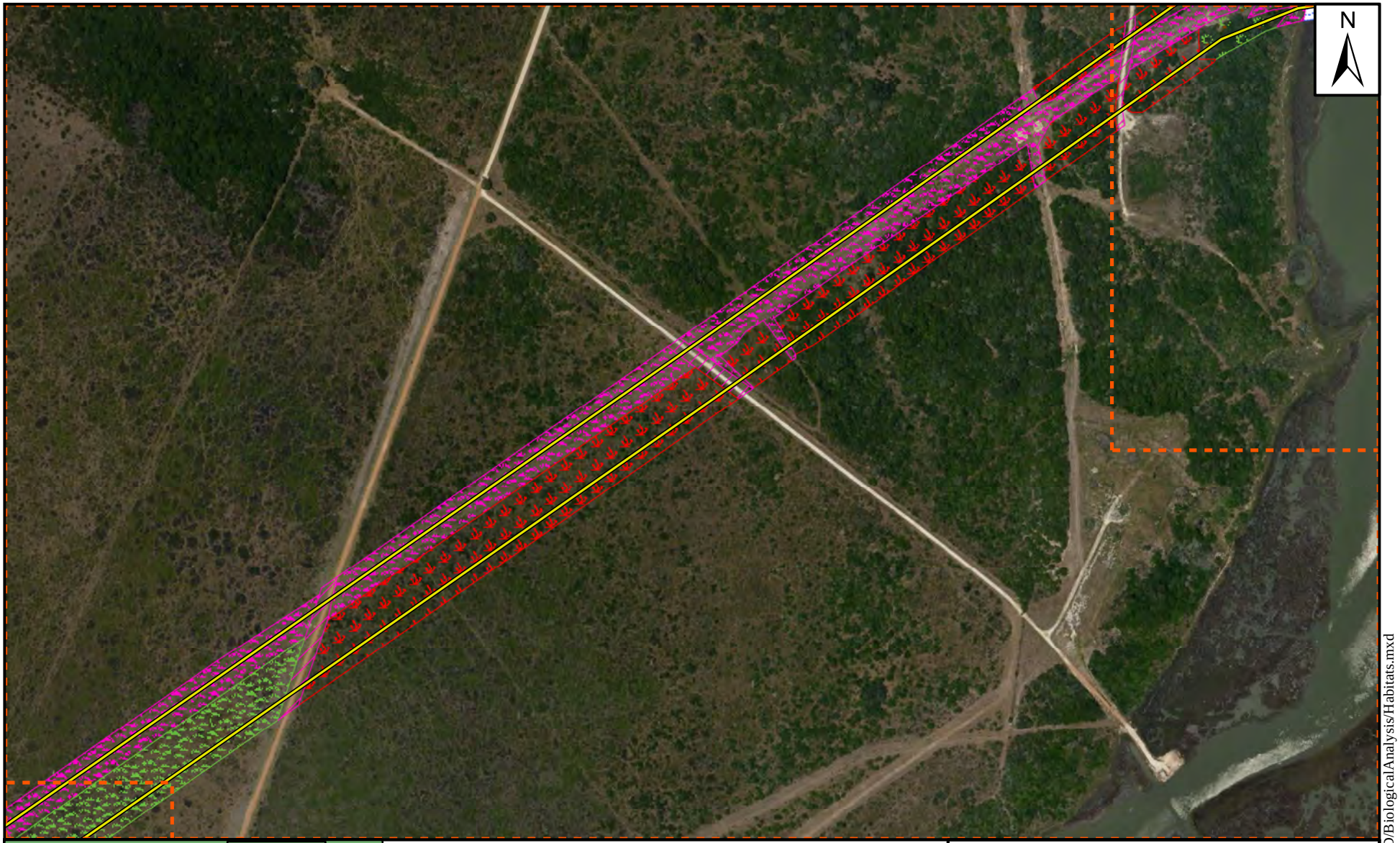
Prepared For: Occidental Chemical Corporation

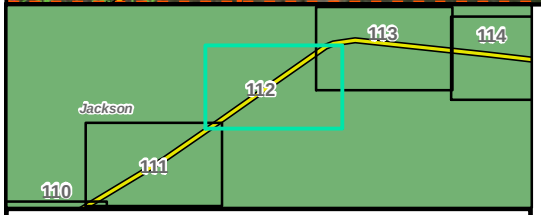
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

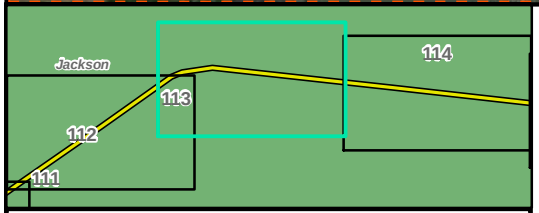
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 113 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

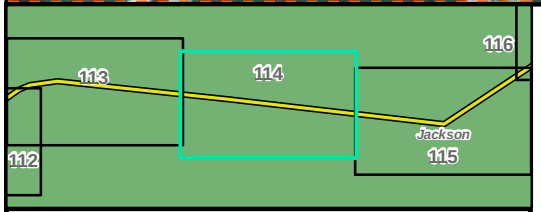
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 114 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

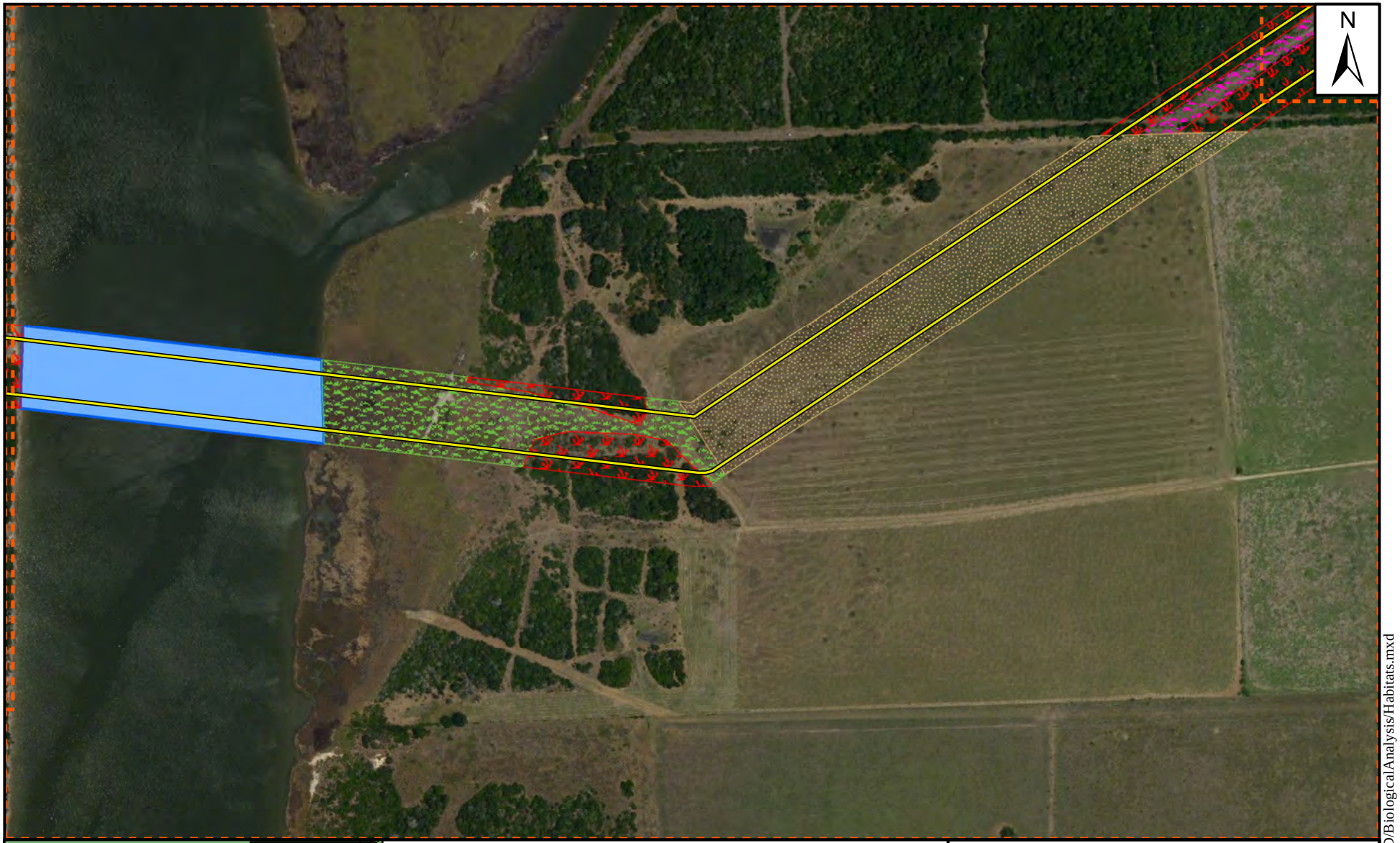
Prepared For: Occidental Chemical Corporation

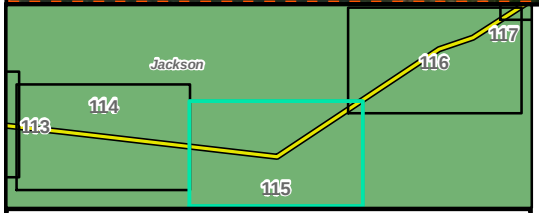
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 115 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

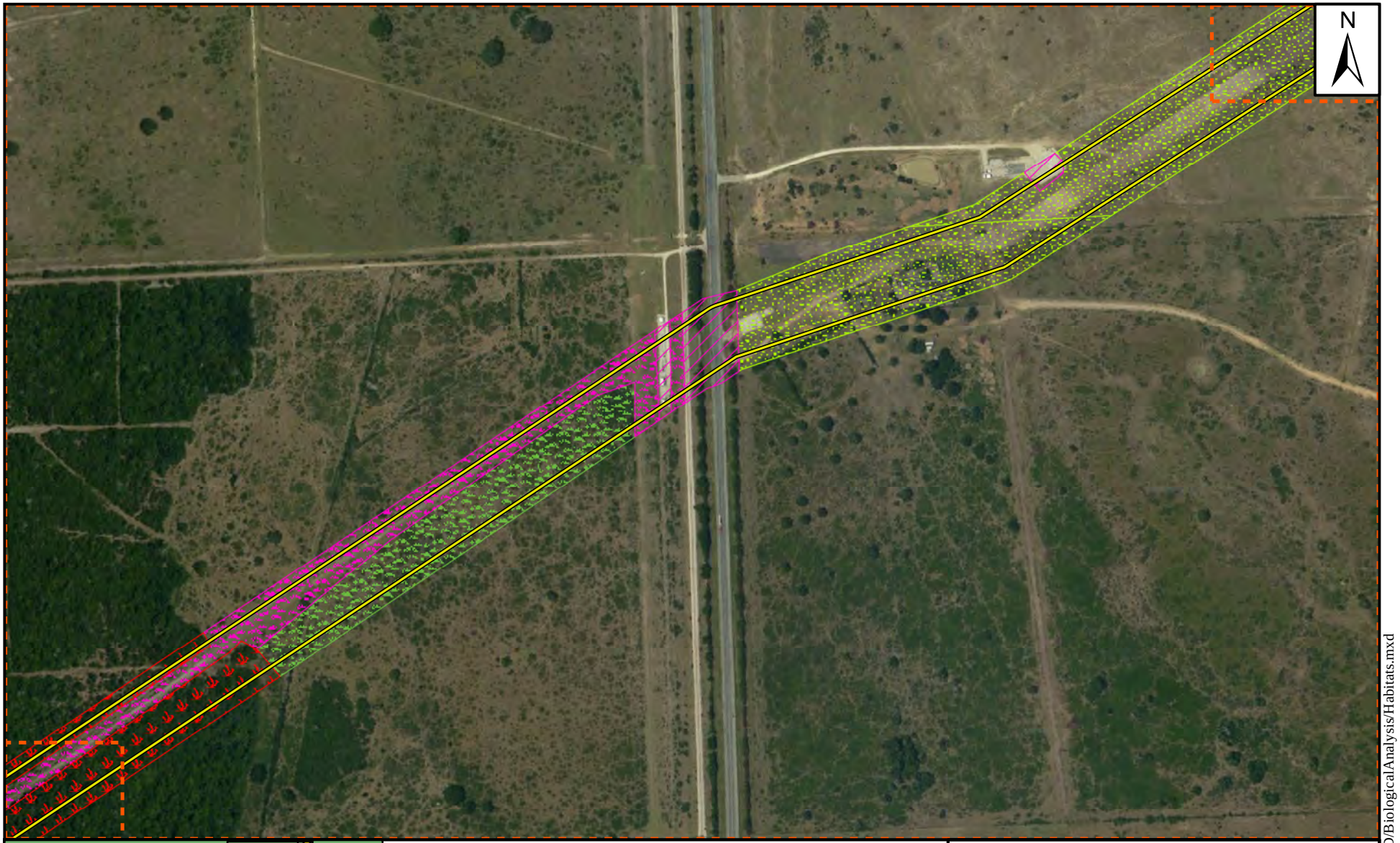
Prepared For: Occidental Chemical Corporation

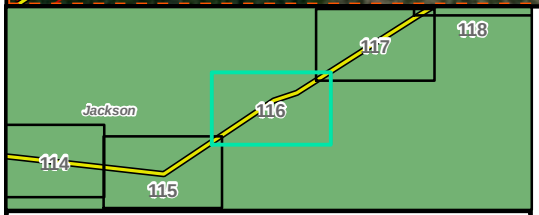
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 116 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

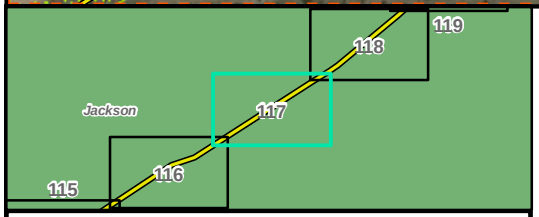
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 117 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

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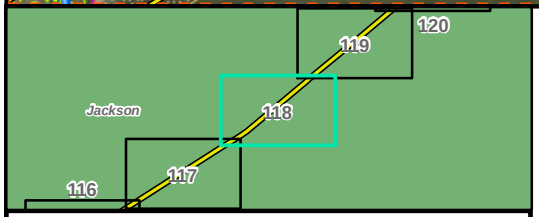


Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 118 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

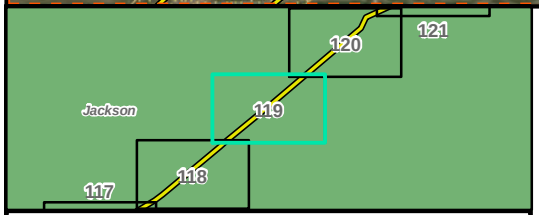
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 119 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

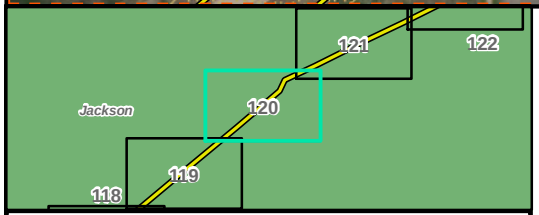
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 120 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

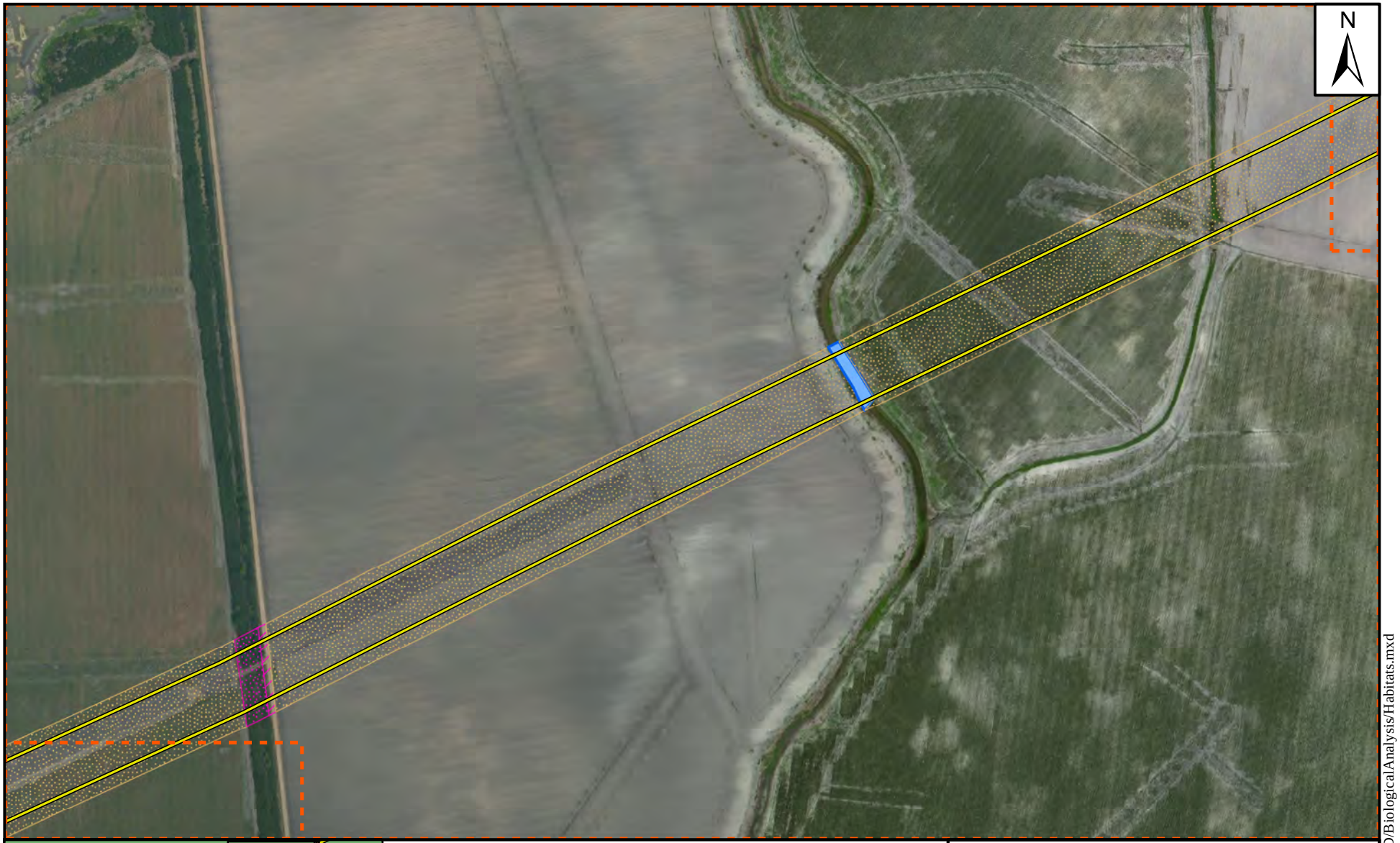
Prepared For: Occidental Chemical Corporation

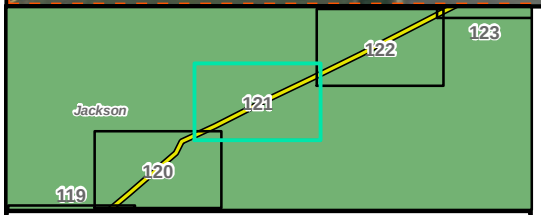
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 121 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

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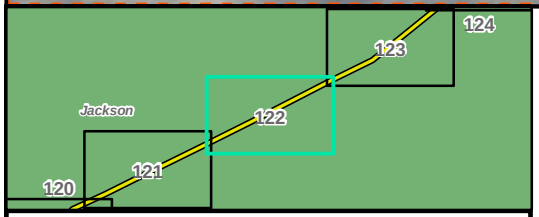
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 122 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

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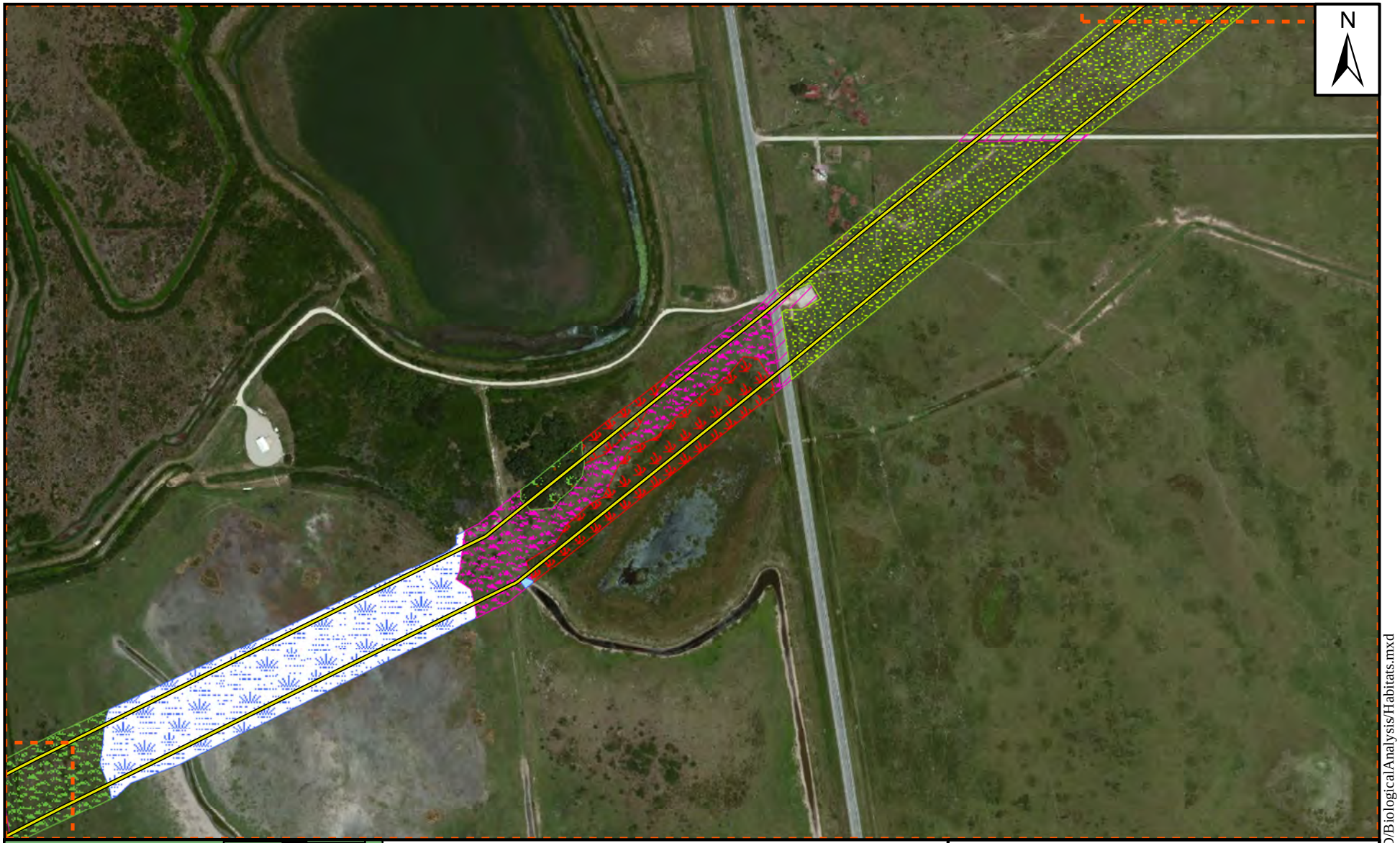
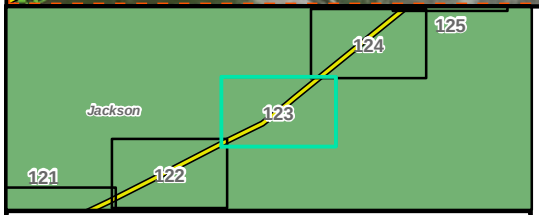
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 123 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

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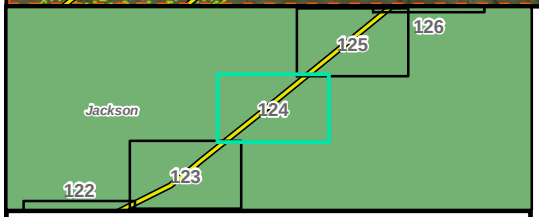
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 124 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

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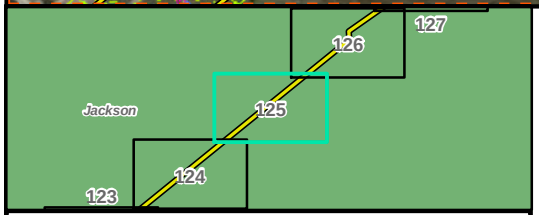
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 125 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

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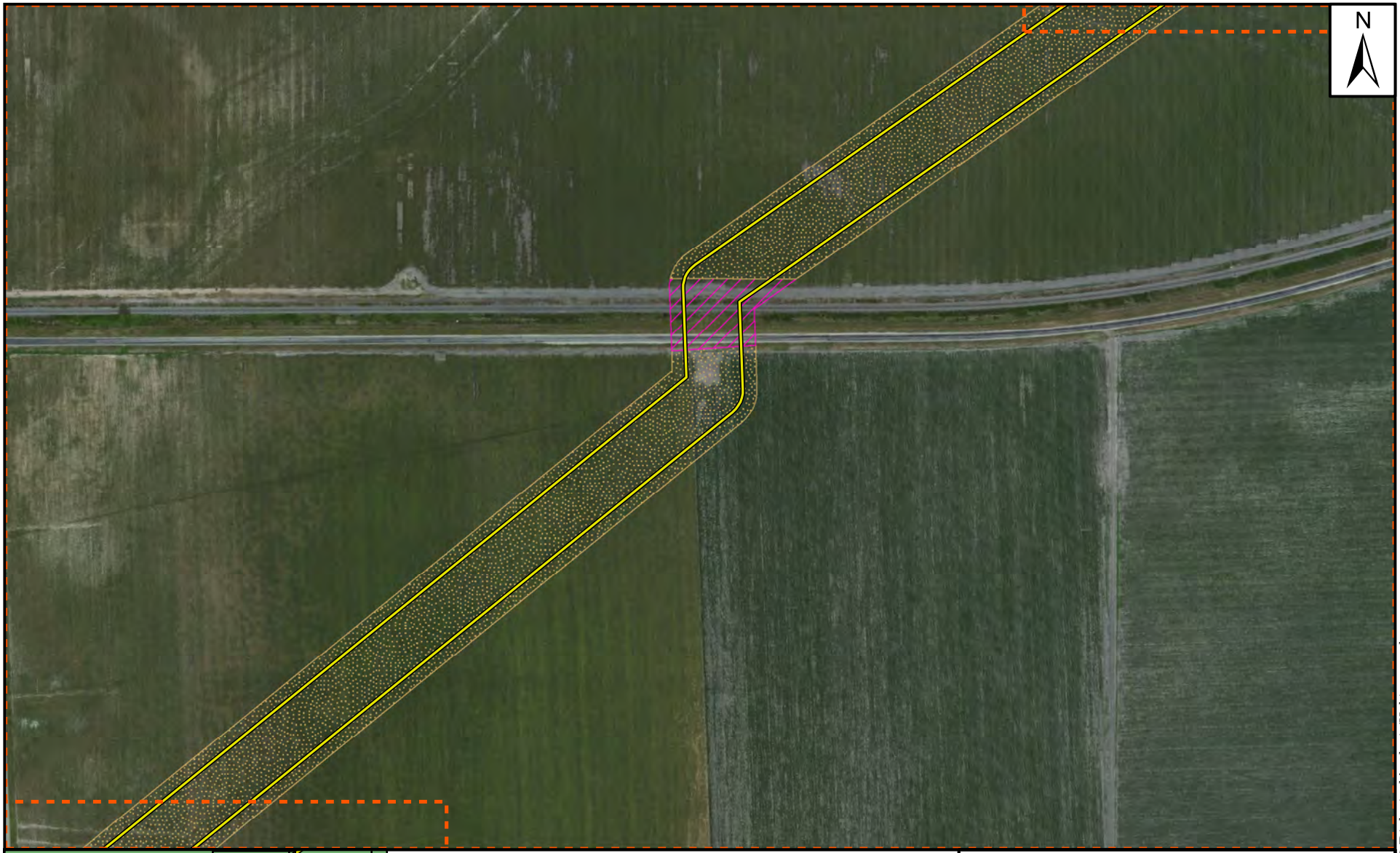
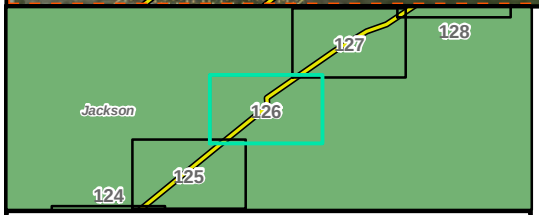
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 126 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

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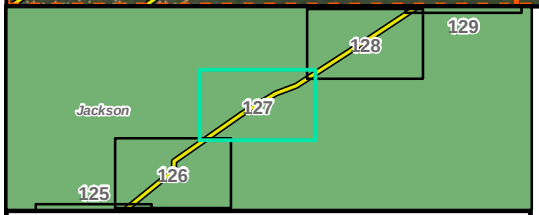
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 127 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

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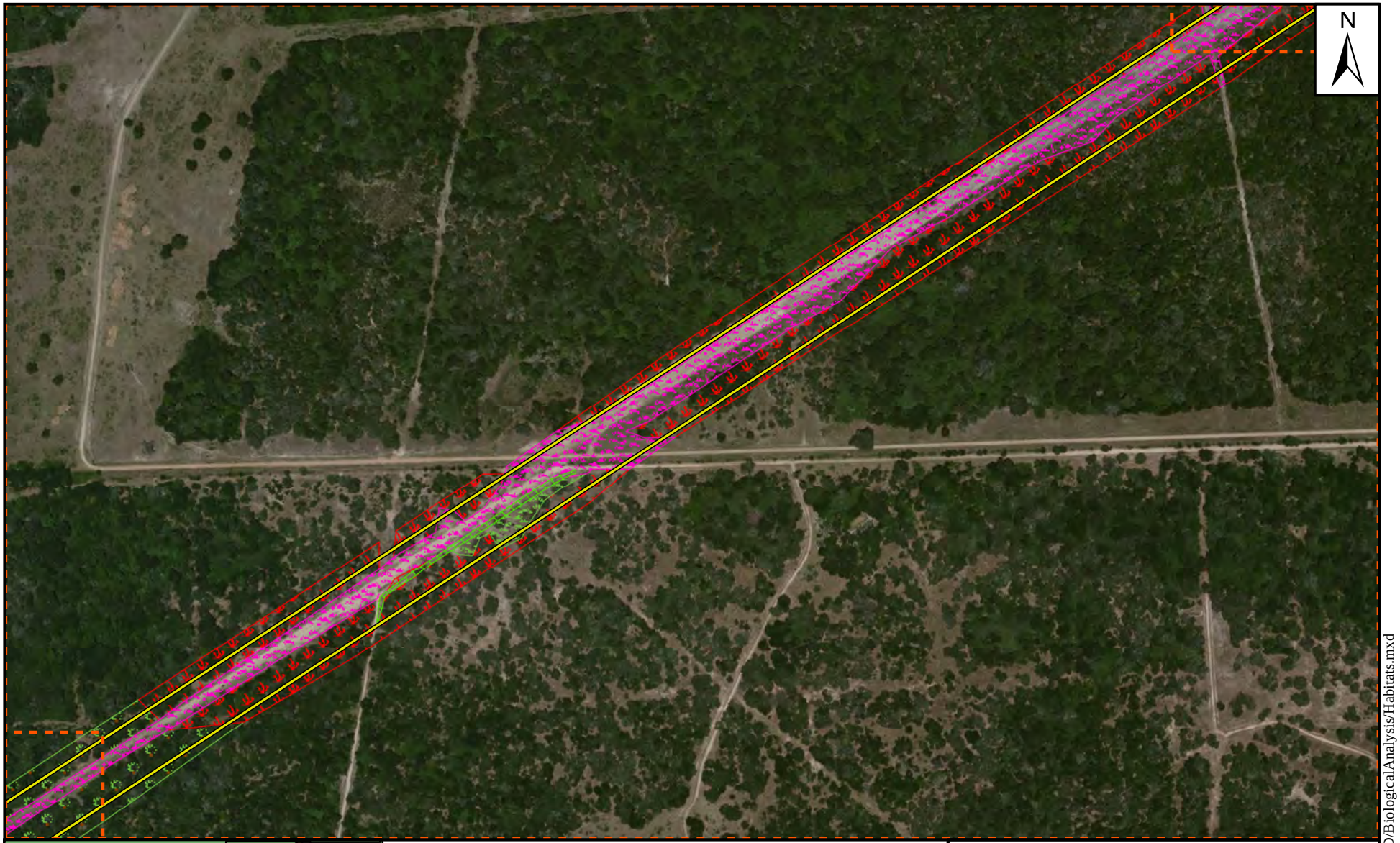
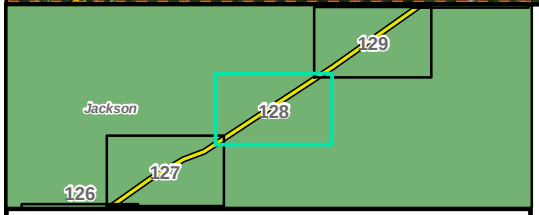
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

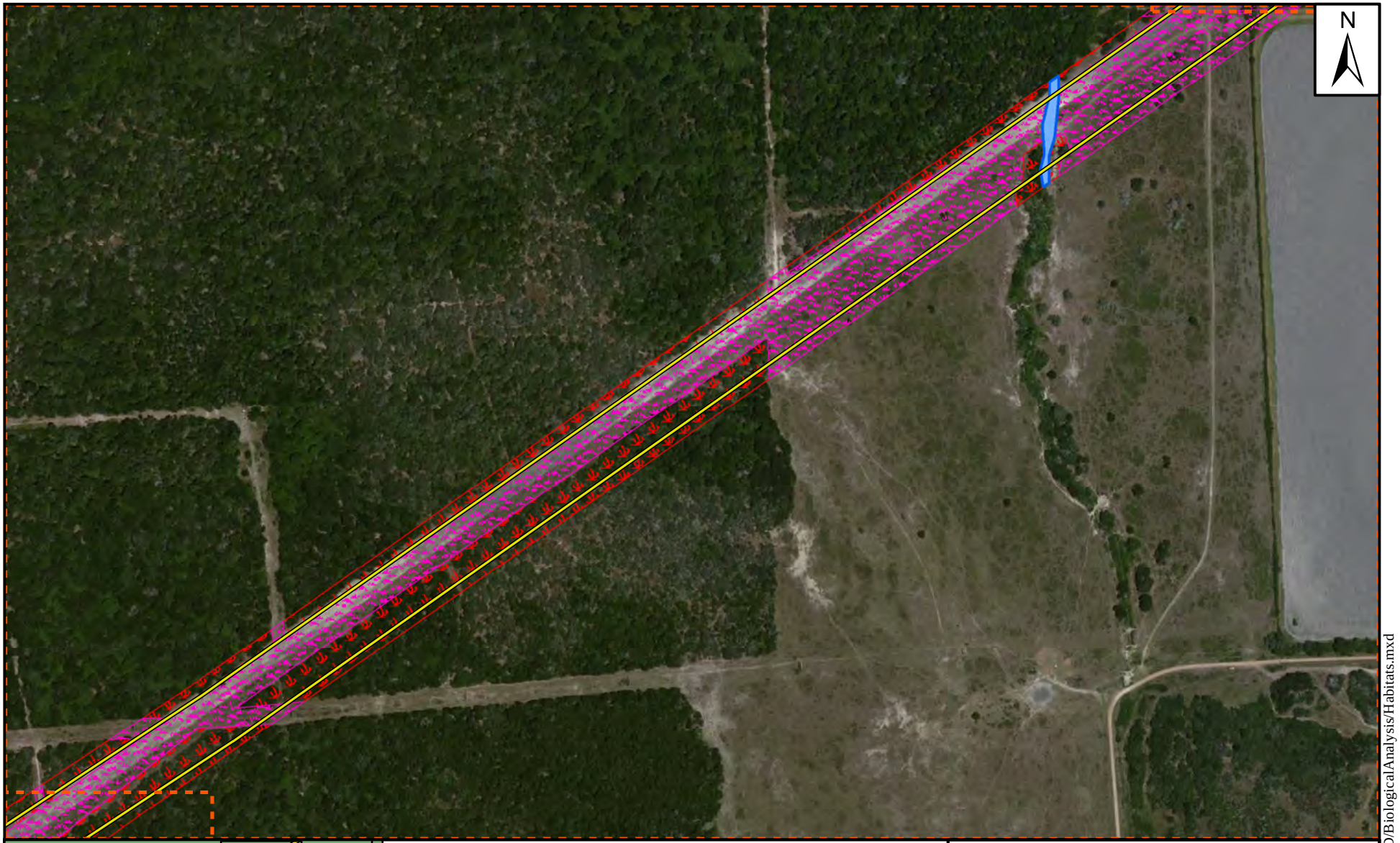
Prepared For: Occidental Chemical Corporation

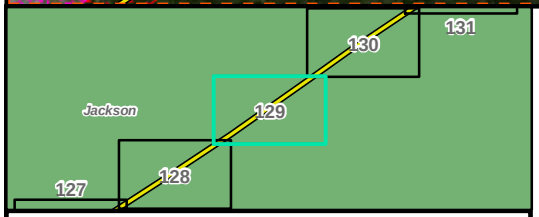
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 129 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

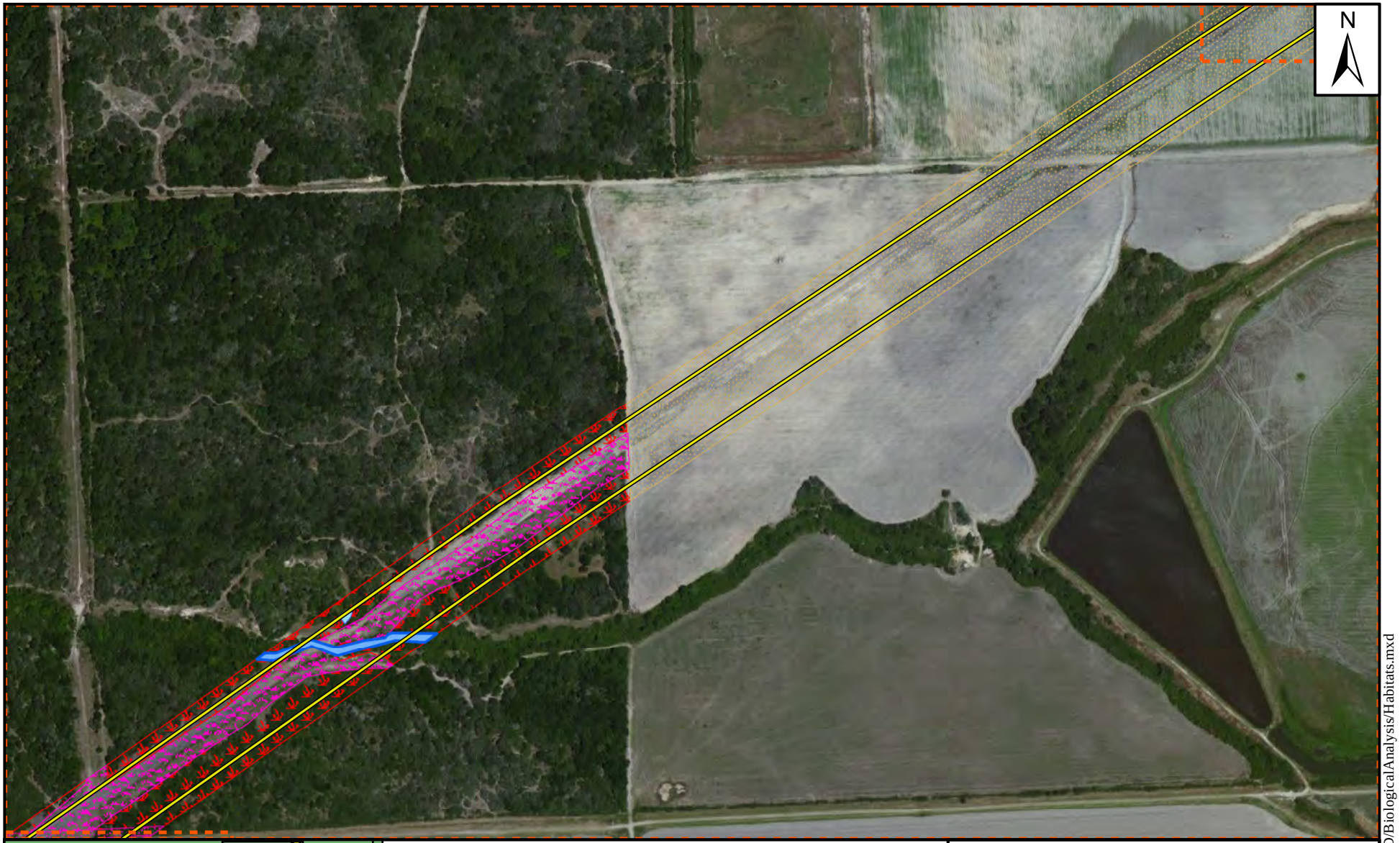
Prepared For: Occidental Chemical Corporation

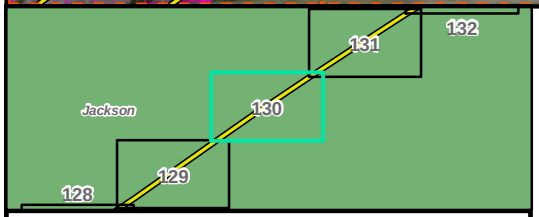
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

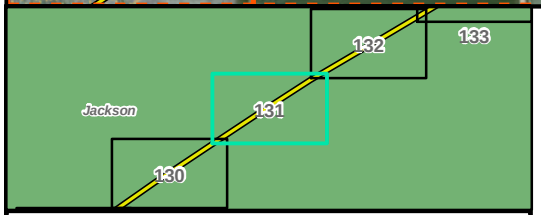
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 131 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

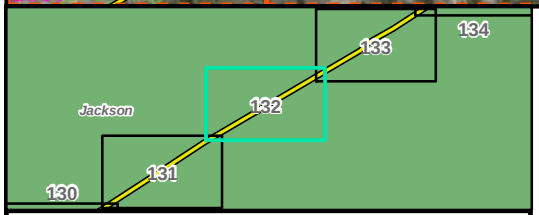
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

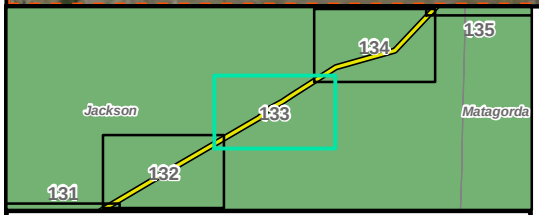
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

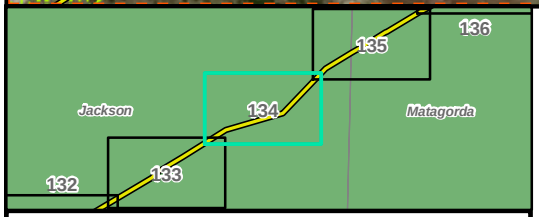
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 134 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

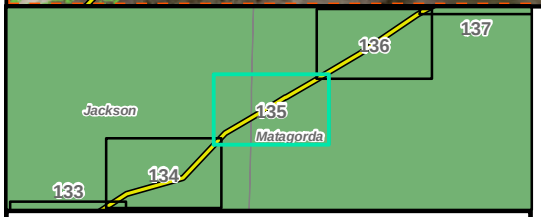
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

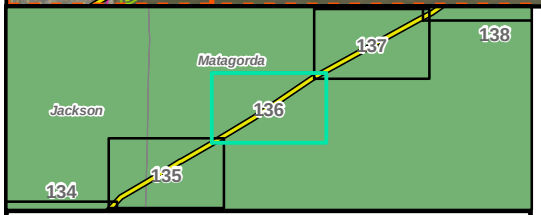
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

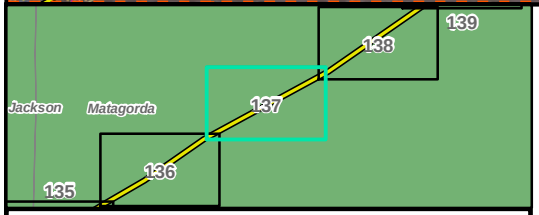
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 137 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

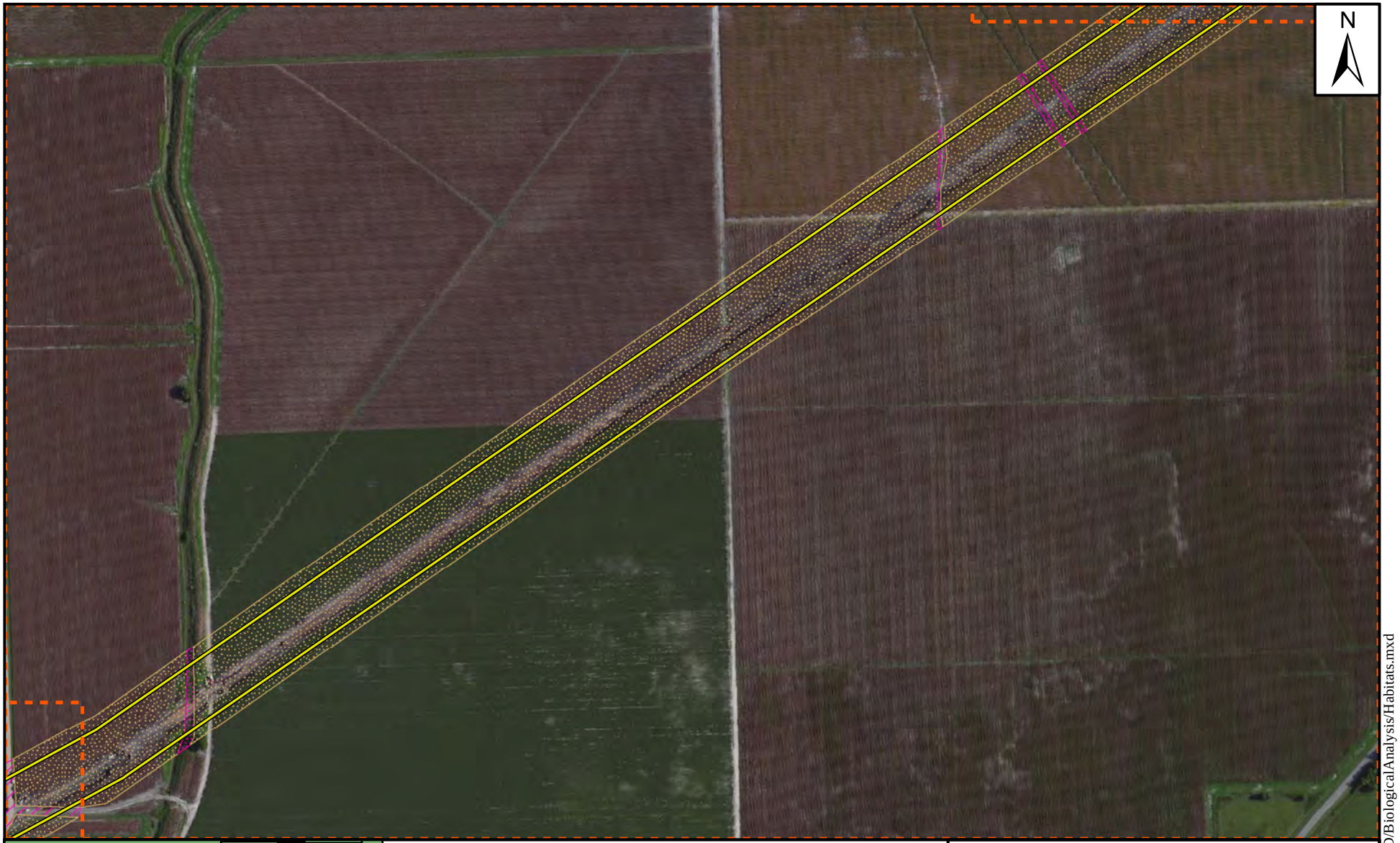
Prepared For: Occidental Chemical Corporation

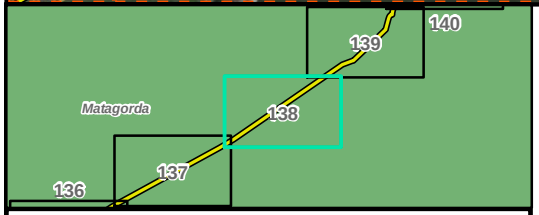
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 138 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

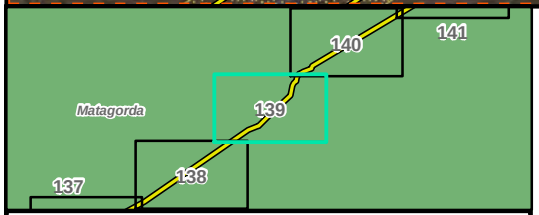
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 139 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

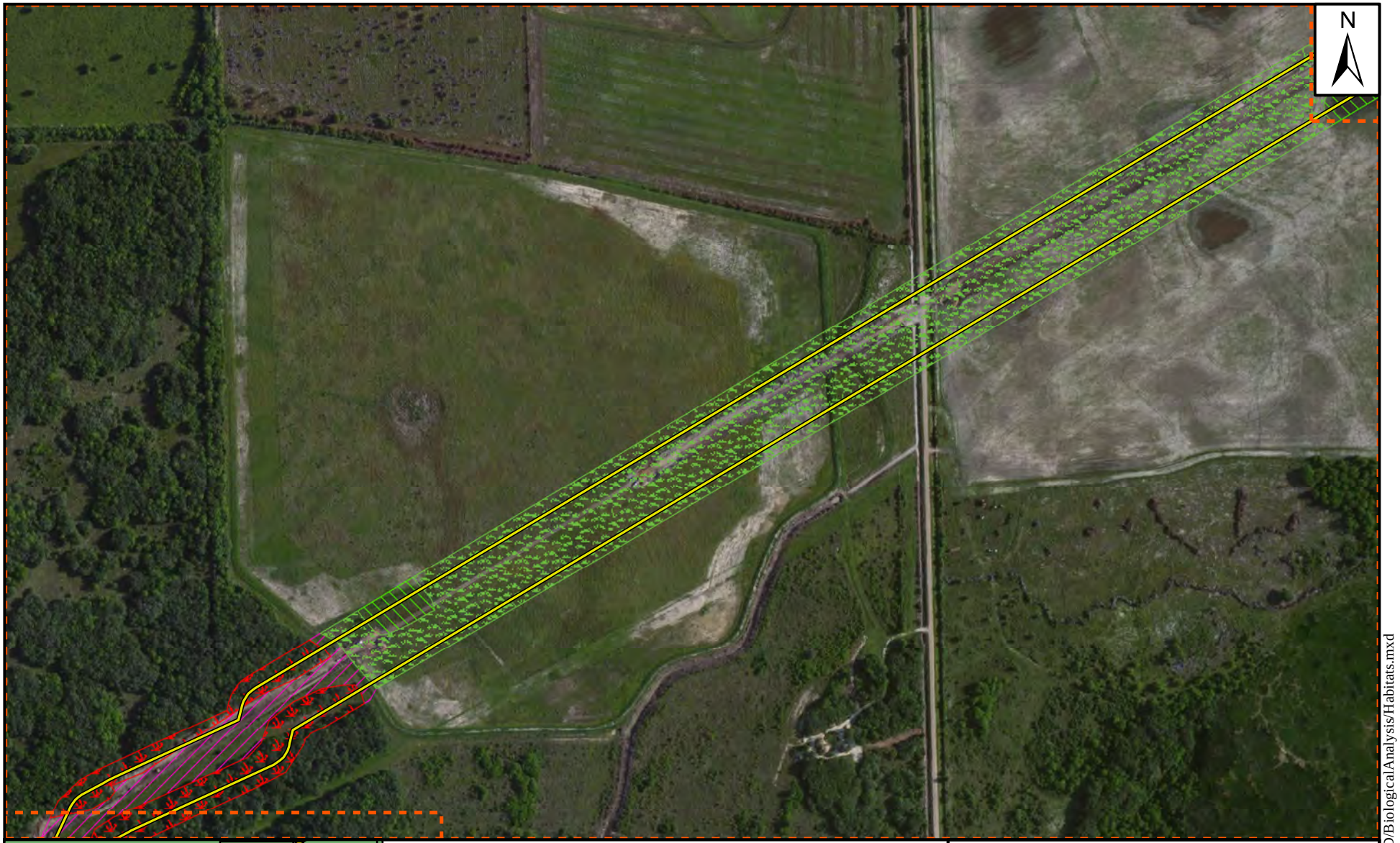
Prepared For: Occidental Chemical Corporation

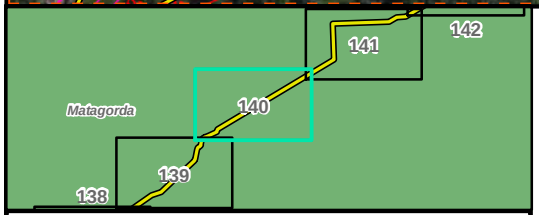
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

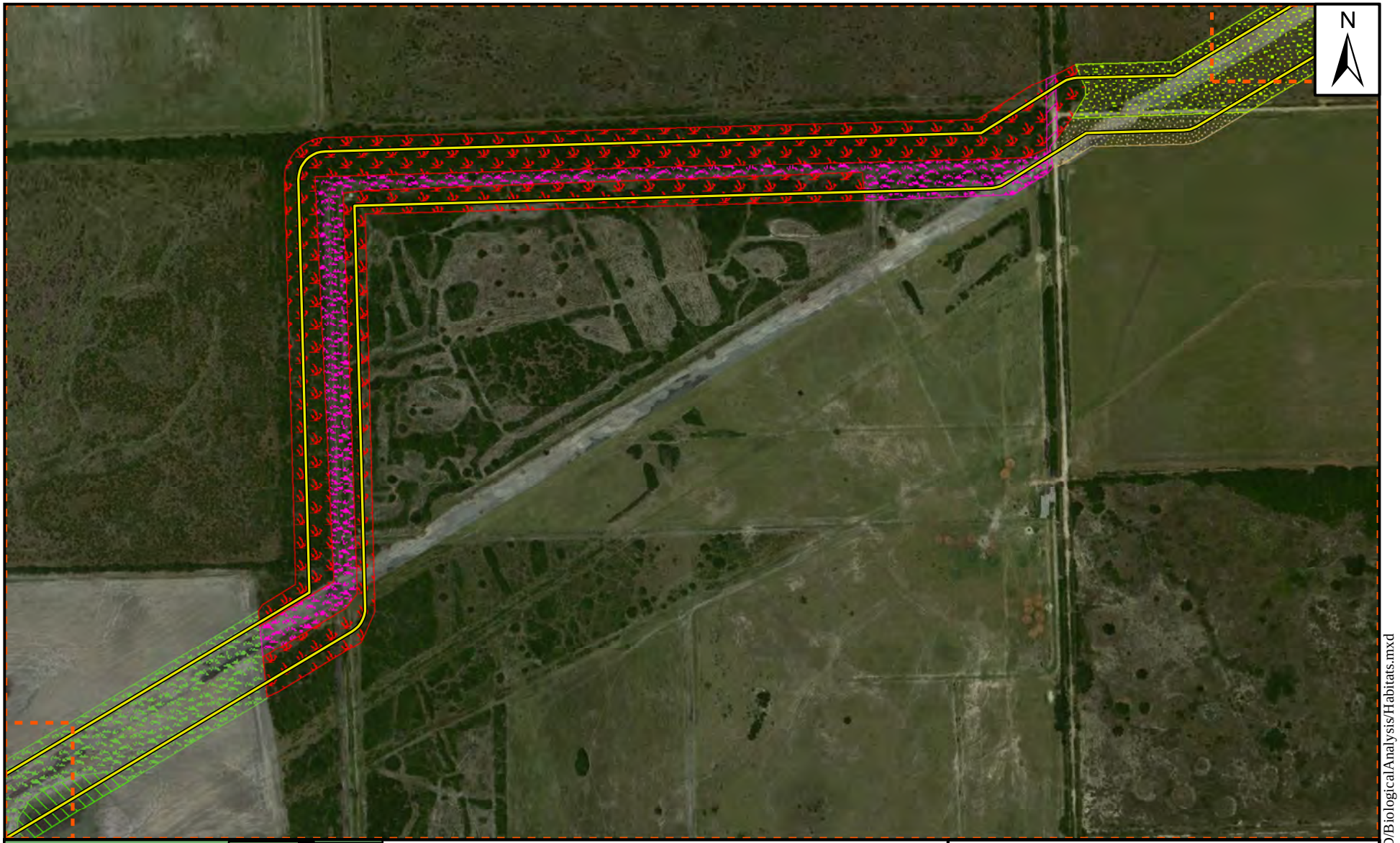
Prepared For: Occidental Chemical Corporation

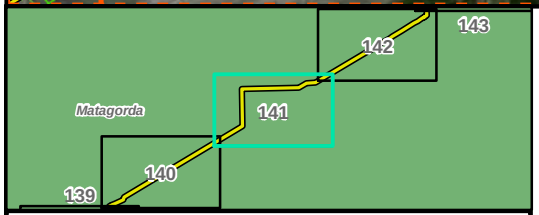
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

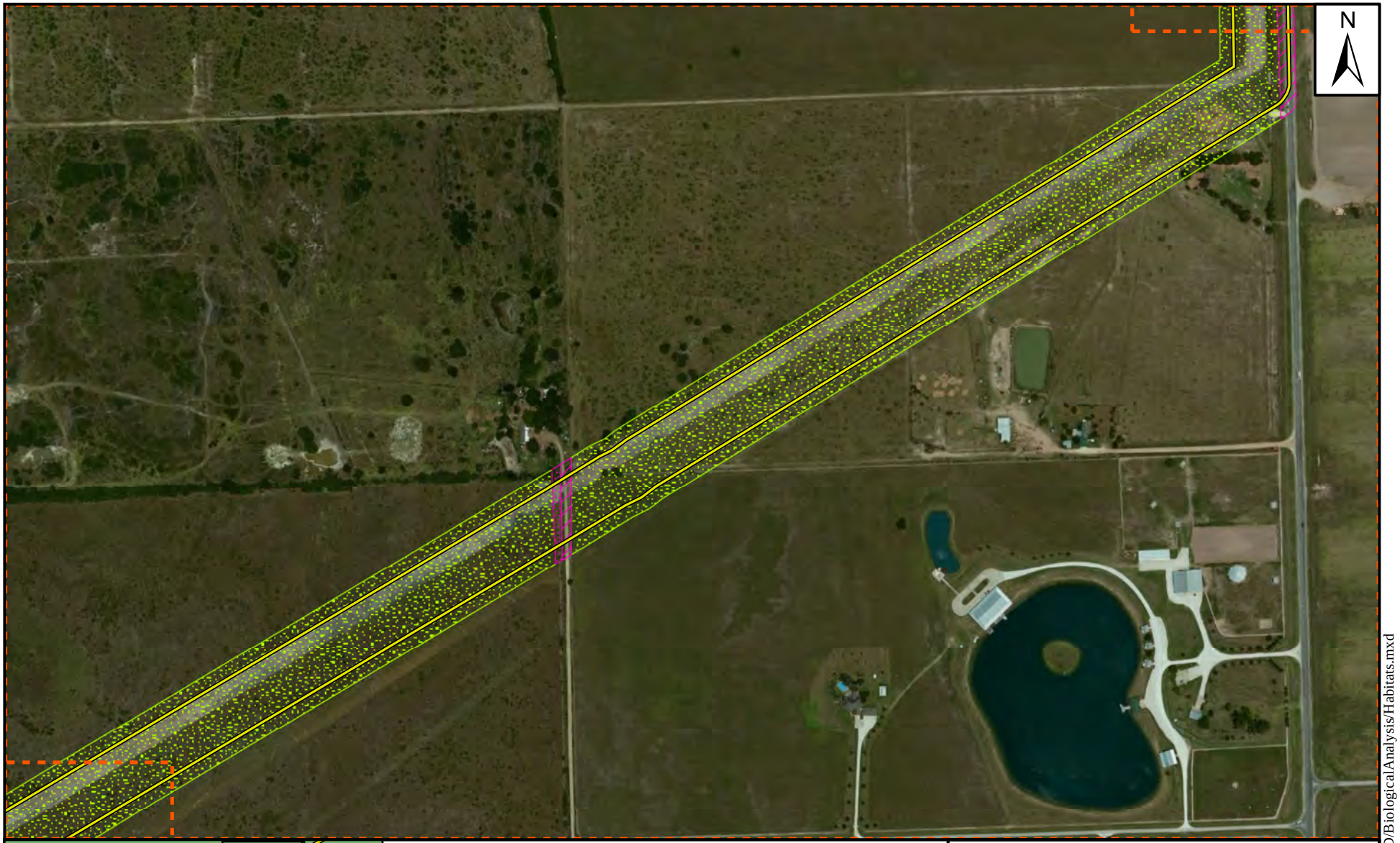
Prepared For: Occidental Chemical Corporation

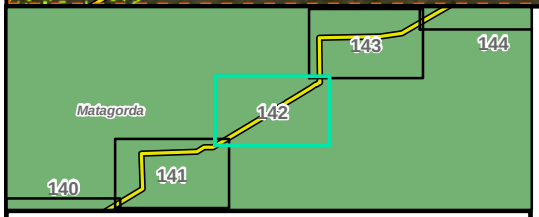
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 142 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

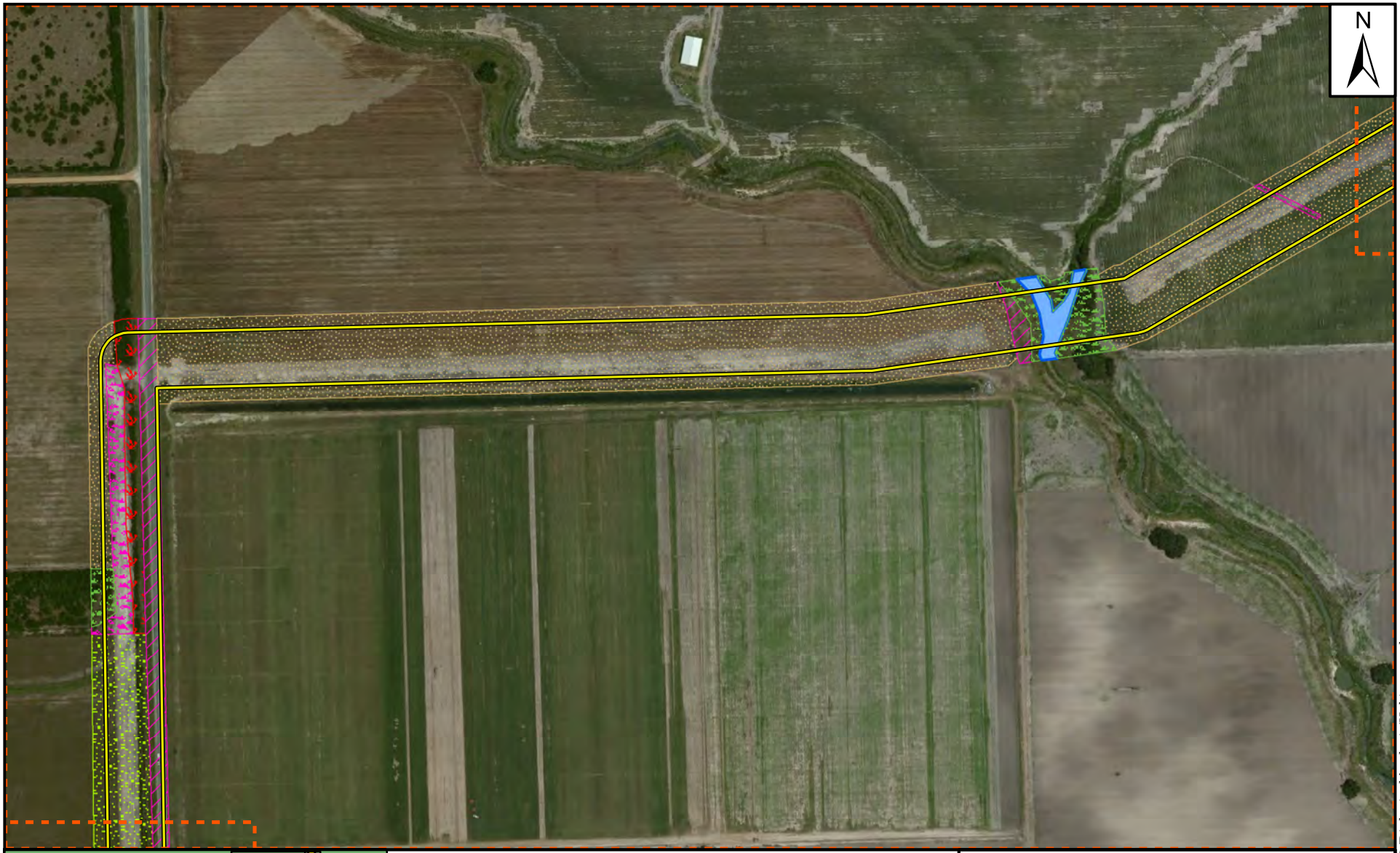
Prepared For: Occidental Chemical Corporation

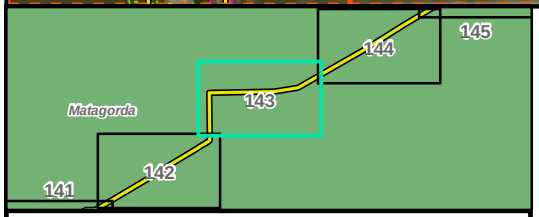
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 143 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

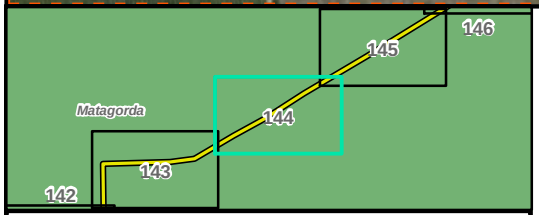
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 144 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

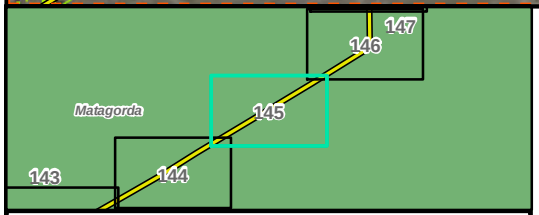
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 145 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

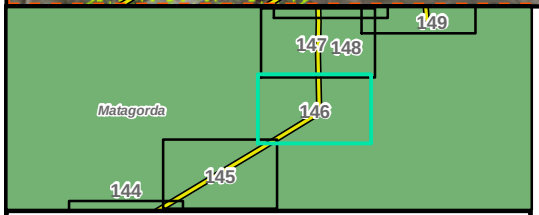
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 146 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

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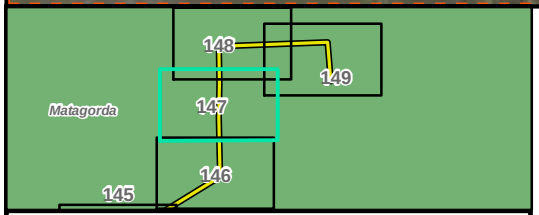
Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

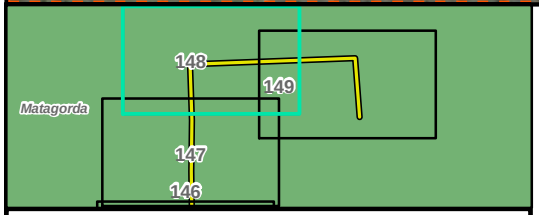
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

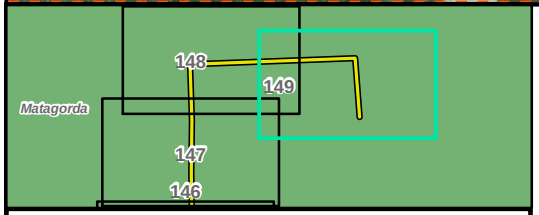
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 149 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

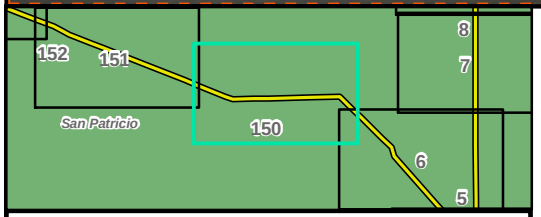
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

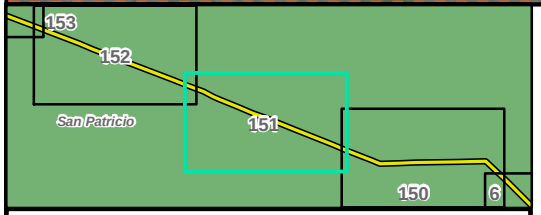
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 151 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

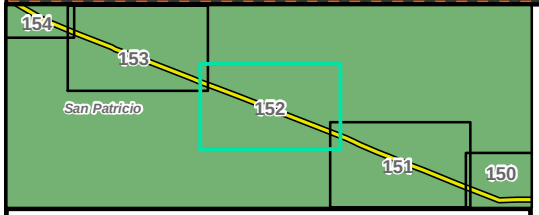
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

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Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

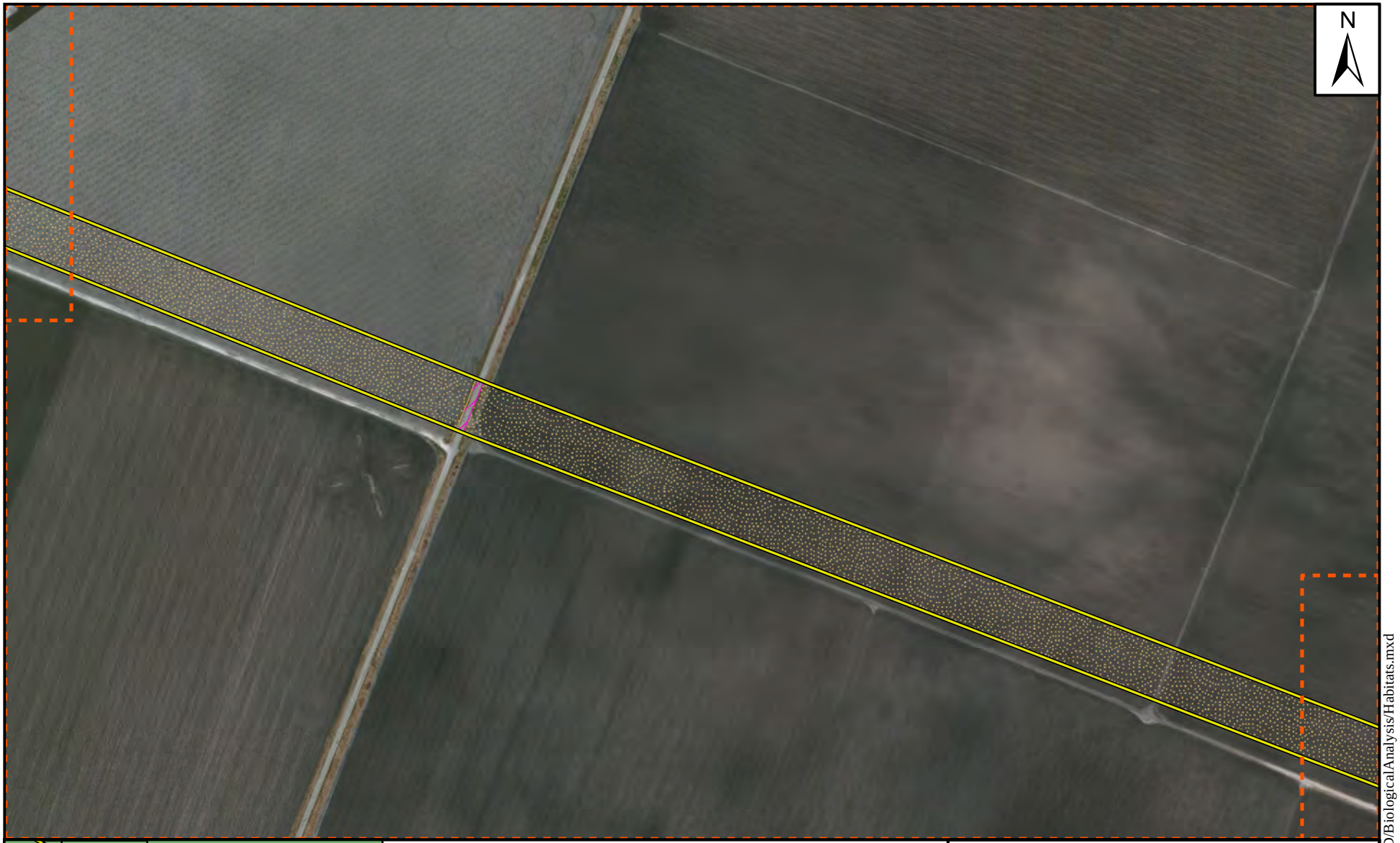
Prepared For: Occidental Chemical Corporation

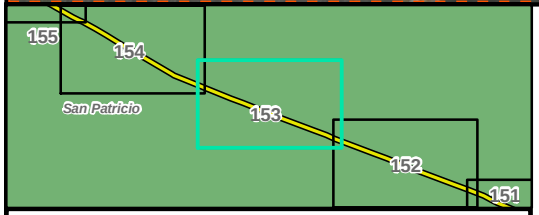
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 153 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

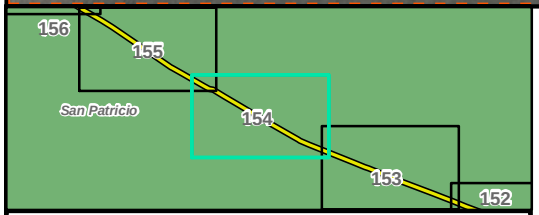
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 154 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

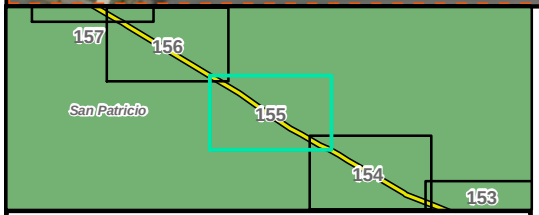
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 155 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

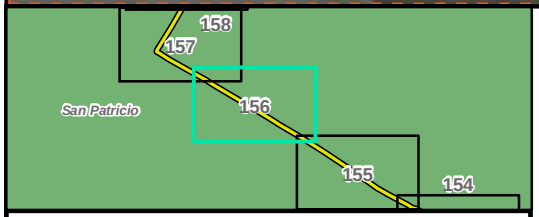
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 156 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

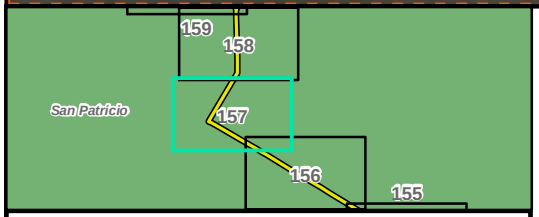
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 157 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

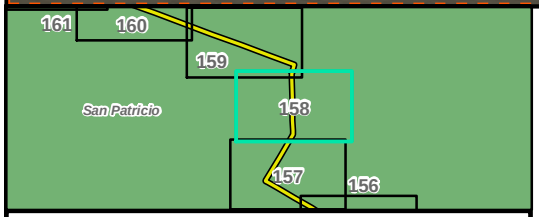
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 158 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

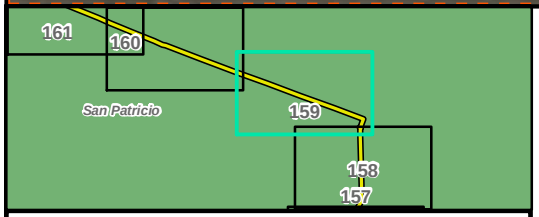
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 159 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

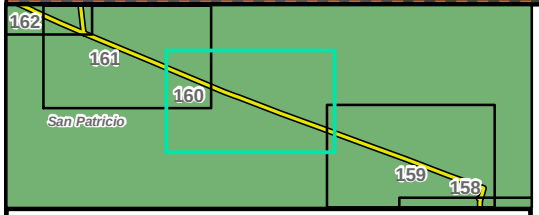
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 160 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

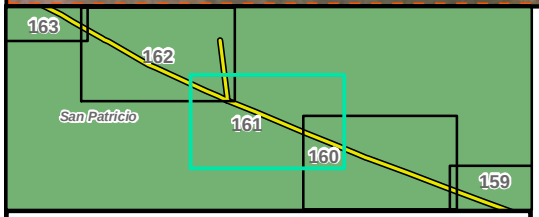
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 161 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

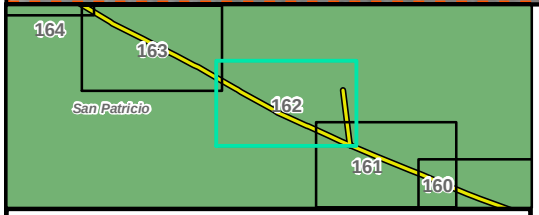
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 162 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

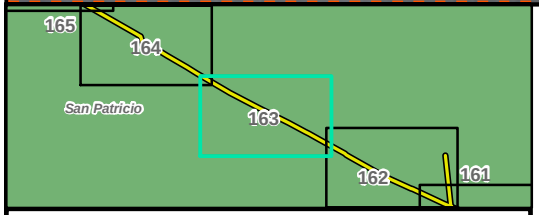
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 163 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

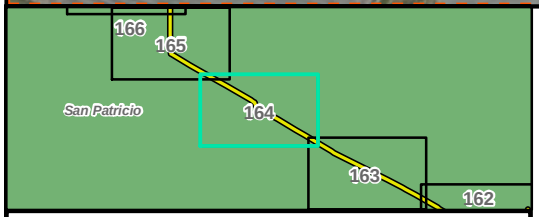
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 164 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

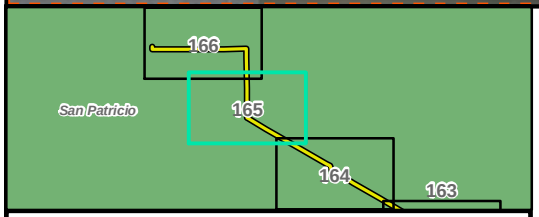
Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT



Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

- Survey Area
- Cropland
- Ditch
- Upland Forest
- Upland Grassland
- Maintained Herbaceous
- Maintained
- PEM wetland
- PFO wetland
- PSS wetland
- Pastureland
- Pond
- Upland Prairie
- Saltmarsh
- Upland Scrub-shrub
- Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 165 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

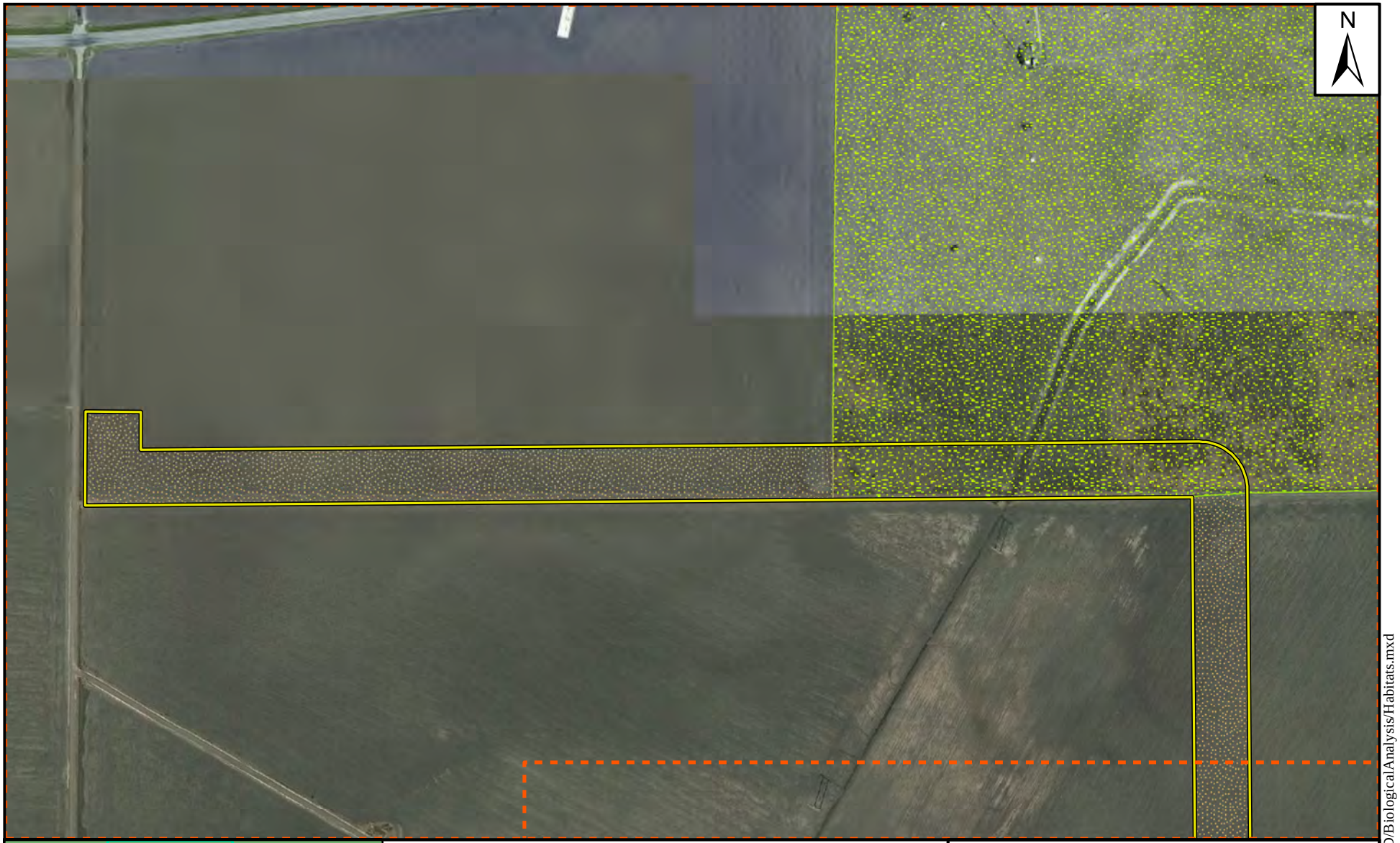
Prepared For: Occidental Chemical Corporation

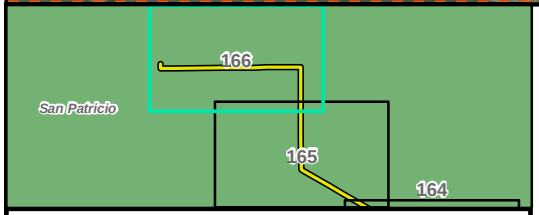
Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd

US EPA ARCHIVE DOCUMENT





Source: ESRI World Imagery from ESRI ArcView Data. Habitat data TT 2013.

LEGEND

Survey Area	Upland Grassland	PFO wetland	Upland Prairie
Cropland	Maintained Herbaceous	PSS wetland	Saltmarsh
Ditch	Maintained	Pastureland	Upland Scrub-shrub
Upland Forest	PEM wetland	Pond	Stream

0 500 1,000 1,500 Feet

Scale = 1:6,000

SHEET 166 of 166

Appendix A. Habitats Traversed by the OxyChem Markham Pipeline Corridor, San Patricio Pipeline Corridor, and Ethane Cracker Project.

Prepared For: Occidental Chemical Corporation

Prepared By: TETRA TECH

Date: 6/13

P:GIS/Projects/OxyPhaseII/MXD/BiologicalAnalysis/Habitats.mxd