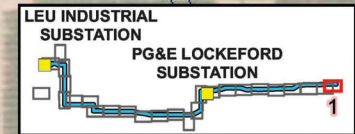
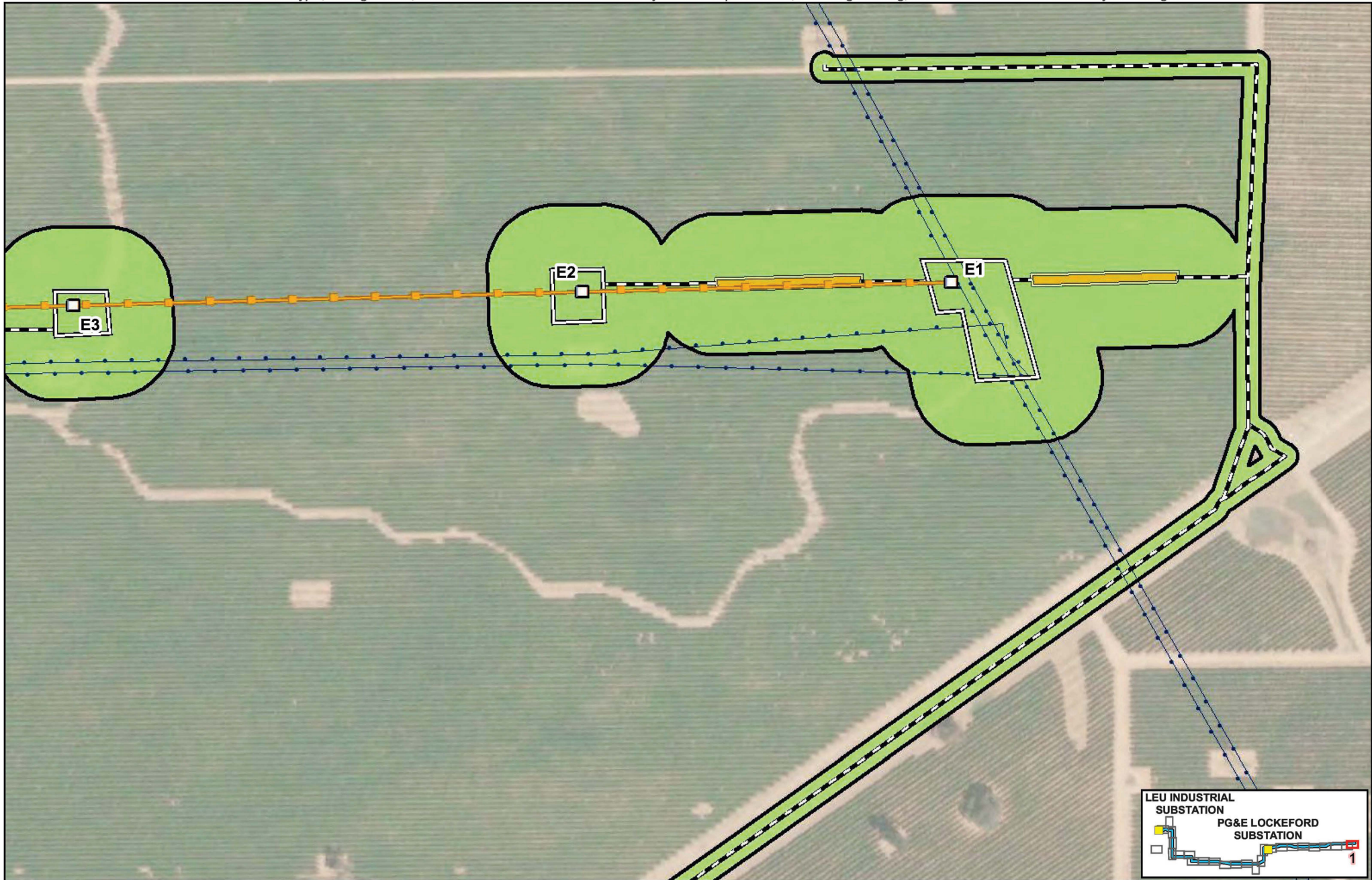


Appendix F

Habitat Figures for
Northern San Joaquin 230 kV
Transmission Project

Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area
(387.06 acres)

- Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover
Agriculture

Source:
1) Esri World
Imagery

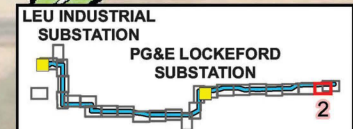
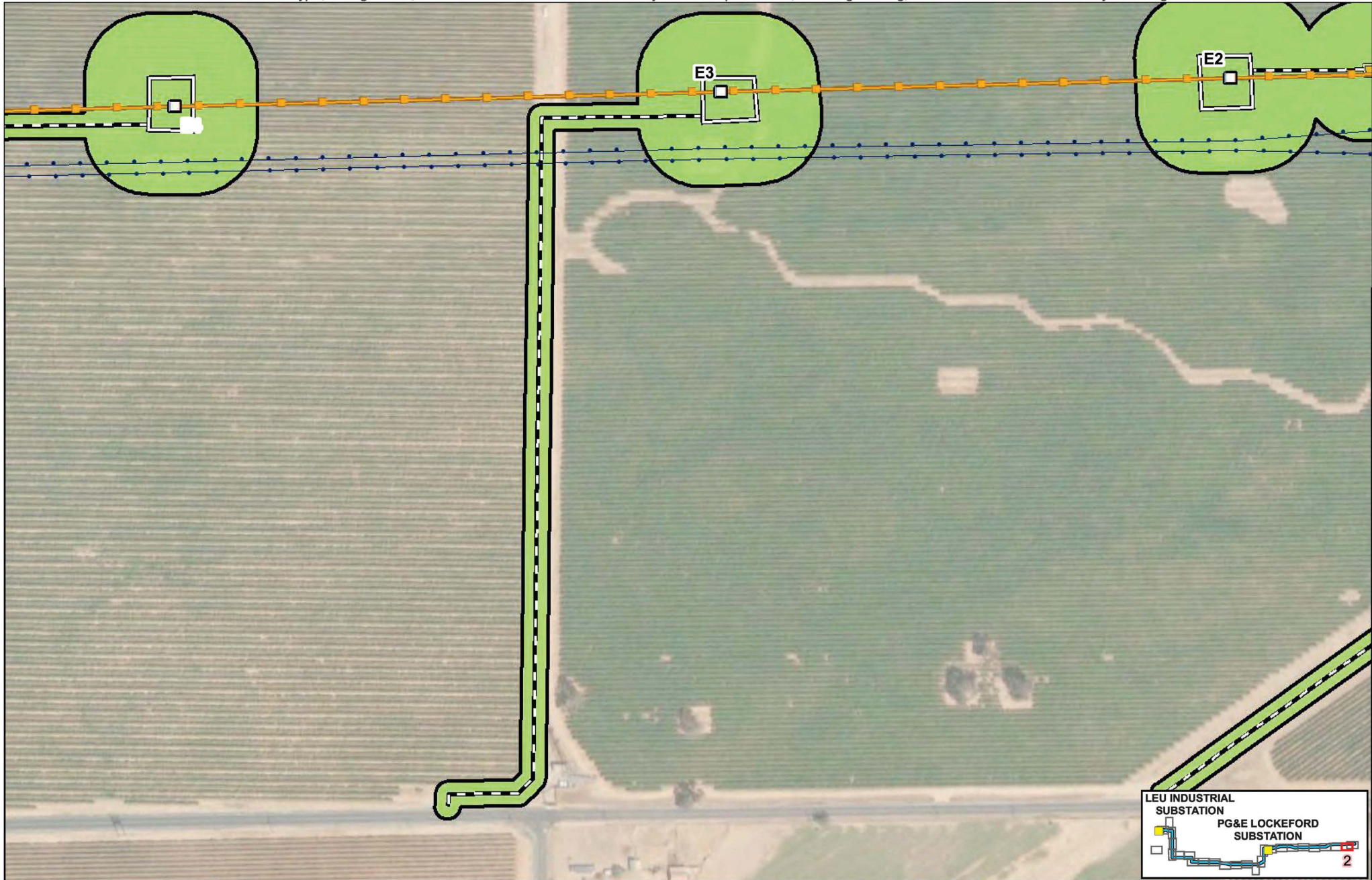
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Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 1 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

- Biological Study Area (387.06 acres)
- ▲ Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- ▲ Potential Guard Structure Area
- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Agriculture

Source:
1) Esri World Imagery

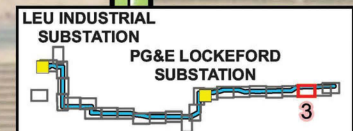
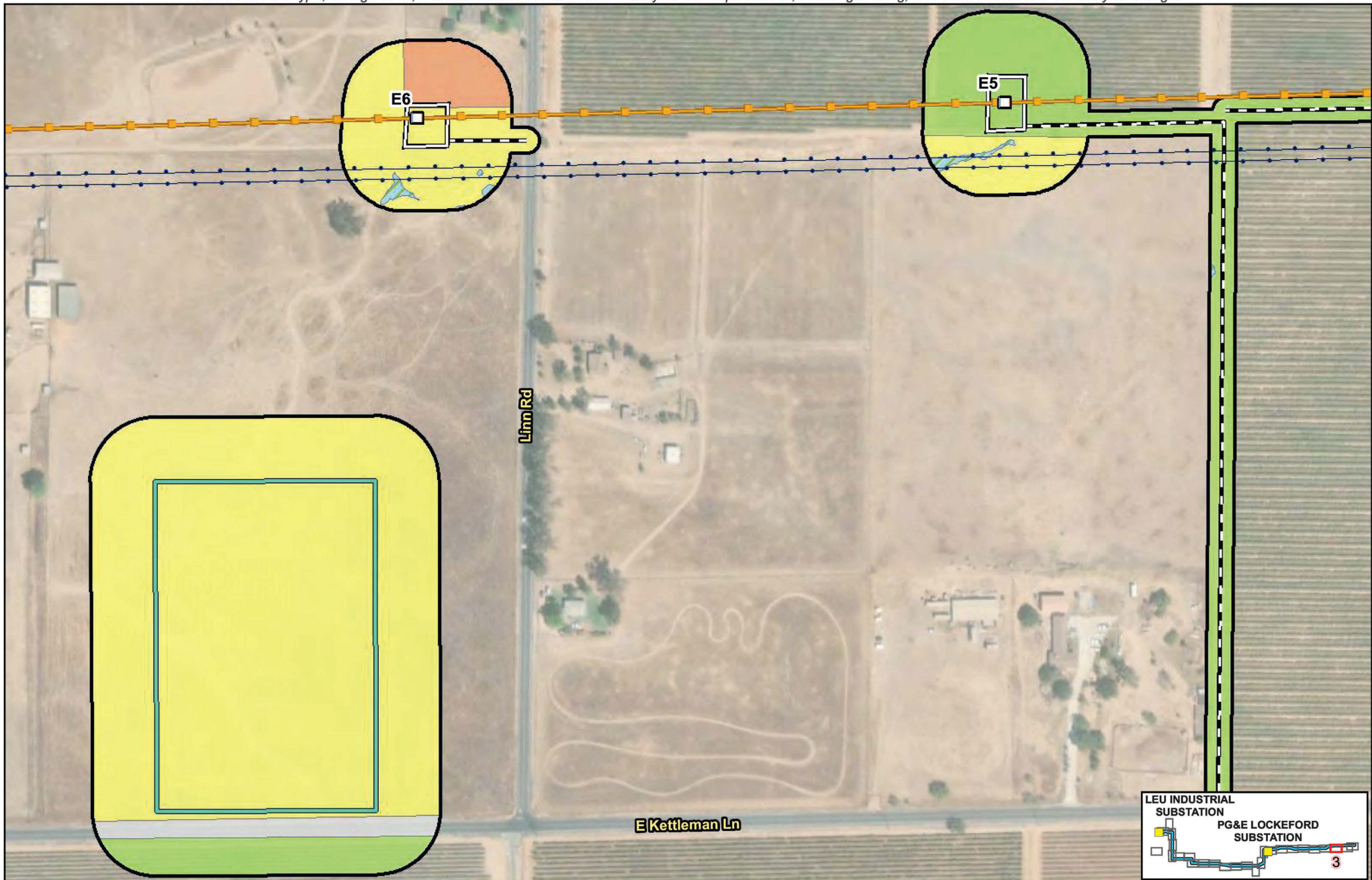
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FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 2 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area	Agriculture
Substation	RO-L1 Proposed TSP	Proposed Access Route	Developed/Disturbed
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area	Grassland
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site	Ruderal
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline	Wetlands
		Proposed Staging Area	

Source:
1) Esri World Imagery

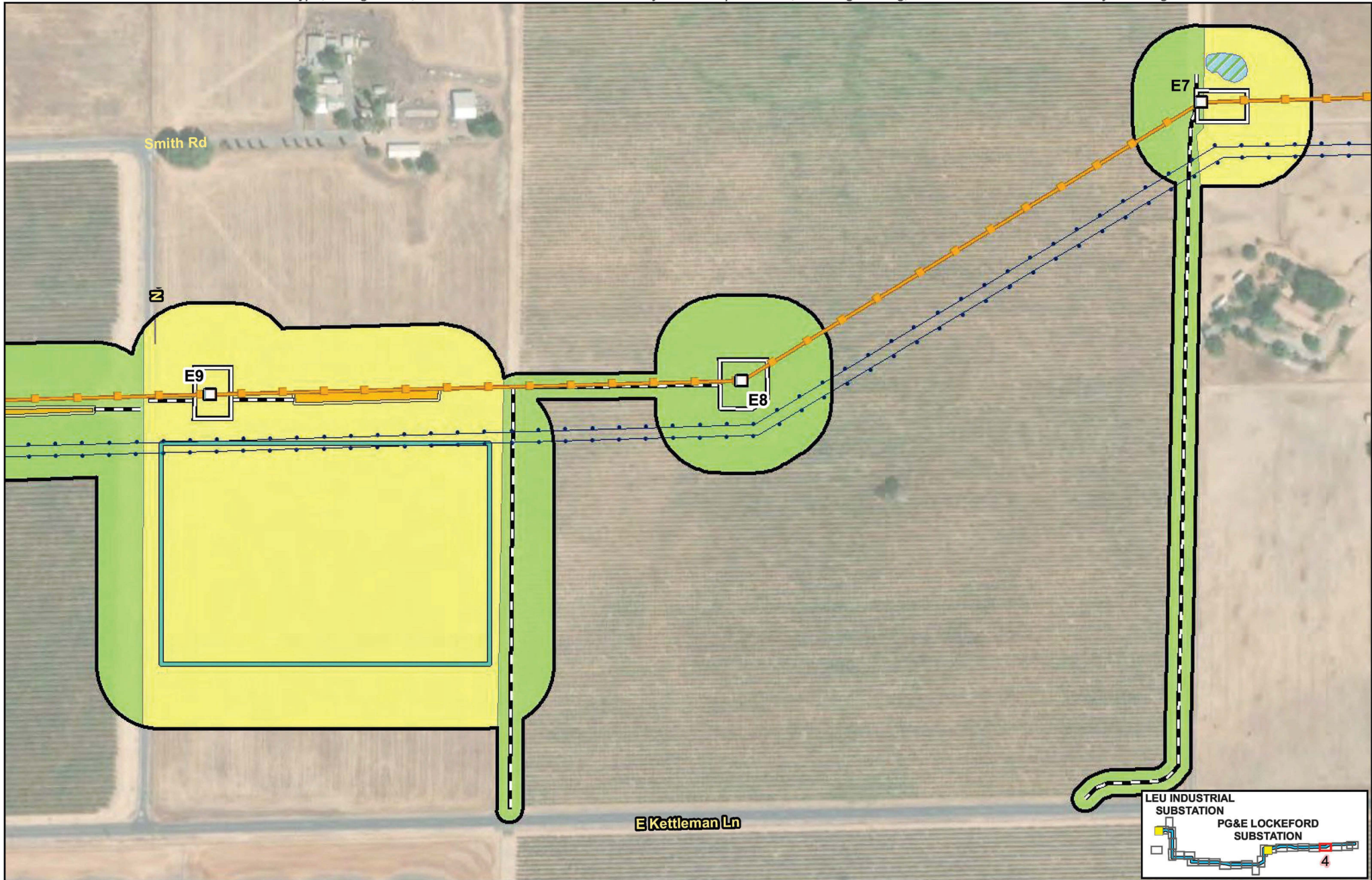
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FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 3 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend			
Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area	Land Cover Agriculture Grassland Other Waters Wetlands
Substation	RO-L1 Proposed TSP	Proposed Access Route	
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area	
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site	
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline	
		Proposed Staging Area	

Source:
1) Esri World Imagery

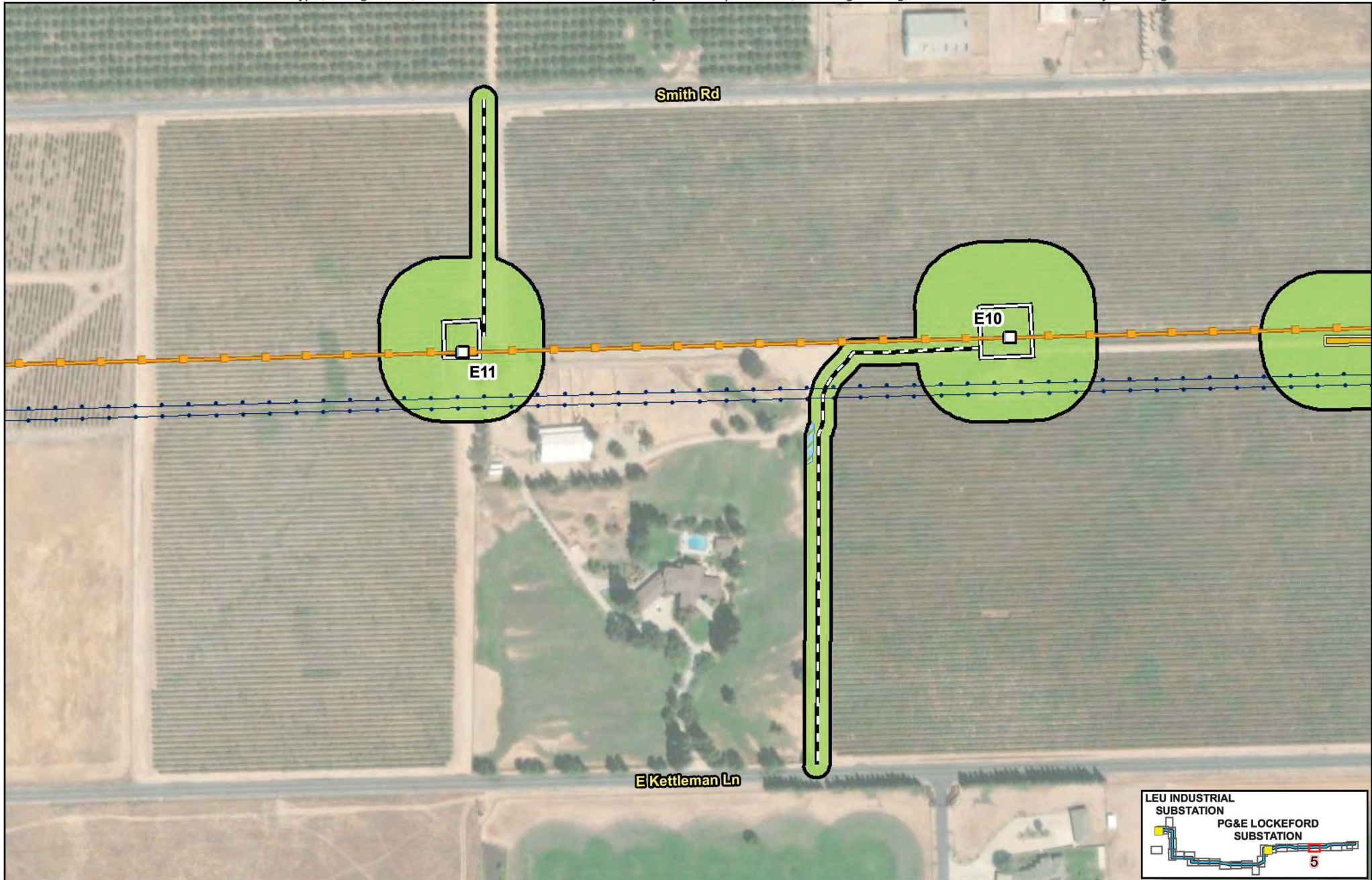
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Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 4 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area
(387.06 acres)

- Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Agriculture
- Wetlands

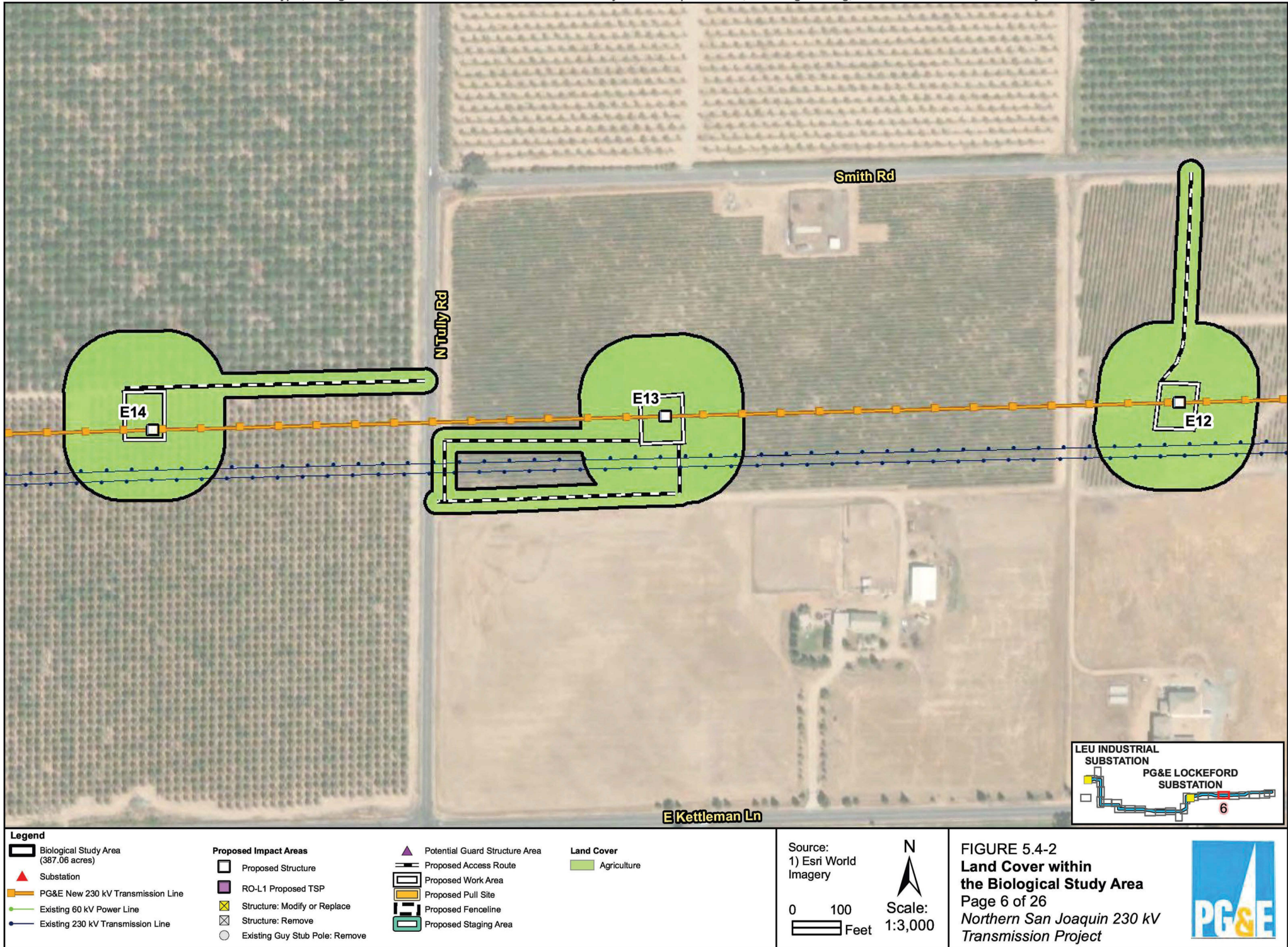
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1) Esri World
Imagery

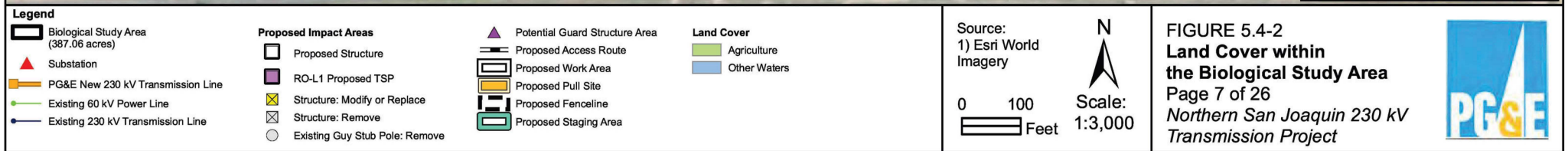
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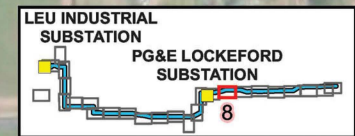
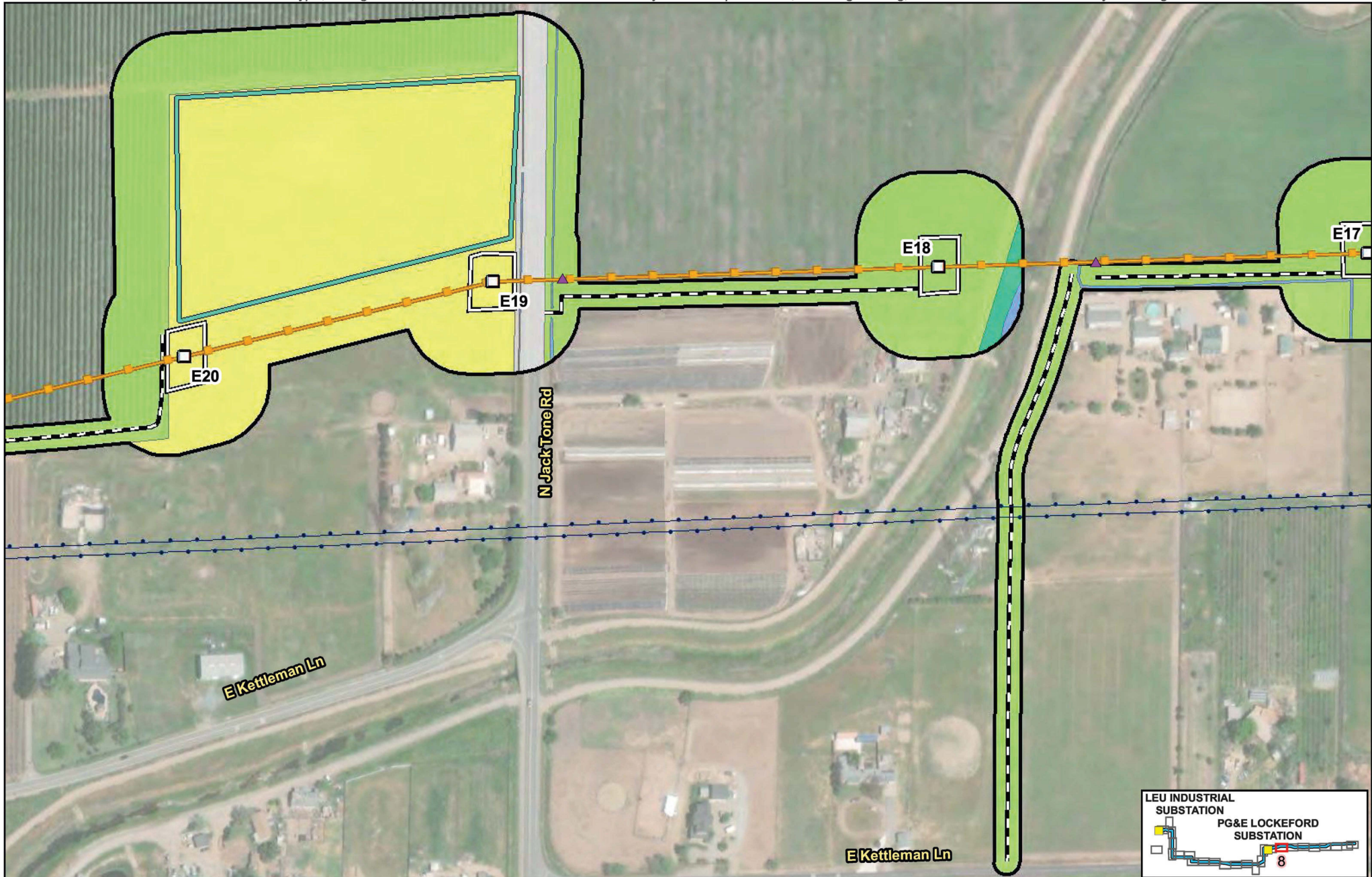
FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 5 of 26
Northern San Joaquin 230 kV
Transmission Project







Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

<ul style="list-style-type: none"> Biological Study Area (387.06 acres) Substation PG&E New 230 kV Transmission Line Existing 60 kV Power Line Existing 230 kV Transmission Line 	<ul style="list-style-type: none"> Proposed Structure RO-L1 Proposed TSP Structure: Modify or Replace Structure: Remove Existing Guy Stub Pole: Remove 	<ul style="list-style-type: none"> Potential Guard Structure Area Proposed Access Route Proposed Work Area Proposed Pull Site Proposed Fenceline Proposed Staging Area 	<ul style="list-style-type: none"> Land Cover Agriculture Developed/Disturbed Grassland Other Waters Riparian
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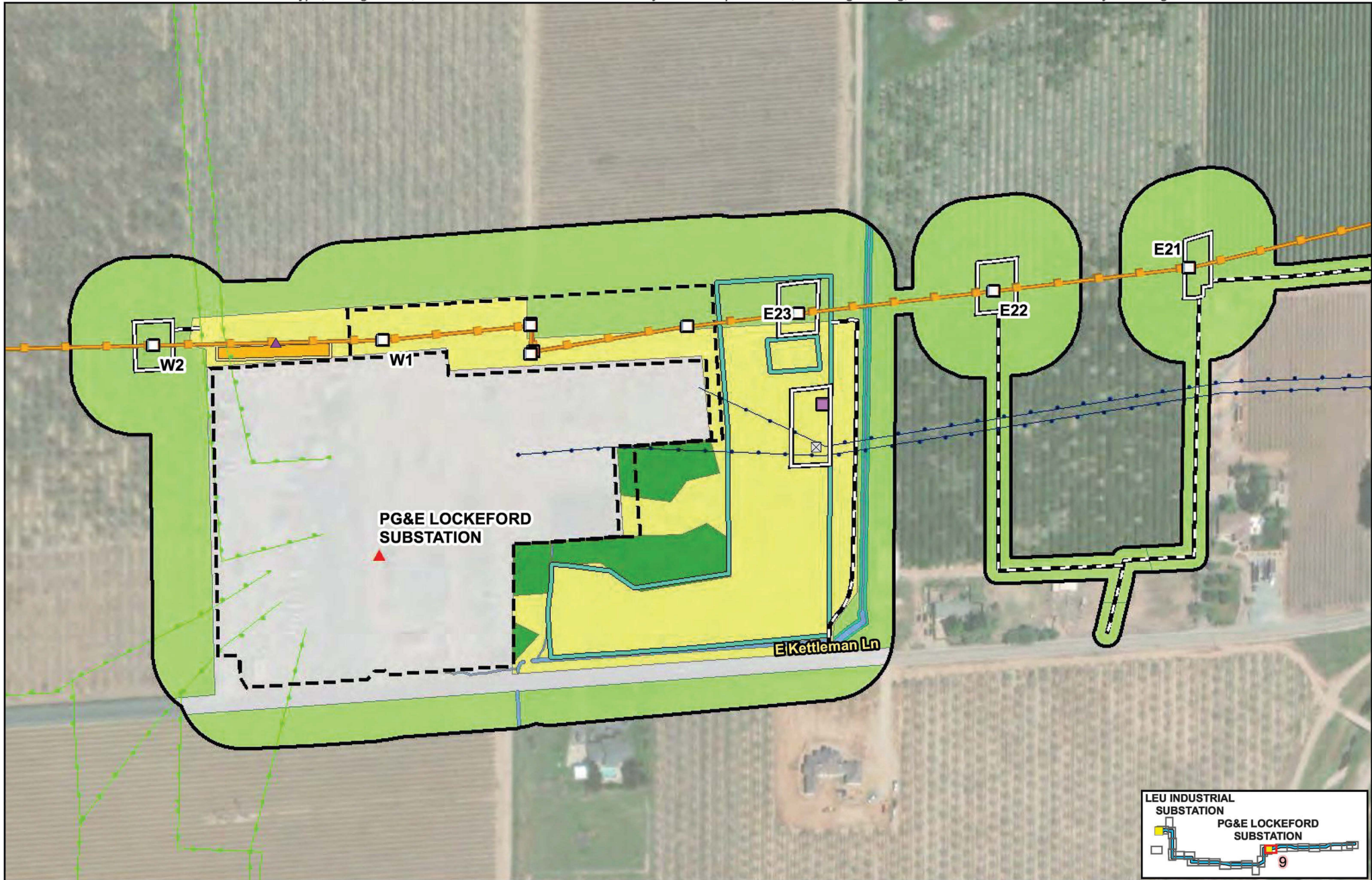
Source:
1) Esri World Imagery

0 100 Feet

Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 8 of 26
Northern San Joaquin 230 kV
Transmission Project





Legend

Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area	Agriculture
Substation	RO-L1 Proposed TSP	Proposed Access Route	Developed/Disturbed
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area	Grassland
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site	Other Waters
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline	Riparian
		Proposed Staging Area	Tree Cover

Source:
1) Esri World Imagery

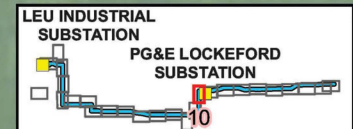
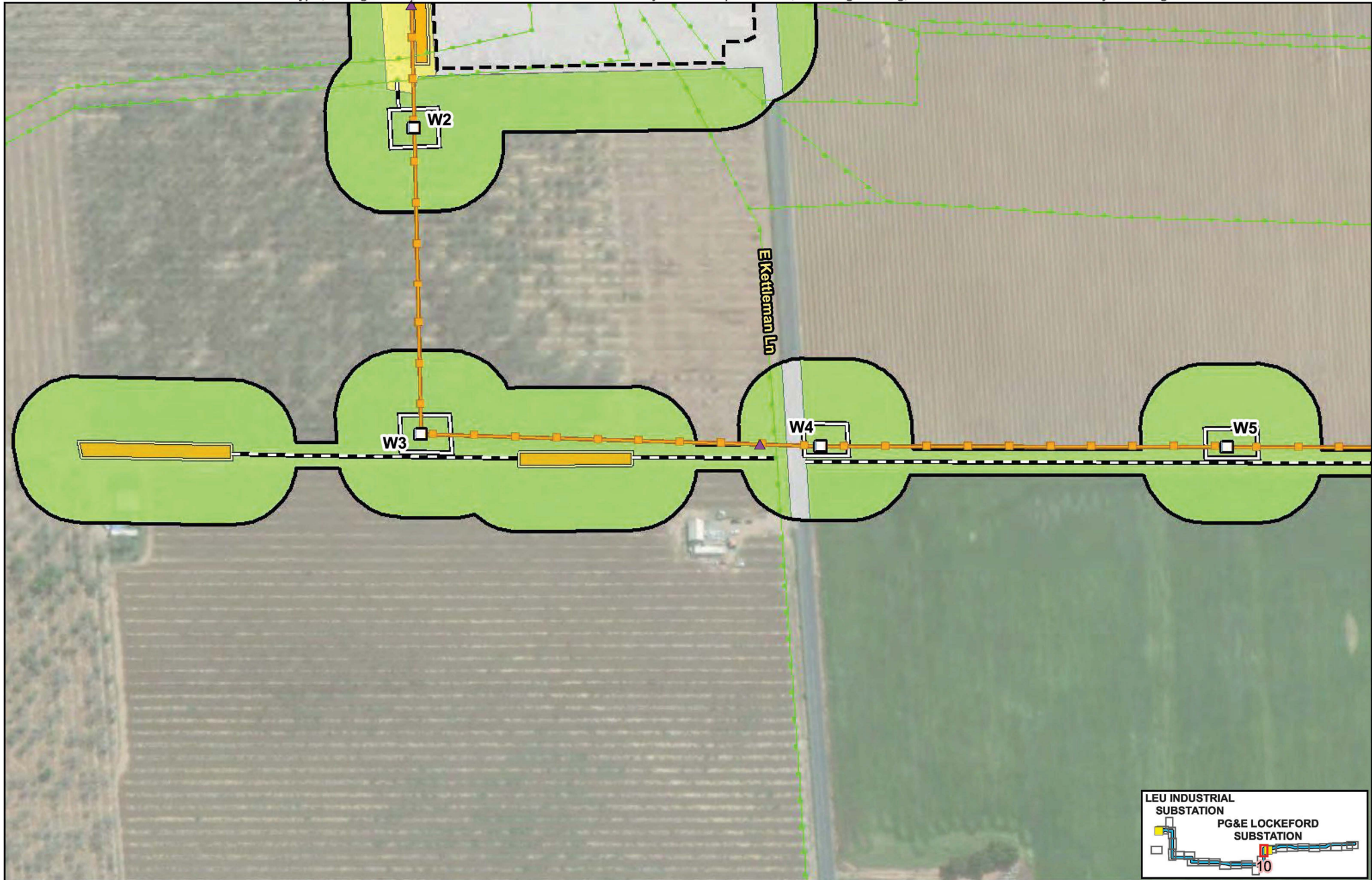
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FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 9 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

 Biological Study Area
(387.06 acres)

- ▲ Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Agriculture
- Developed/Disturbed
- Grassland

Source:
1) Esri World
Imagery

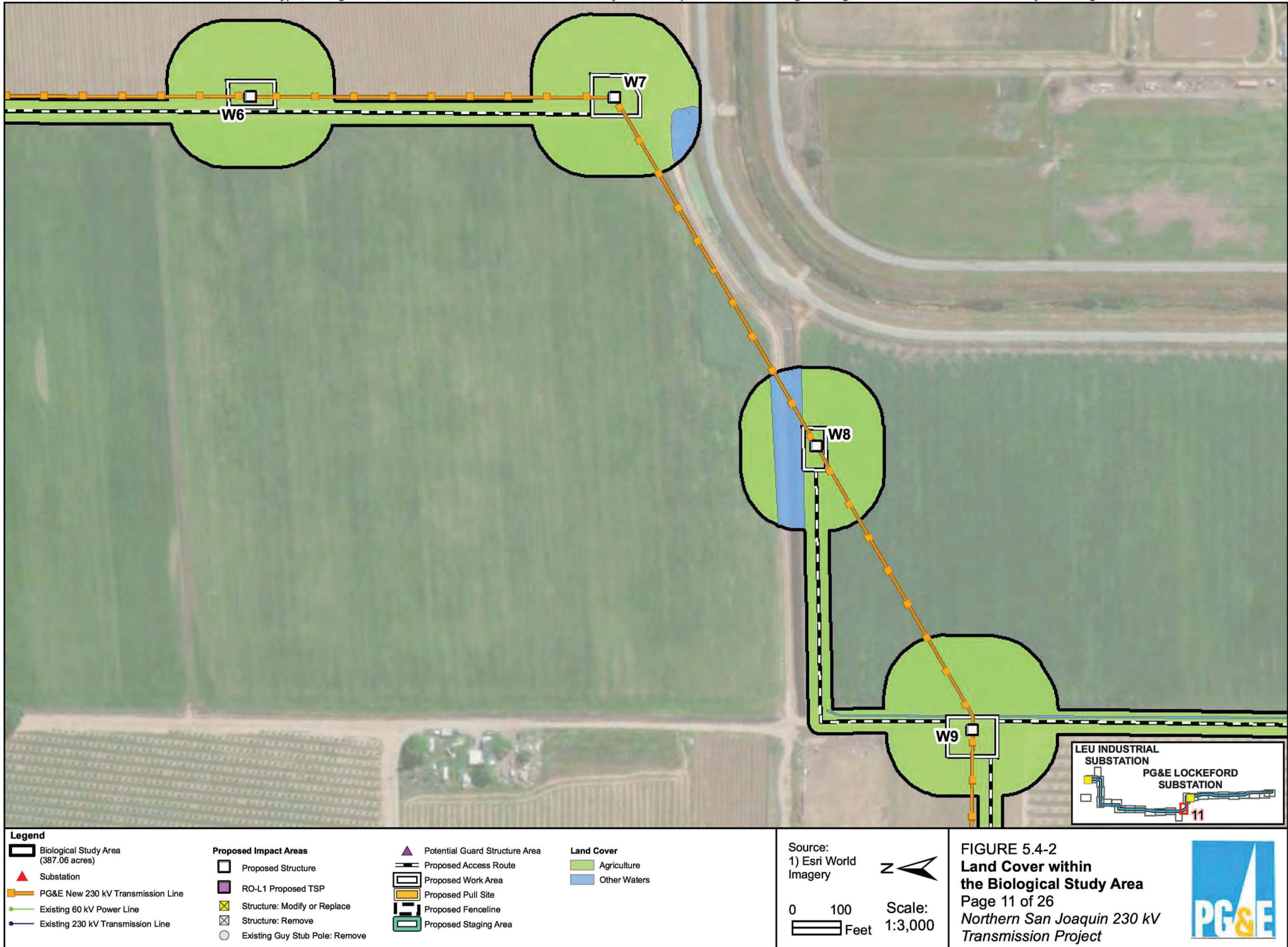


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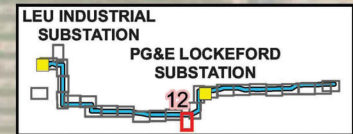
FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 10 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend			
Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area	Land Cover Agriculture Other Waters Riparian
Substation	RO-L1 Proposed TSP	Proposed Access Route	
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area	
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site	
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline	
		Proposed Staging Area	

Source:
1) Esri World Imagery

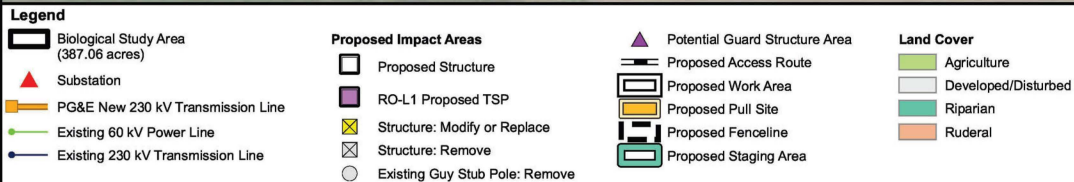
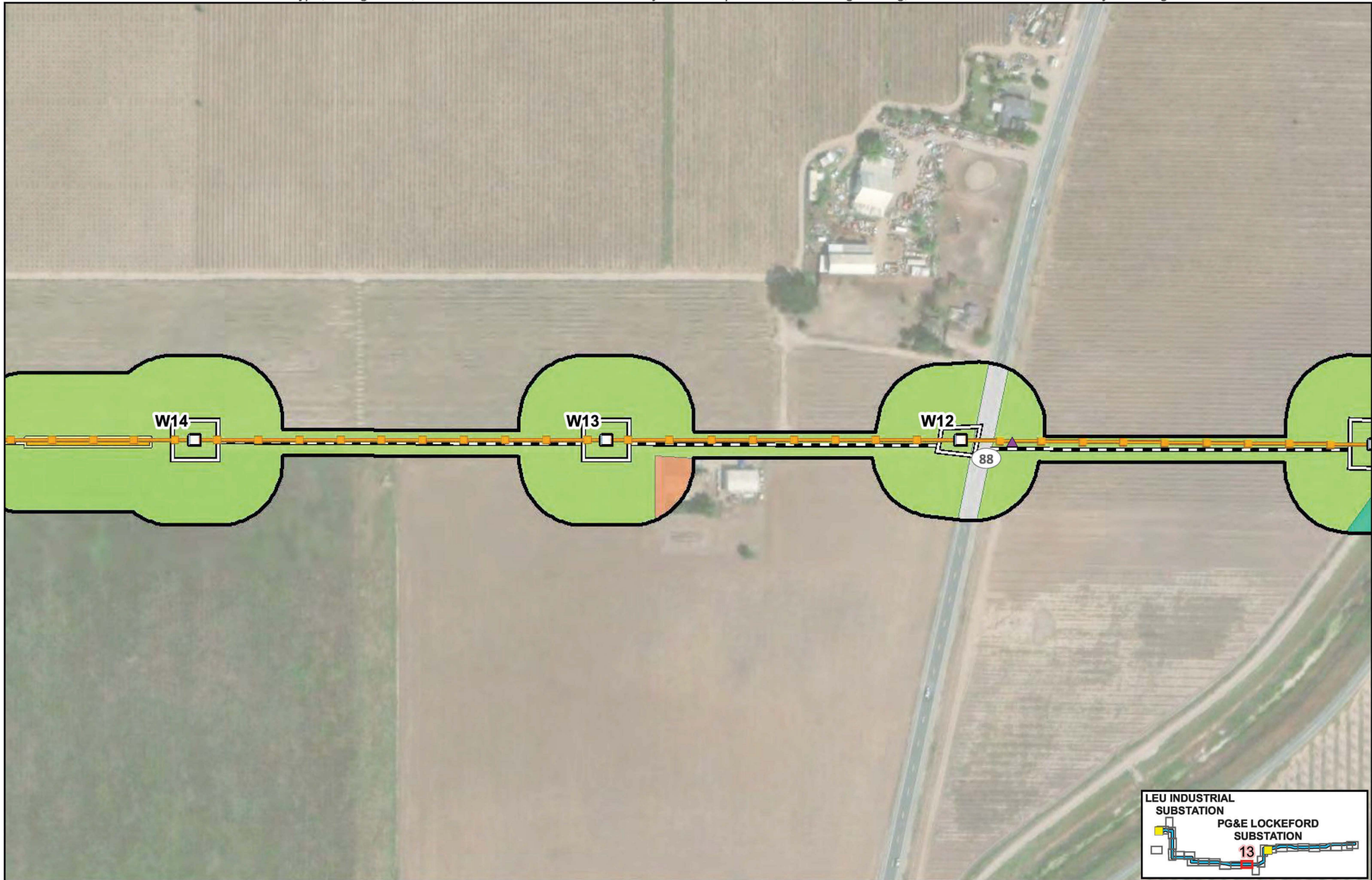
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FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 12 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



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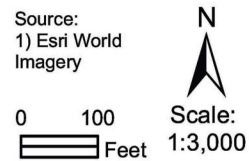
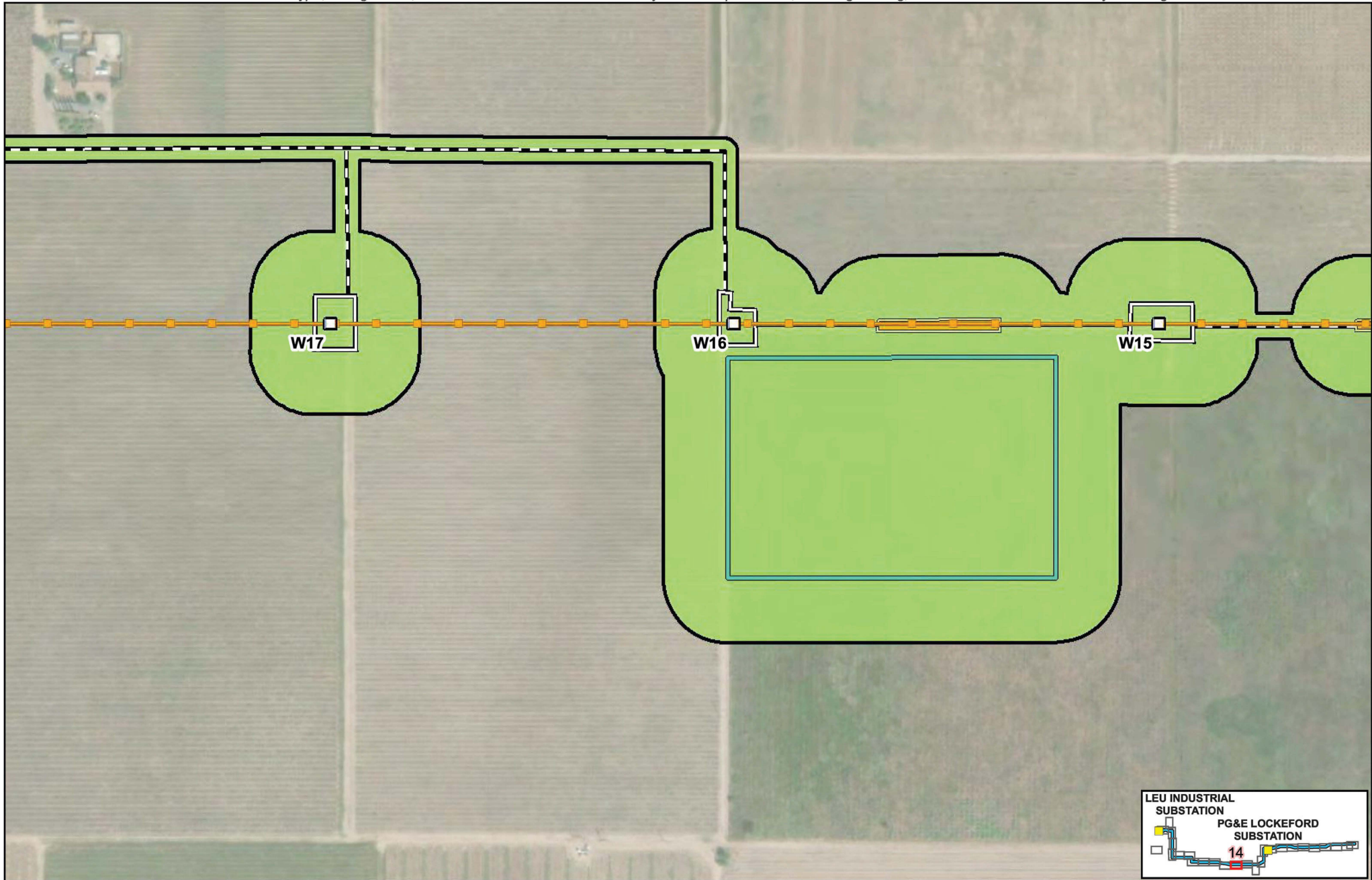


FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 13 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

- Biological Study Area (387.06 acres)
- ▲ Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Agriculture

Source:
1) Esri World Imagery

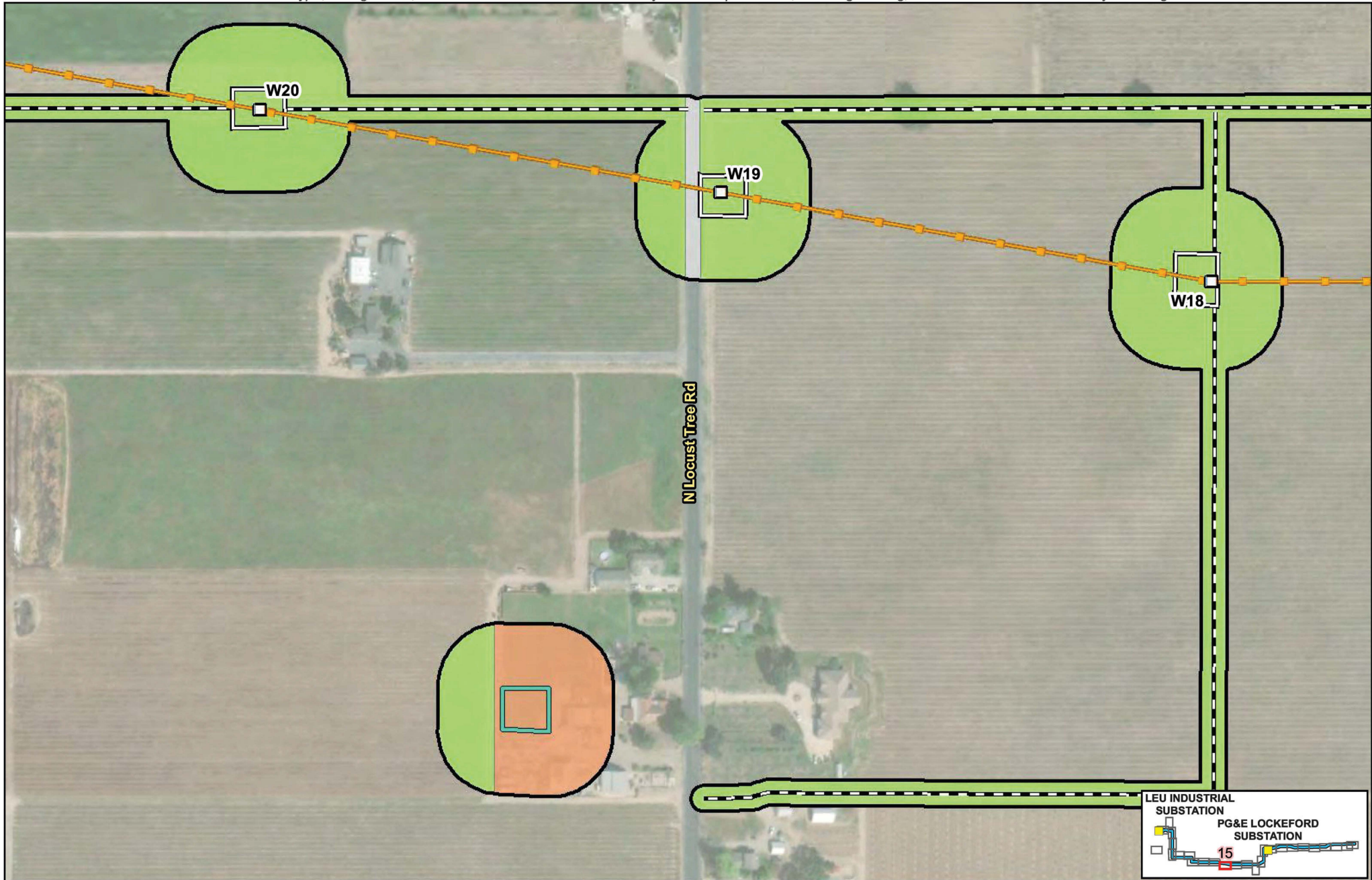
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Scale:
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FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 14 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area
(387.06 acres)

- Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Agriculture
- Developed/Disturbed
- Ruderal

Source:
1) Esri World
Imagery

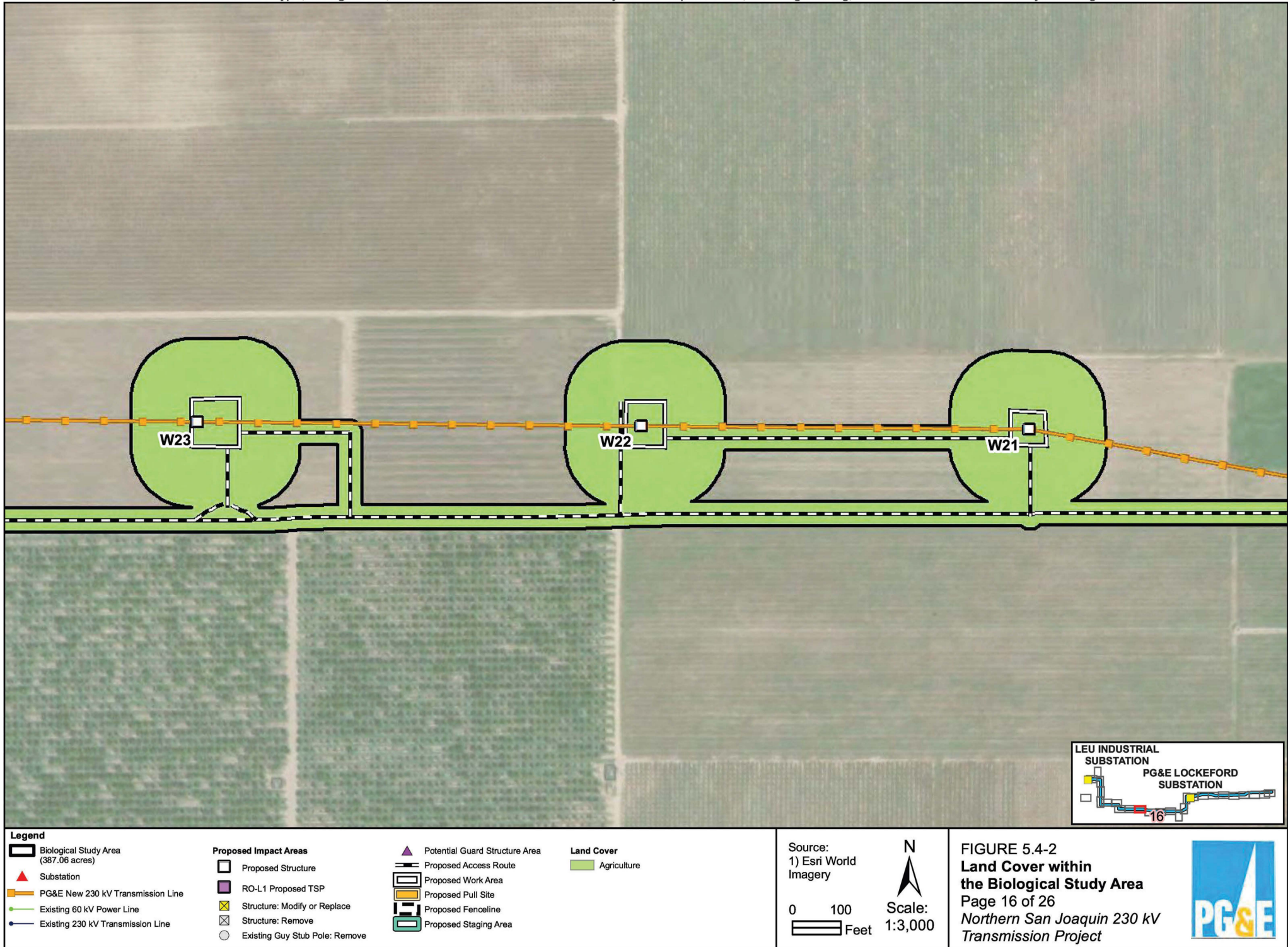
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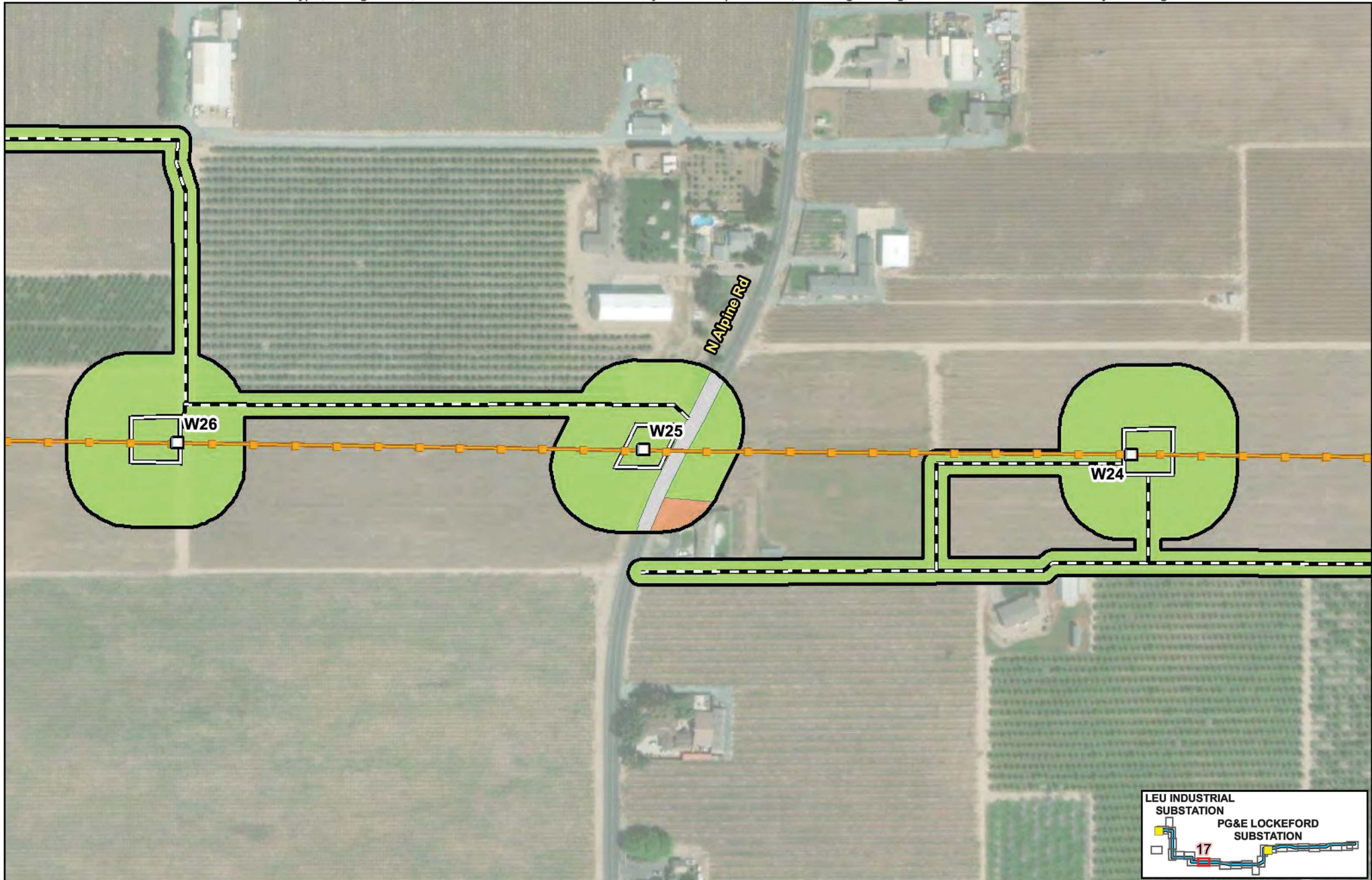
FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 15 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area
(387.06 acres)

- Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Agriculture
- Developed/Disturbed
- Ruderal

Source:
1) Esri World
Imagery

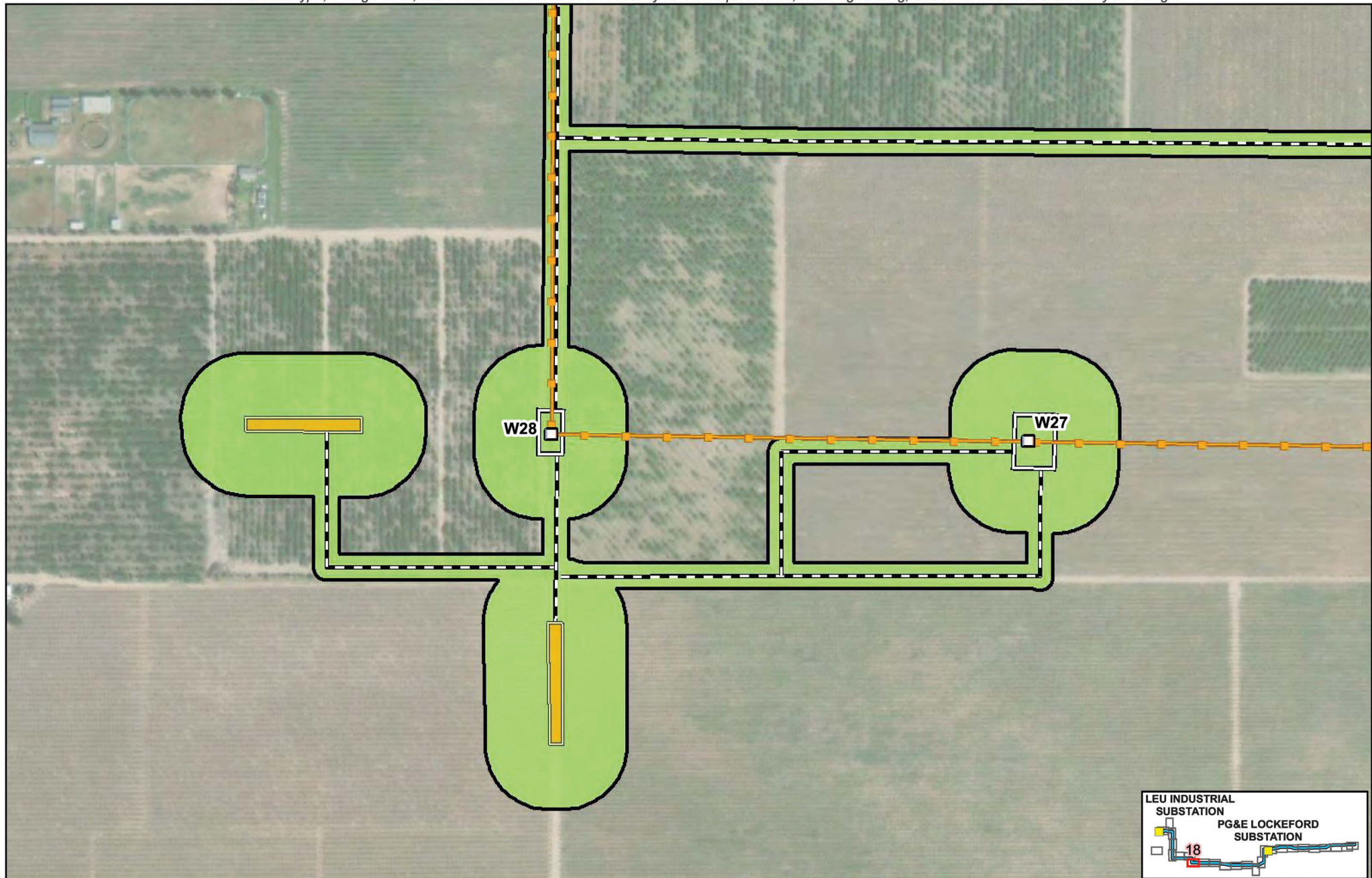
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Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 17 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area
(387.06 acres)

- Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover
Agriculture

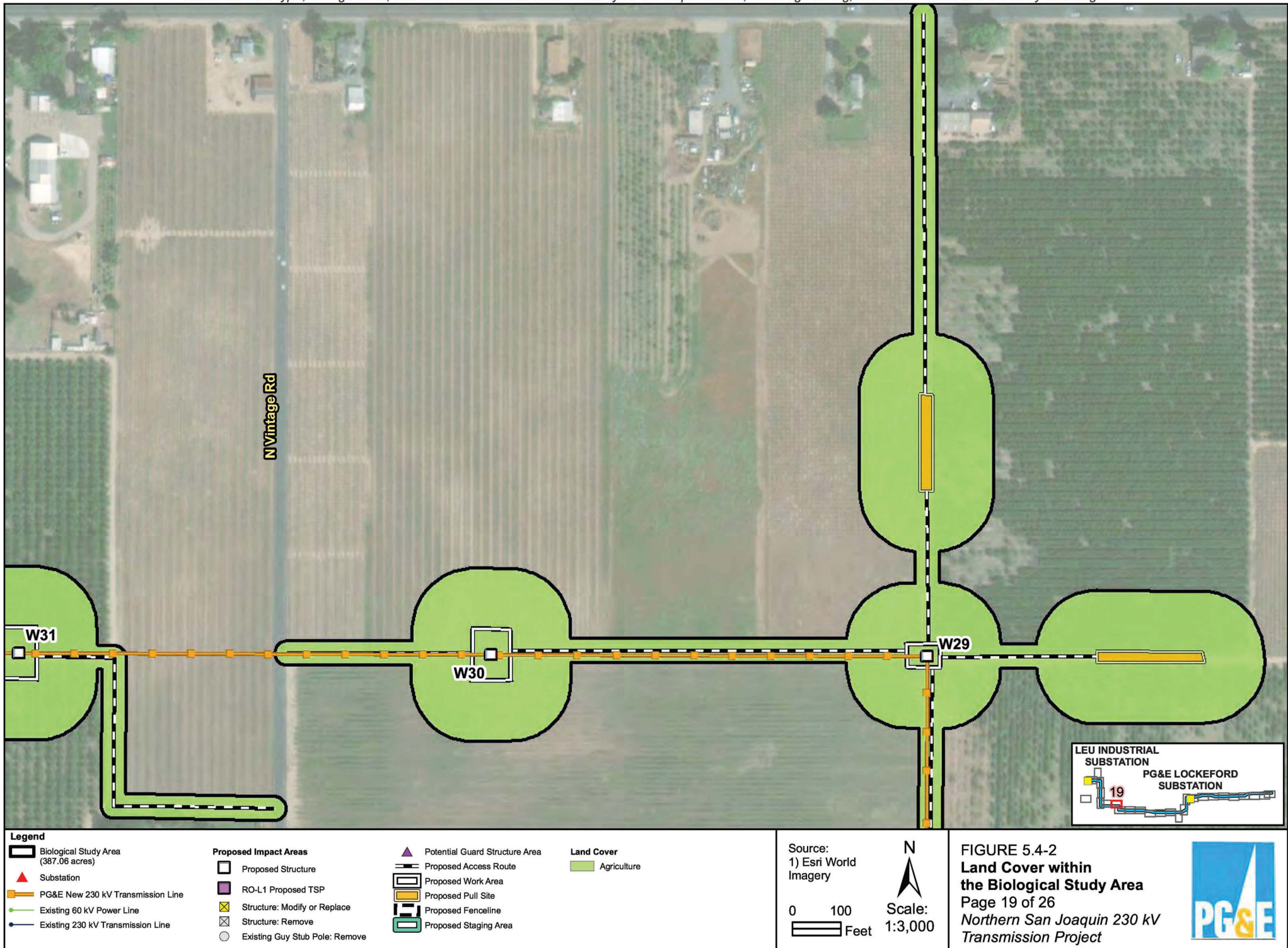
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1) Esri World
Imagery

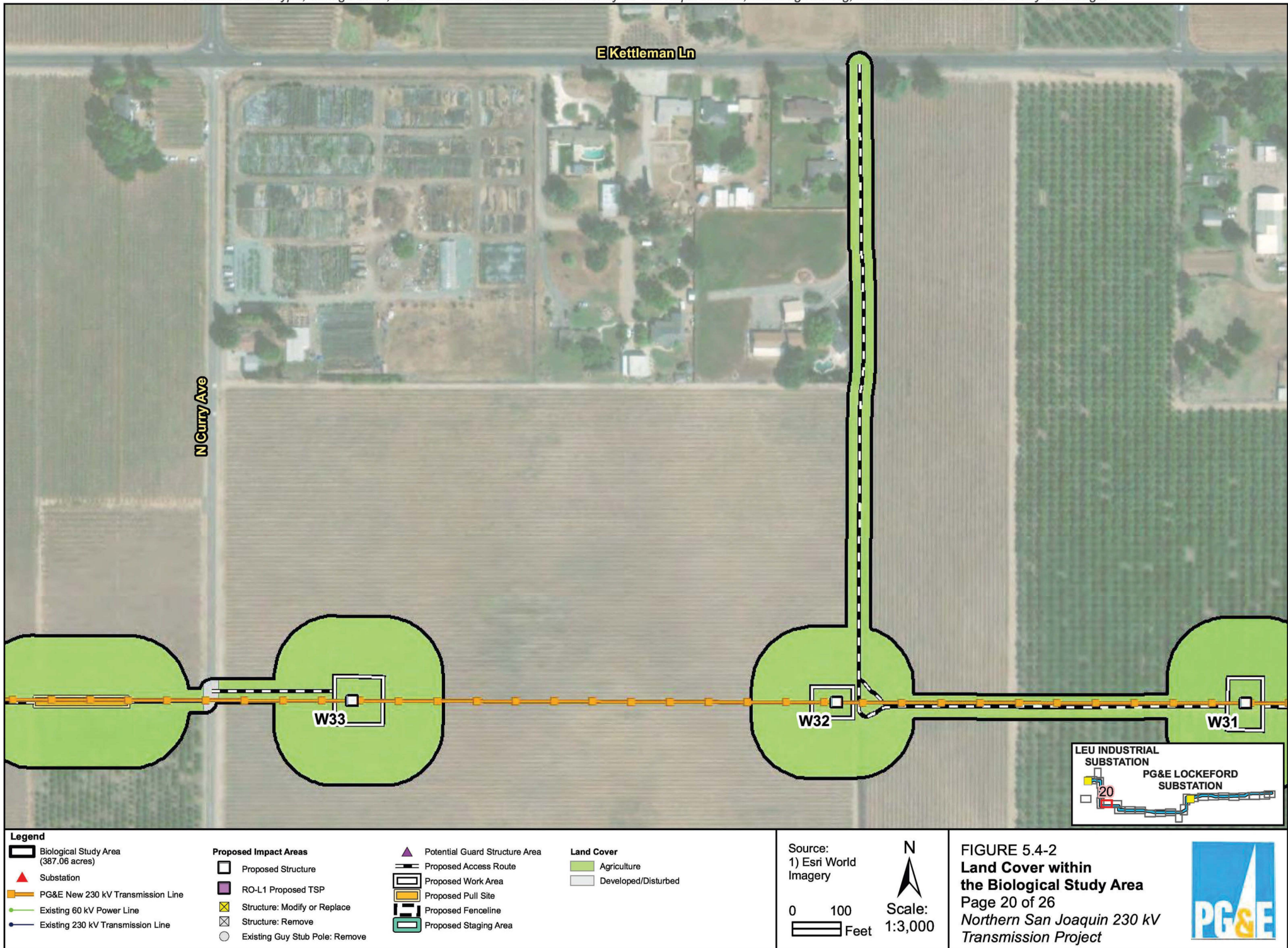
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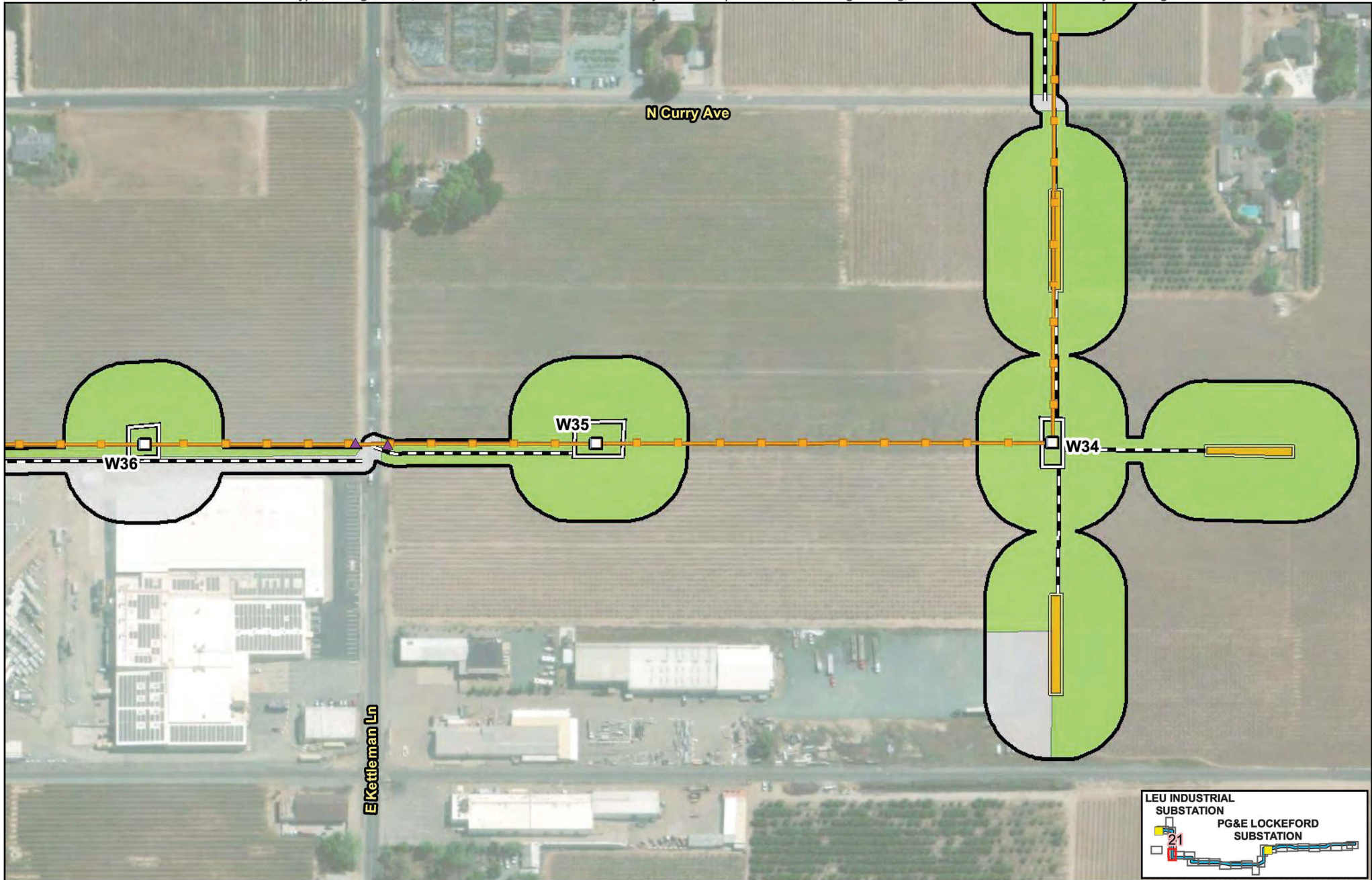
FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 18 of 26
Northern San Joaquin 230 kV
Transmission Project







Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.




Legend			
Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area	Agriculture
Substation	RO-L1 Proposed TSP	Proposed Access Route	Developed/Disturbed
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area	
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site	
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline	
		Proposed Staging Area	

Source:
1) Esri World Imagery

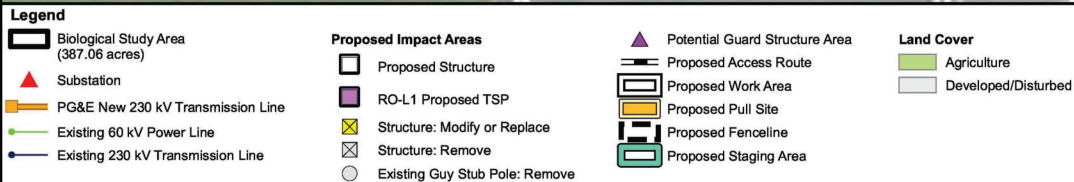
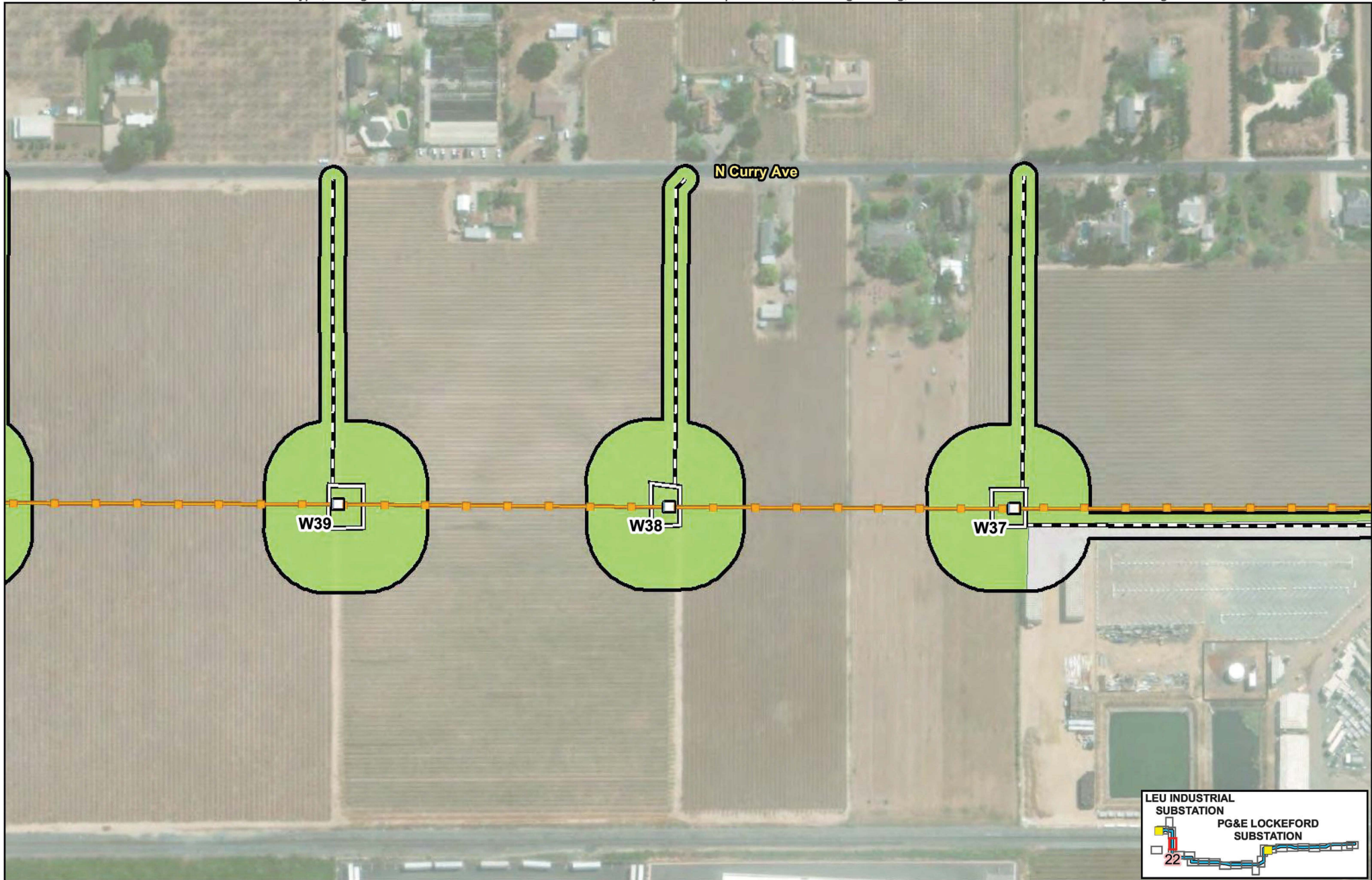
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Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 21 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Source:
1) Esri World Imagery

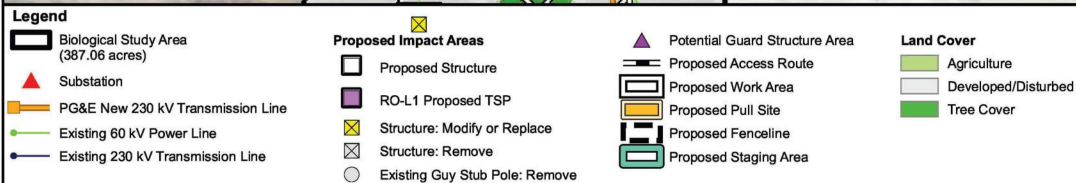
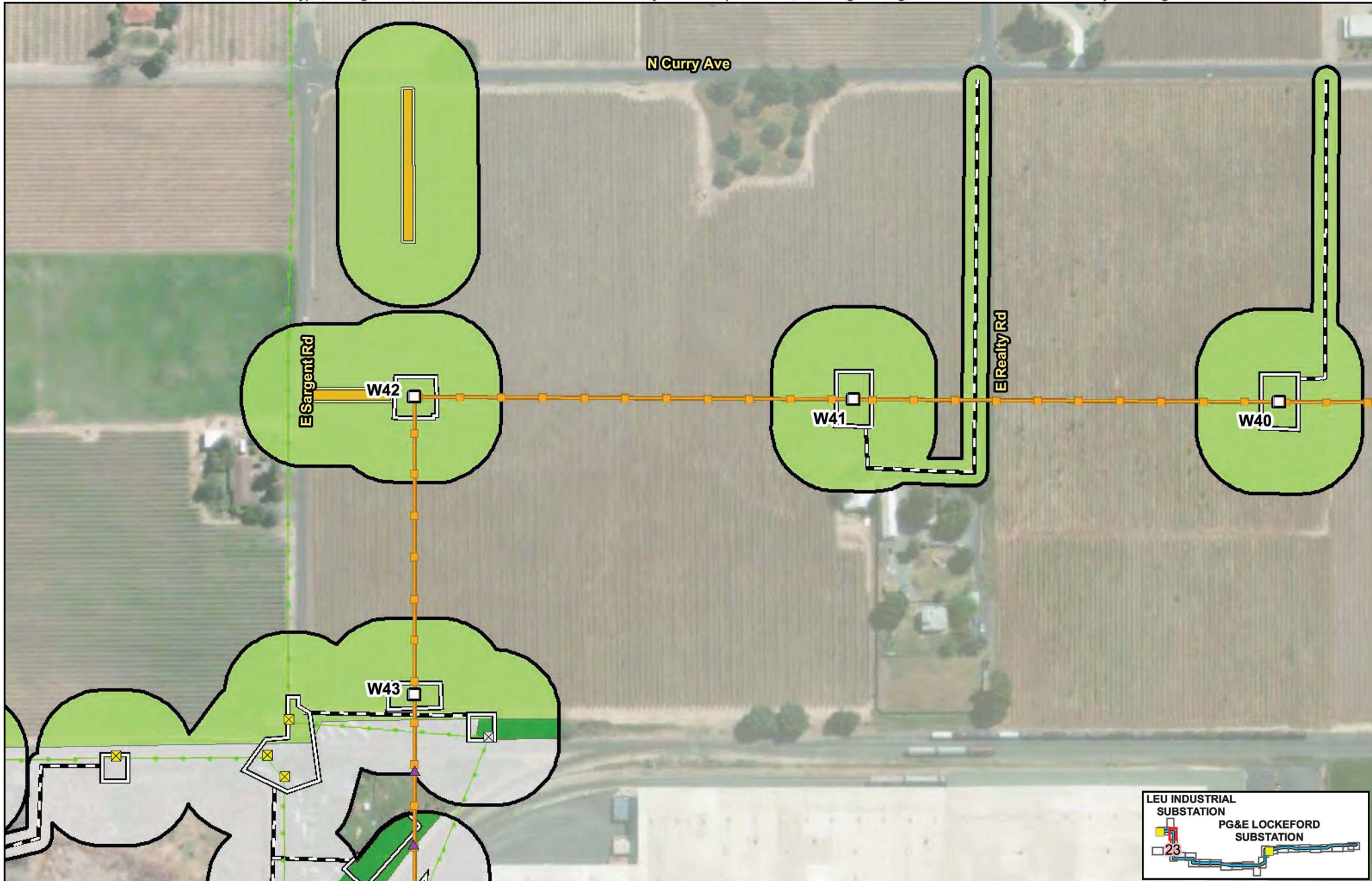


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Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 22 of 26
Northern San Joaquin 230 kV
Transmission Project





Source:
1) Esri World Imagery

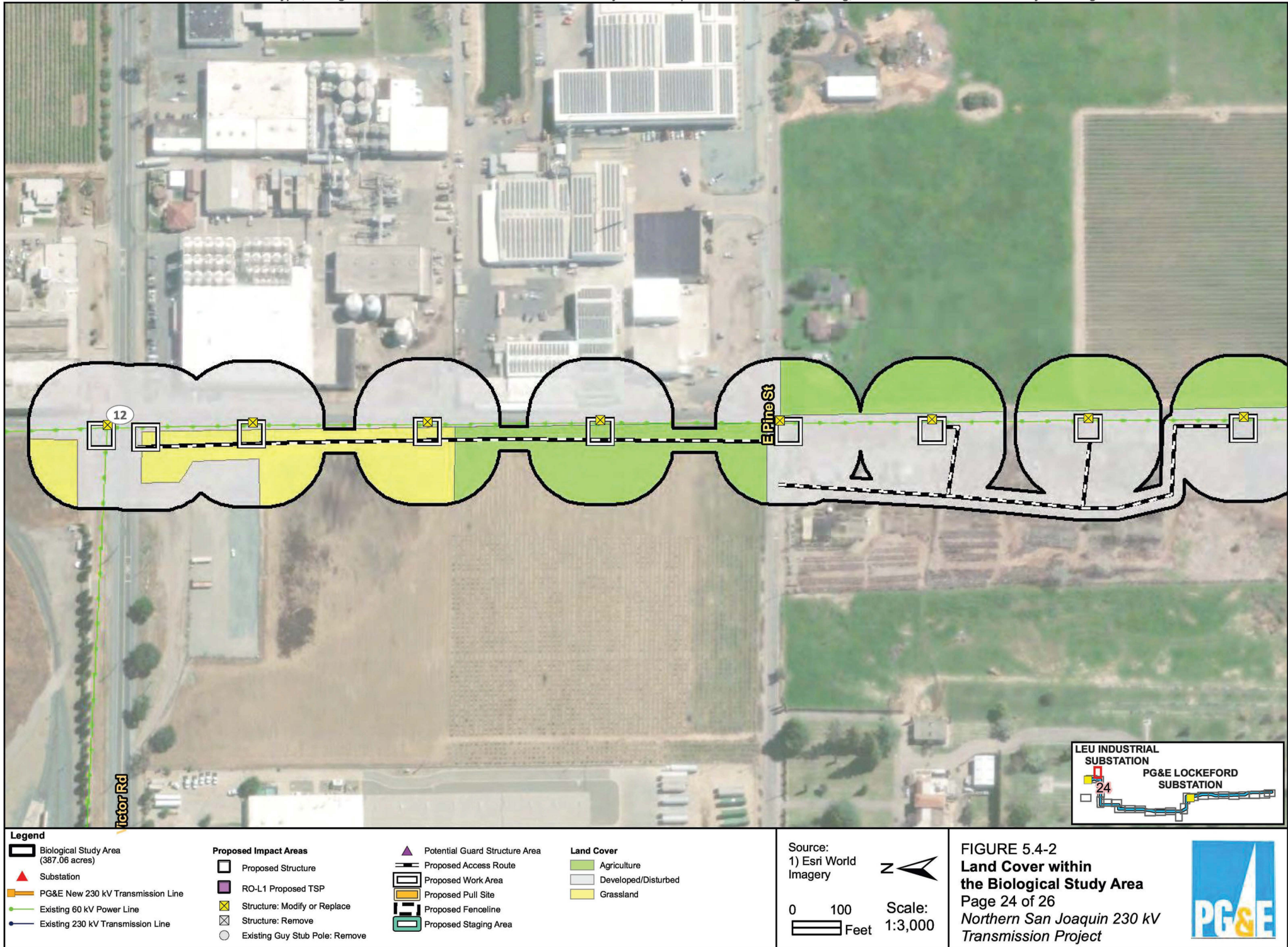


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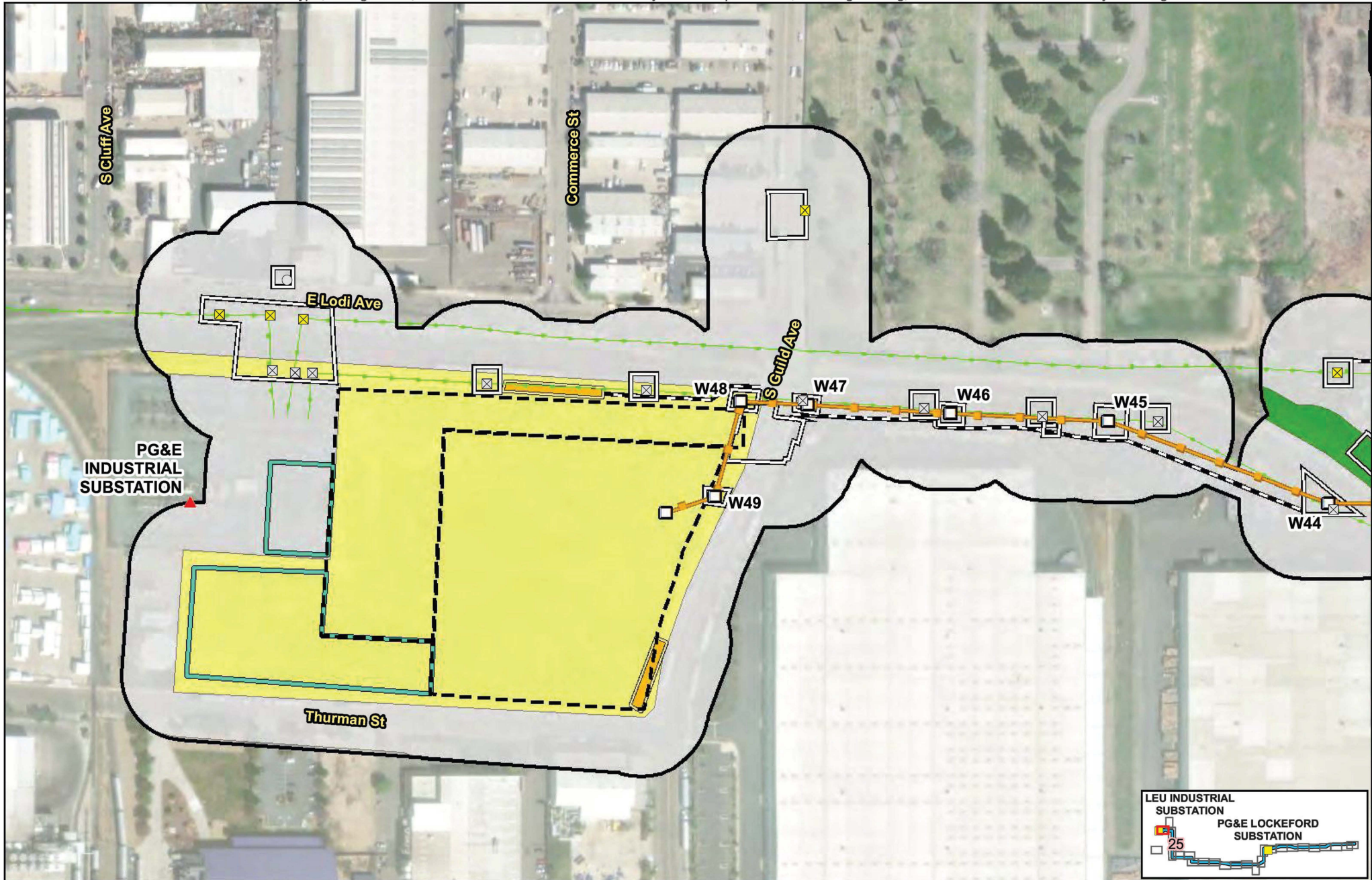
FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 23 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

- Biological Study Area (387.06 acres)
- ▲ Substation
- PG&E New 230 kV Transmission Line
- - - Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Work Area
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Land Cover

- Developed/Disturbed
- Grassland
- Tree Cover

Source:
1) Esri World Imagery

0 100 Feet

N
Scale:
1:3,000

FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 25 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area	Agriculture
Substation	RO-L1 Proposed TSP	Proposed Access Route	Developed/Disturbed
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area	
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site	
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline	
		Proposed Staging Area	

Source:
1) Esri World Imagery

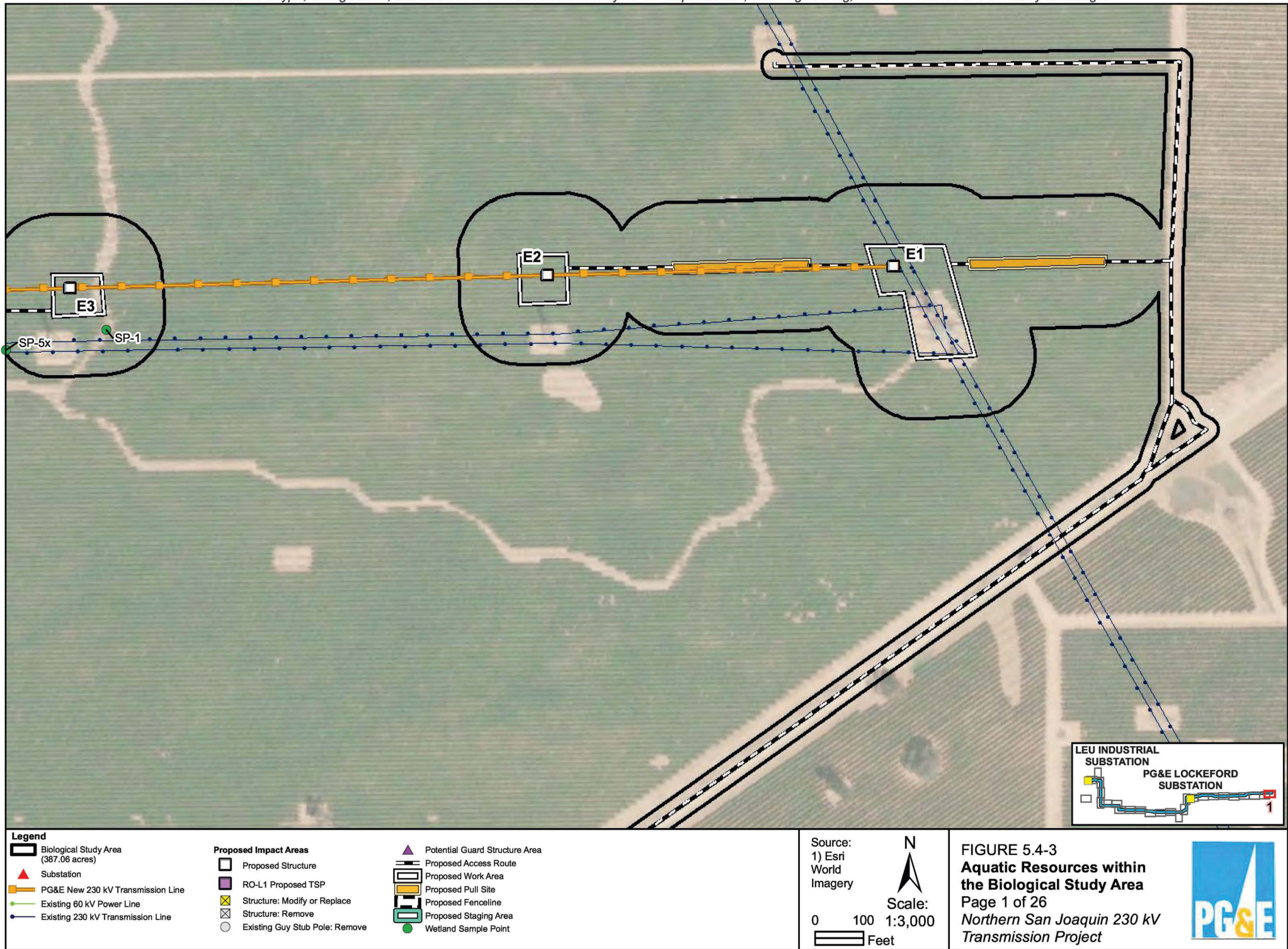
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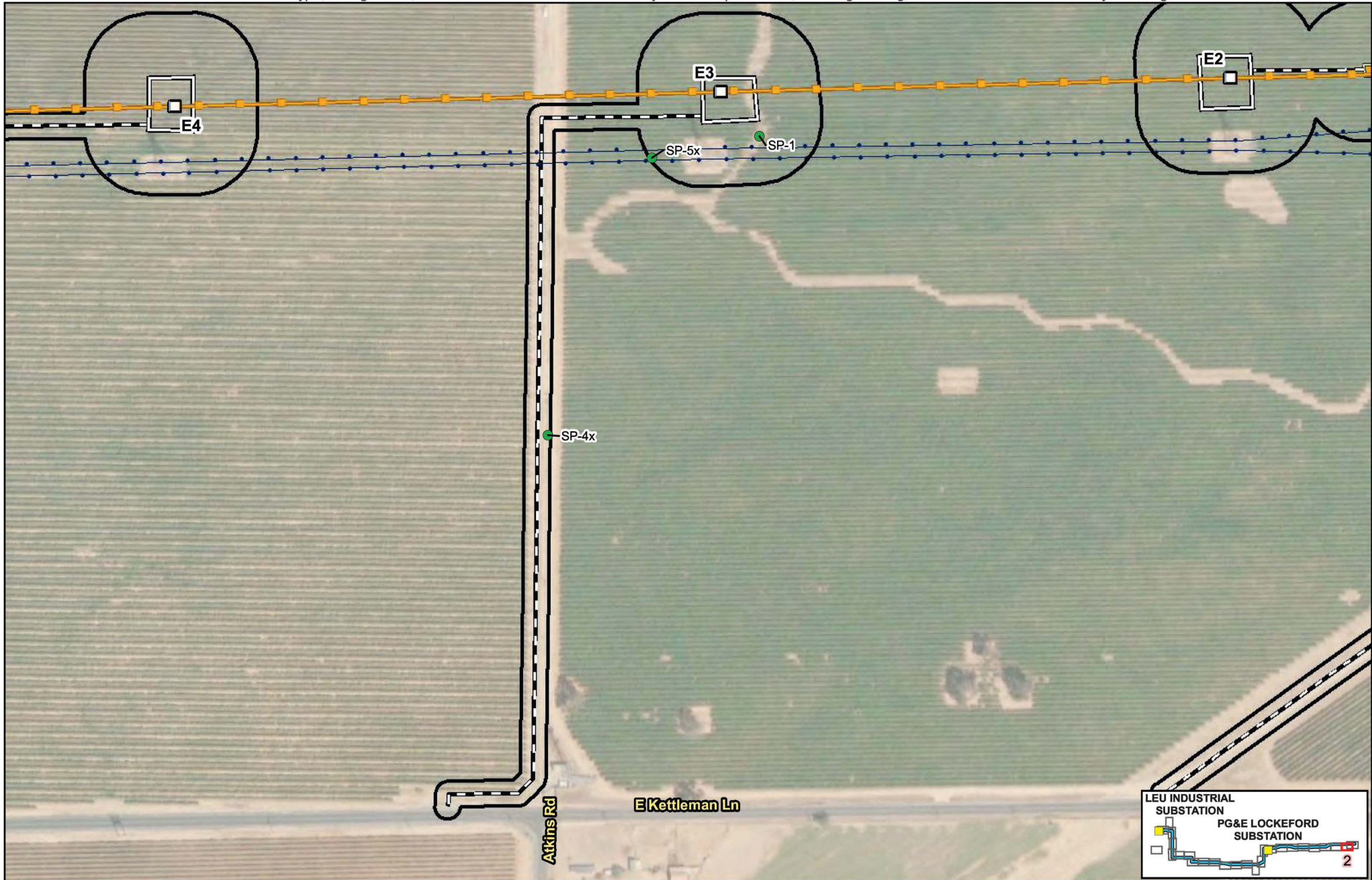
FIGURE 5.4-2
Land Cover within
the Biological Study Area
Page 26 of 26
Northern San Joaquin 230 kV
Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



Legend

Biological Study Area (387.06 acres)
 Substation
 PG&E New 230 kV Transmission Line
 Existing 60 kV Power Line
 Existing 230 kV Transmission Line

Proposed Impact Areas
 Proposed Structure
 RO-L1 Proposed TSP
 Structure: Modify or Replace
 Structure: Remove
 Existing Guy Stub Pole: Remove

Potential Guard Structure Area
 Proposed Access Route
 Proposed Work Area
 Proposed Pull Site
 Proposed Fenceline
 Proposed Staging Area
 Wetland Sample Point

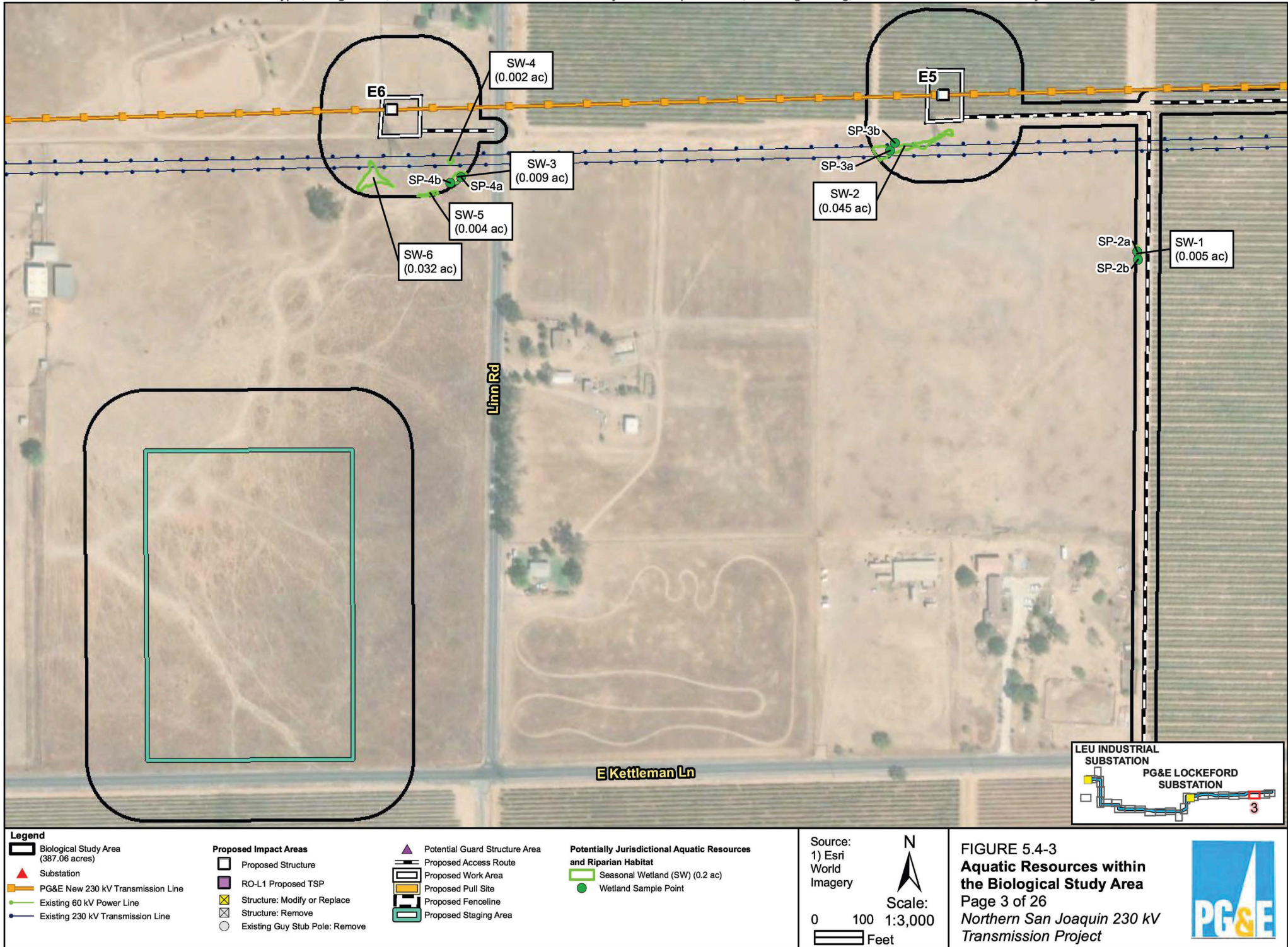
Source:
1) Esri
World
Imagery

Scale:
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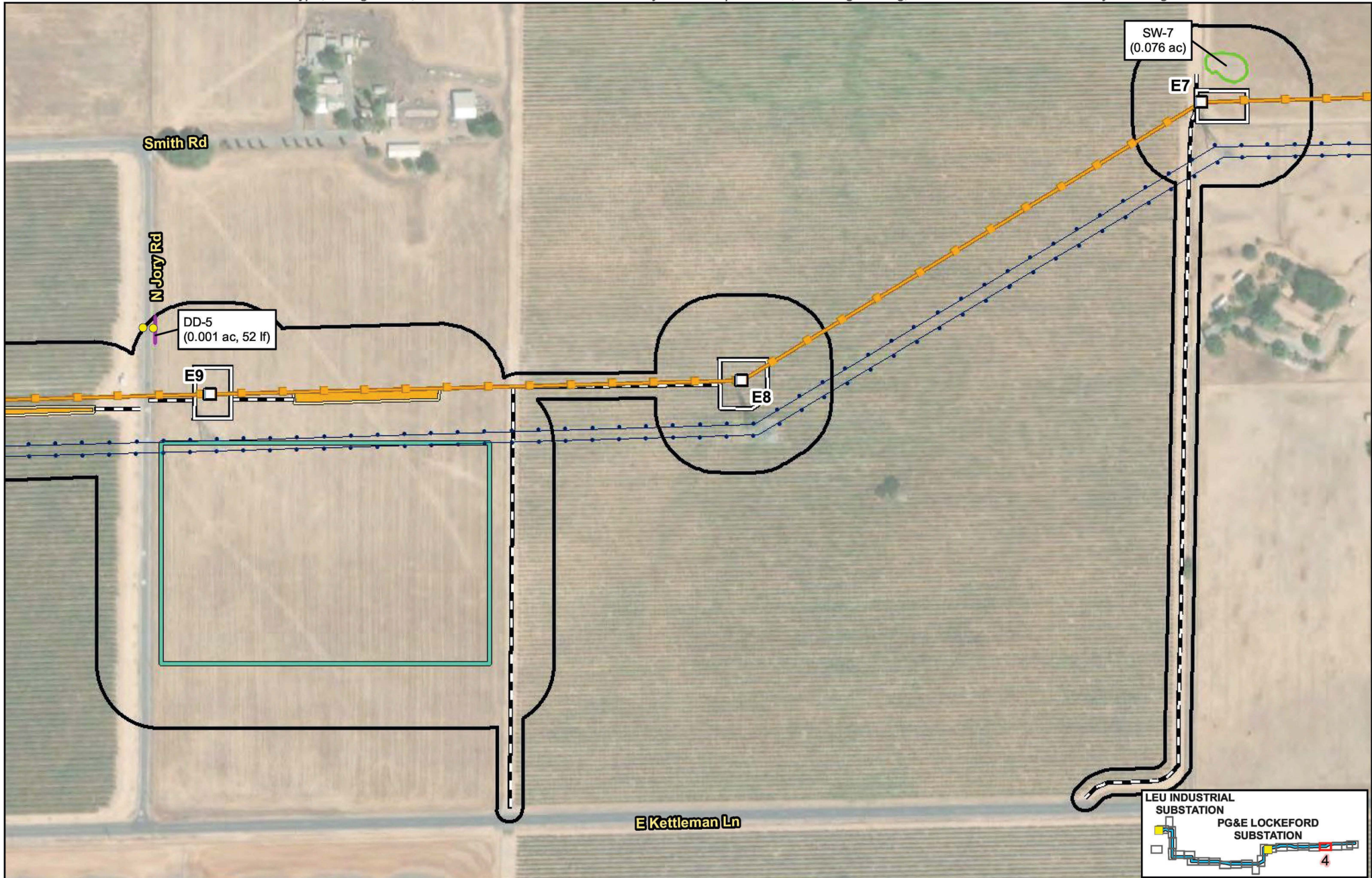
FIGURE 5.4-3
Aquatic Resources within
the Biological Study Area
 Page 2 of 26
 Northern San Joaquin 230 kV
 Transmission Project



Preliminary design and engineering for the physical, civil, and outdoor components.
Exact structure type, configuration, and dimensions will be determined by CPUC requirements, final engineering, and other factors and are likely to change.



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Legend

- Biological Study Area (387.06 acres)
- ▲ Substation
- PG&E New 230 kV Transmission Line
- Existing 60 kV Power Line
- Existing 230 kV Transmission Line

Proposed Impact Areas

- Proposed Structure
- RO-L1 Proposed TSP
- Structure: Modify or Replace
- Structure: Remove
- Existing Guy Stub Pole: Remove

Potential Guard Structure Area

- Proposed Access Route
- Proposed Pull Site
- Proposed Fenceline
- Proposed Staging Area

Potentially Jurisdictional Aquatic Resources and Riparian Habitat

- Seasonal Wetland (SW) (0.2 ac)
- Drainage Ditch (DD) (0.127 ac, 1,805 lf)
- Culvert

Source:
1) Esri
World
Imagery

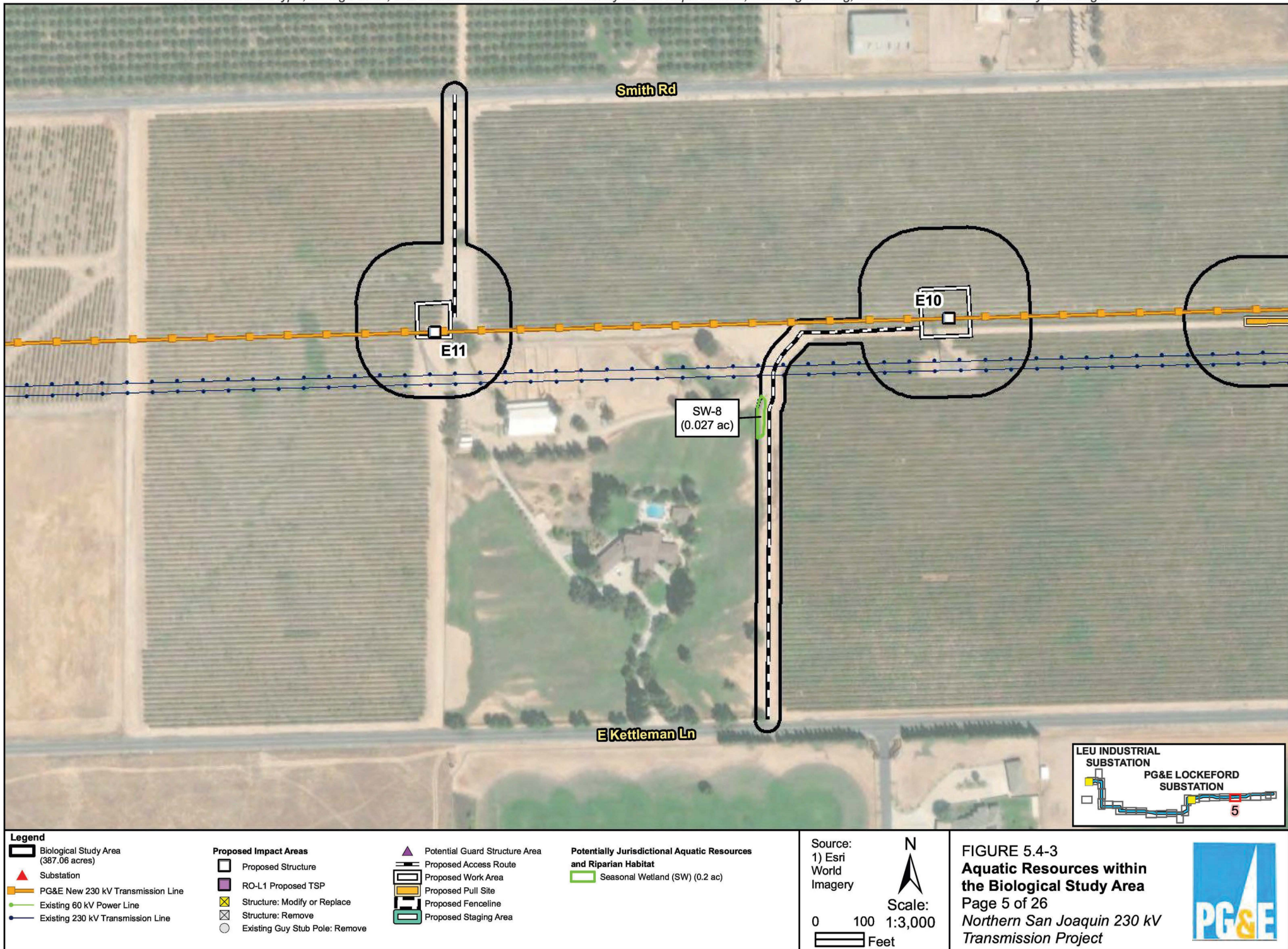
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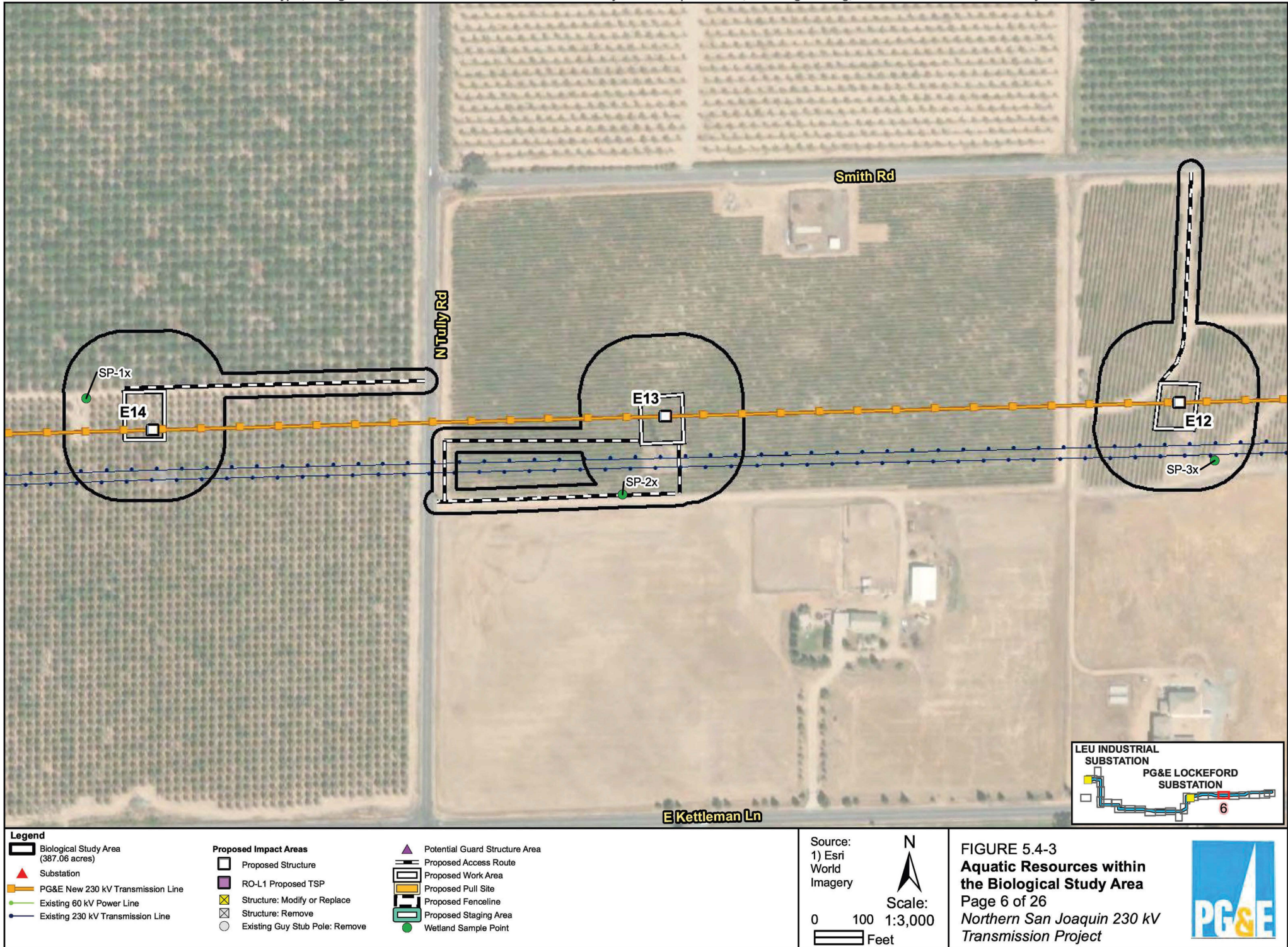
FIGURE 5.4-3
Aquatic Resources within
the Biological Study Area
Page 4 of 26
Northern San Joaquin 230 kV
Transmission Project

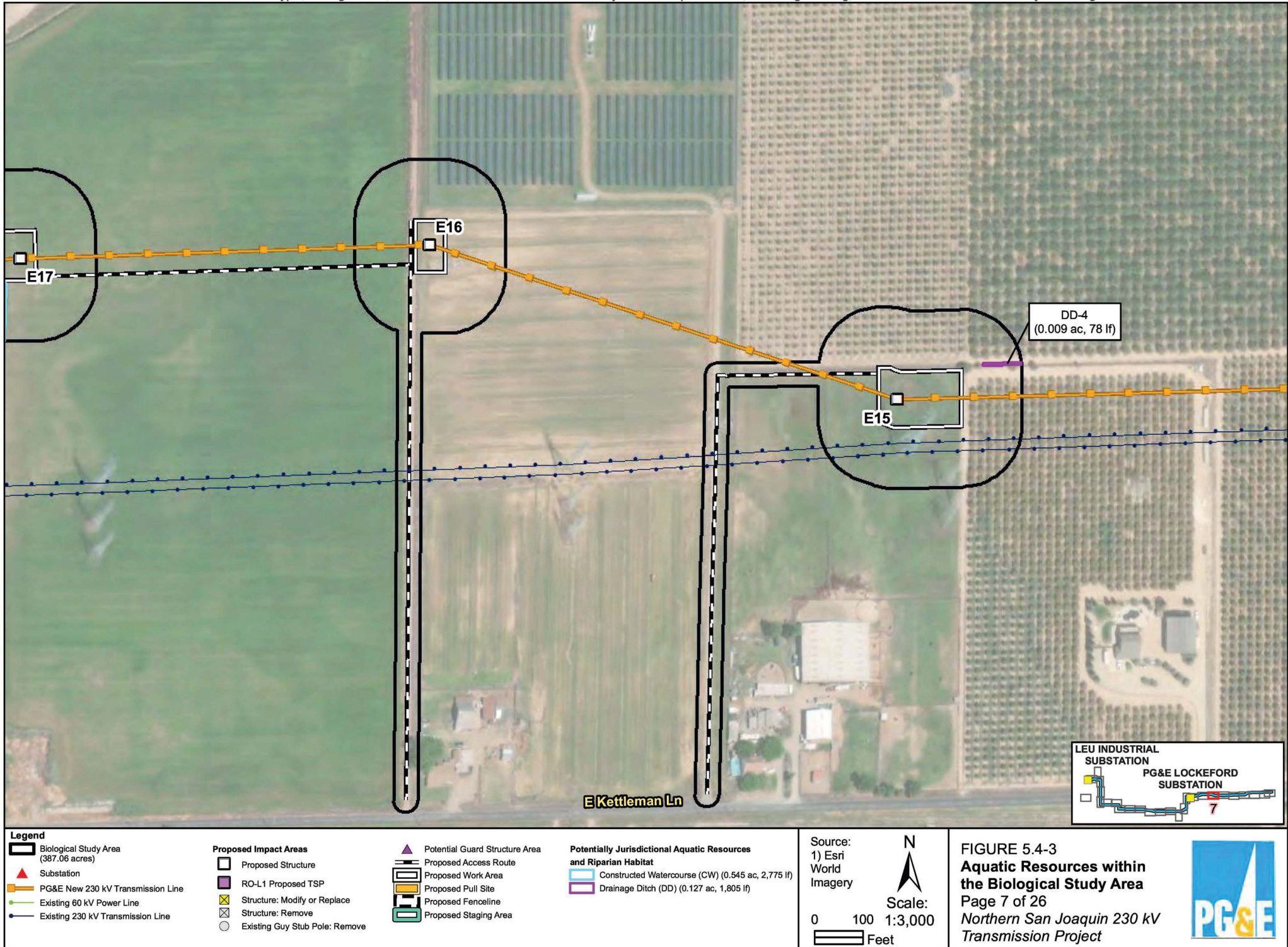


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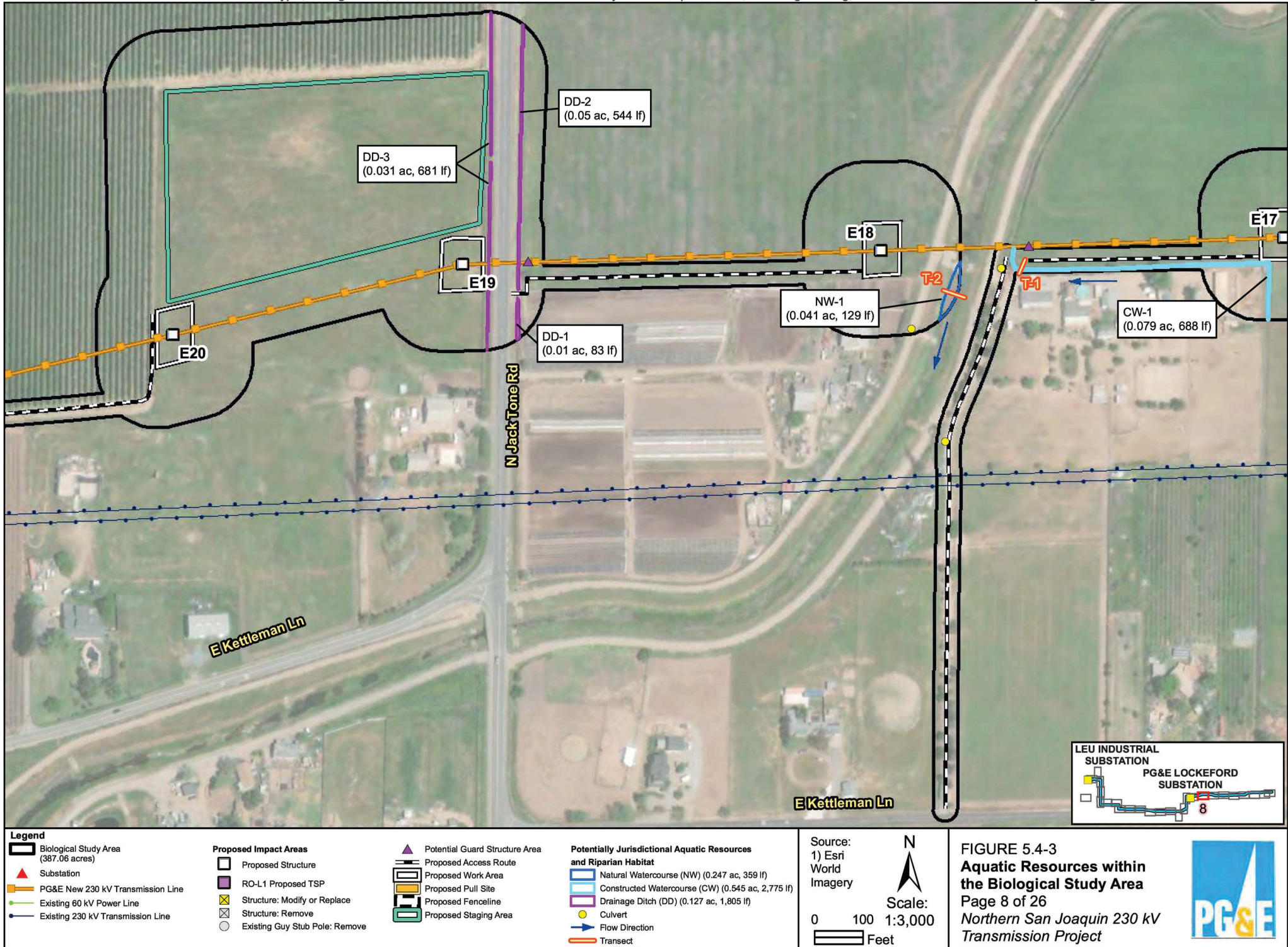
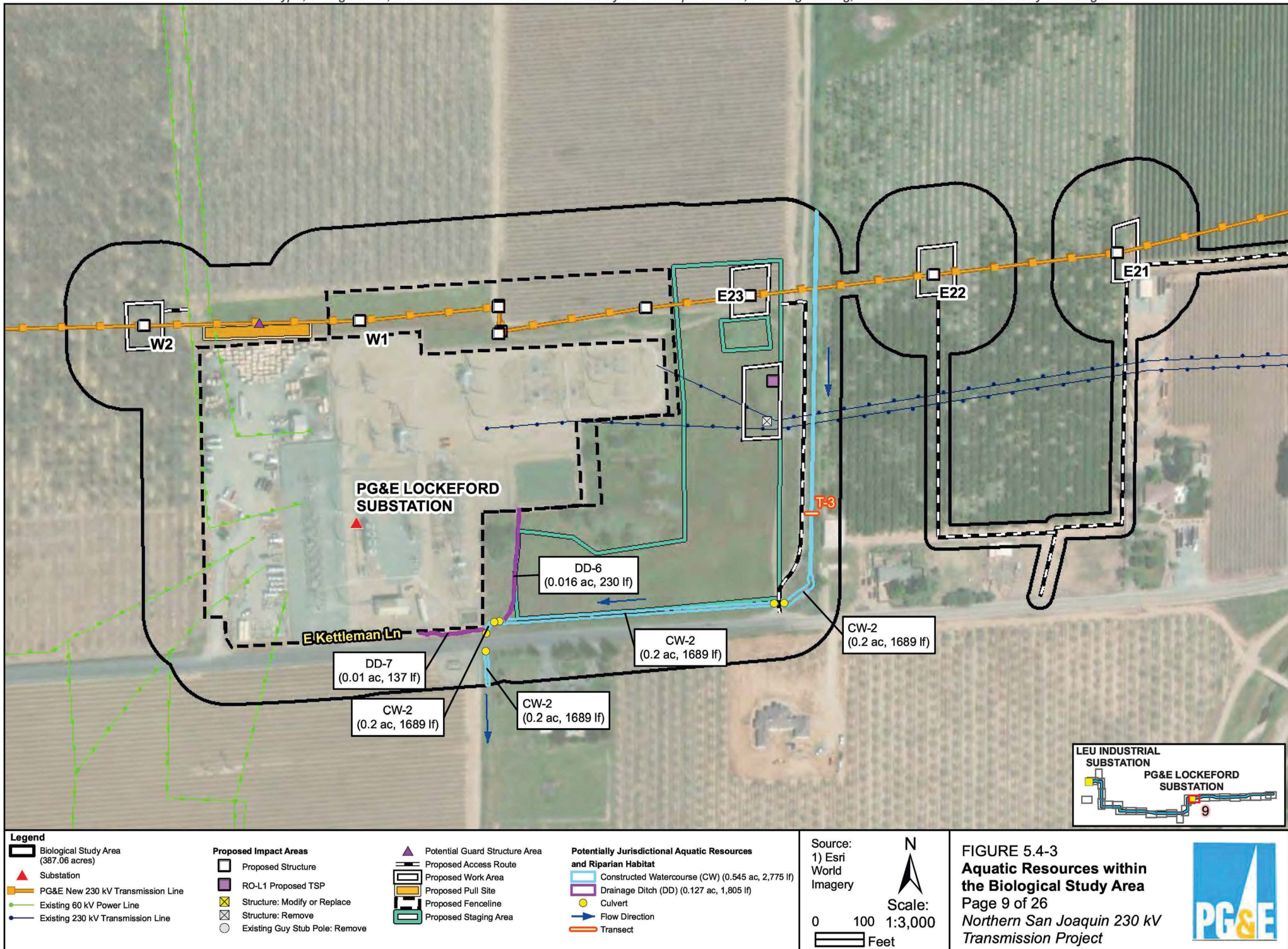
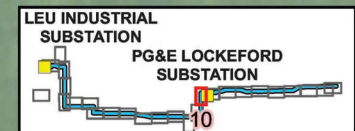
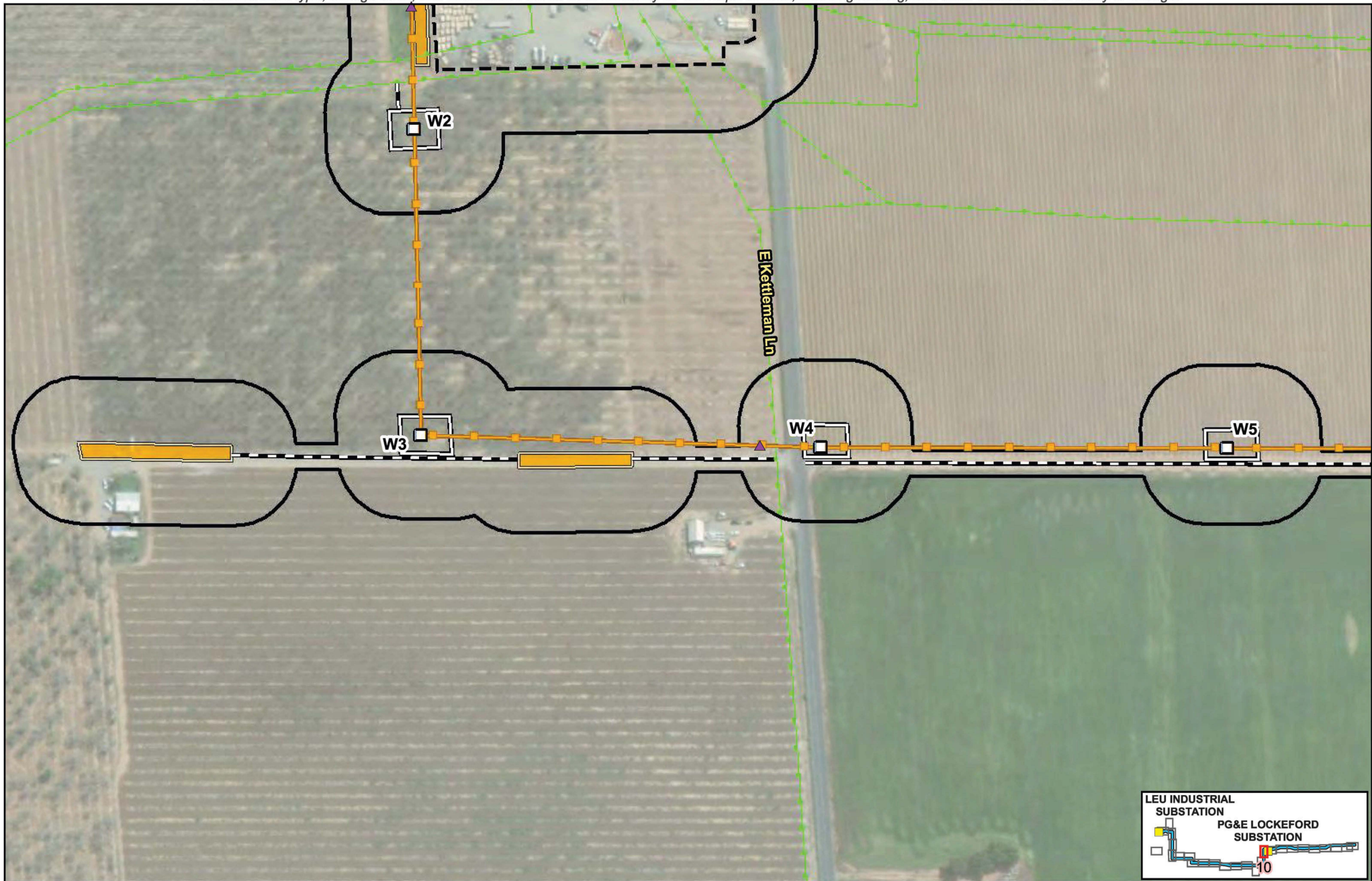


FIGURE 5.4-3
Aquatic Resources within the Biological Study Area
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Northern San Joaquin 230 kV Transmission Project





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- | | | |
|--|---|--|
| Legend
Biological Study Area (387.06 acres)
Substation
PG&E New 230 kV Transmission Line
Existing 60 kV Power Line
Existing 230 kV Transmission Line | Proposed Impact Areas
Proposed Structure
RO-L1 Proposed TSP
Structure: Modify or Replace
Structure: Remove
Existing Guy Stub Pole: Remove | Potential Guard Structure Area
Proposed Access Route
Proposed Work Area
Proposed Pull Site
Proposed Fenceline
Proposed Staging Area |
|--|---|--|

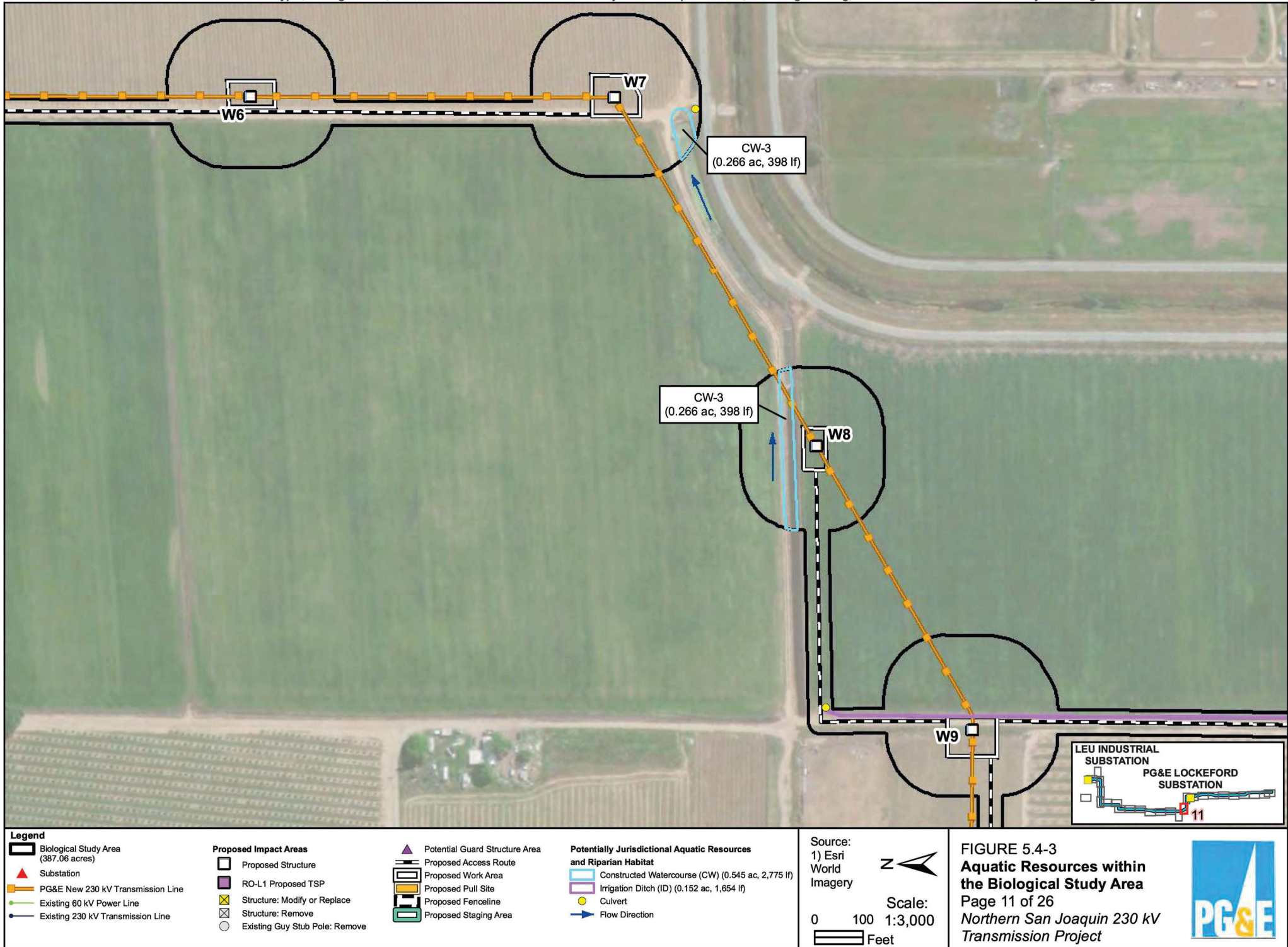
Source:
1) Esri
World
Imagery

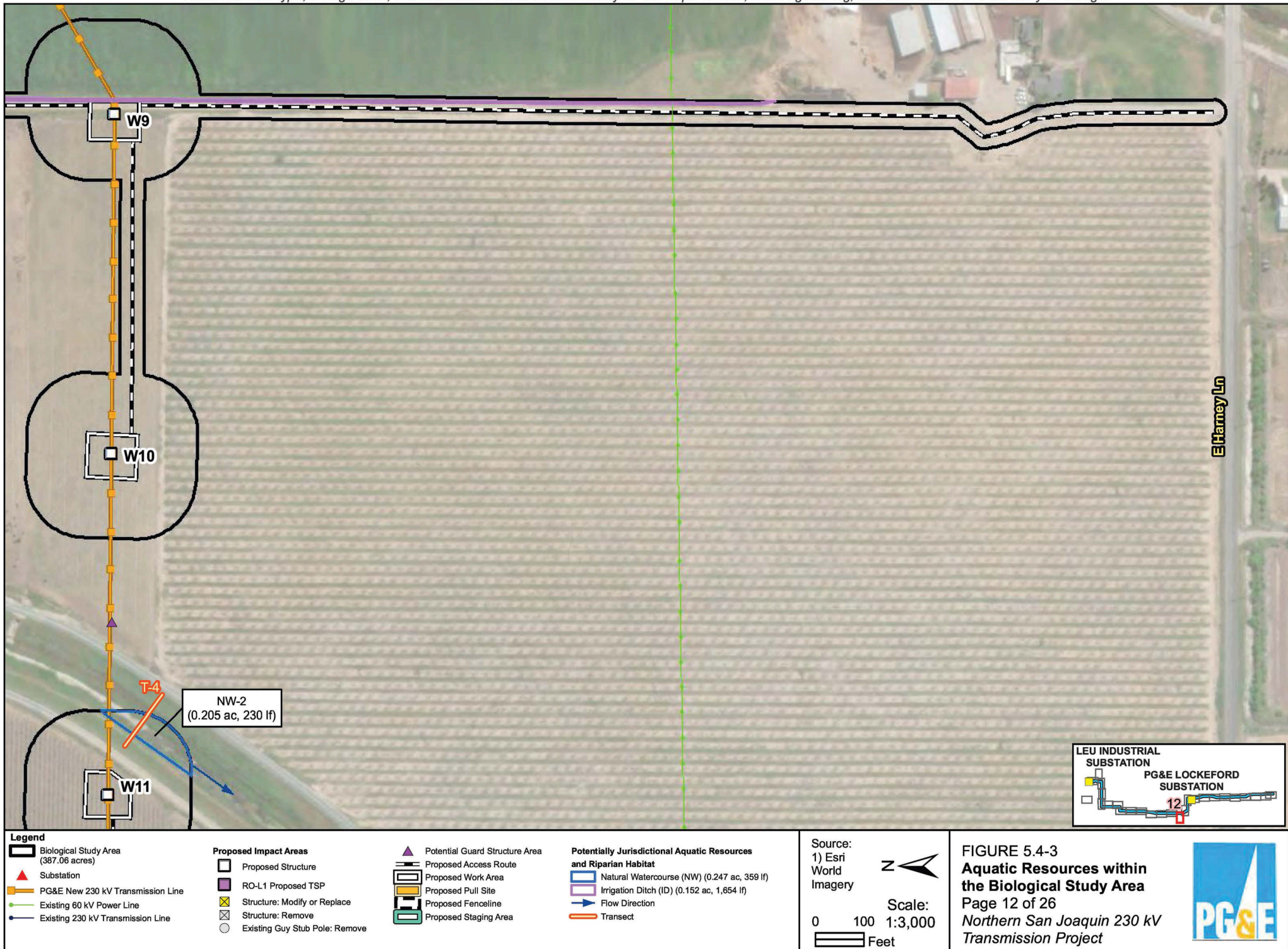
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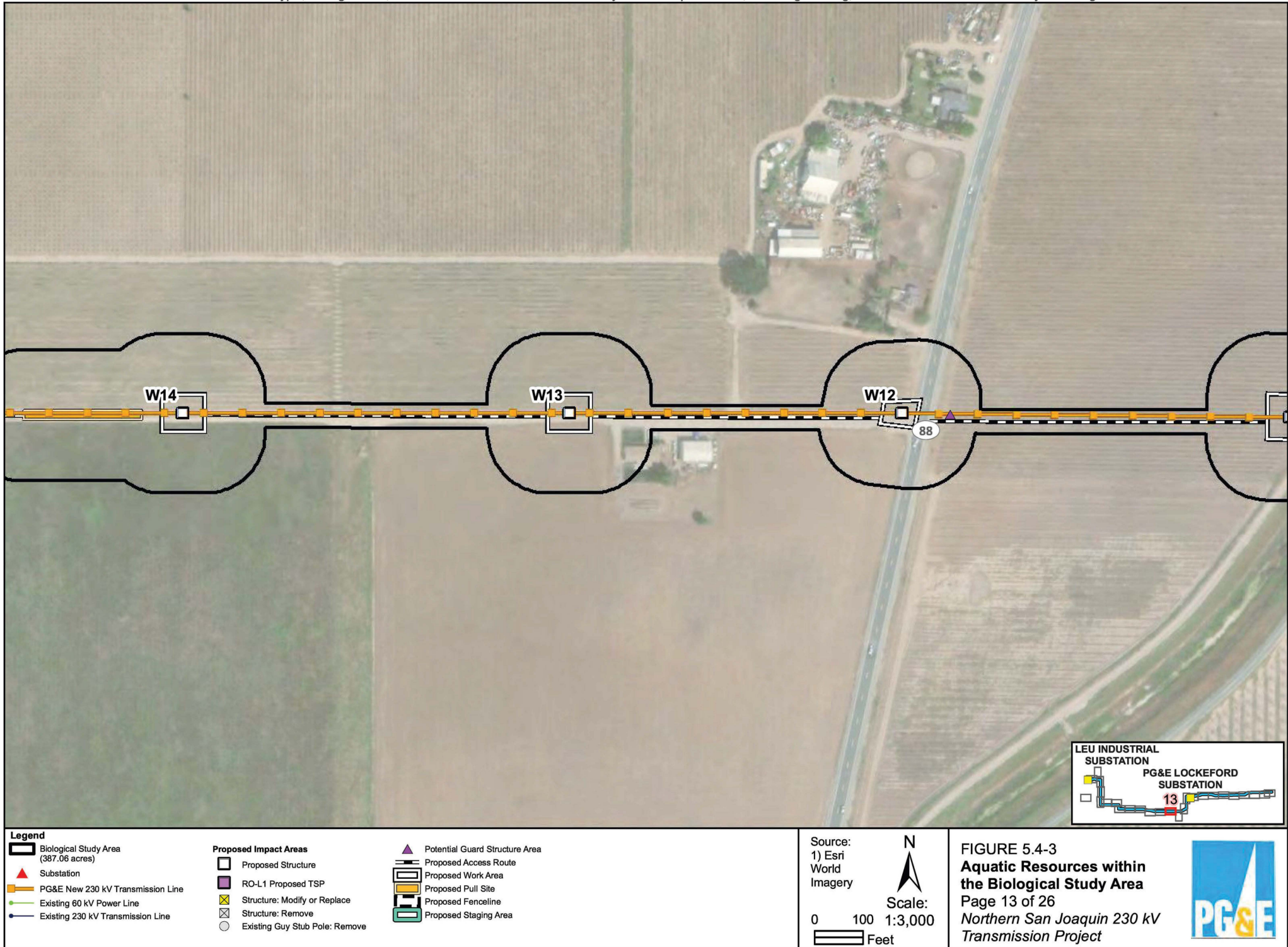
FIGURE 5.4-3
Aquatic Resources within
the Biological Study Area
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Transmission Project

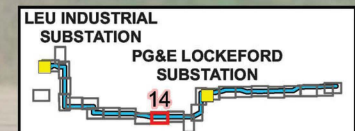
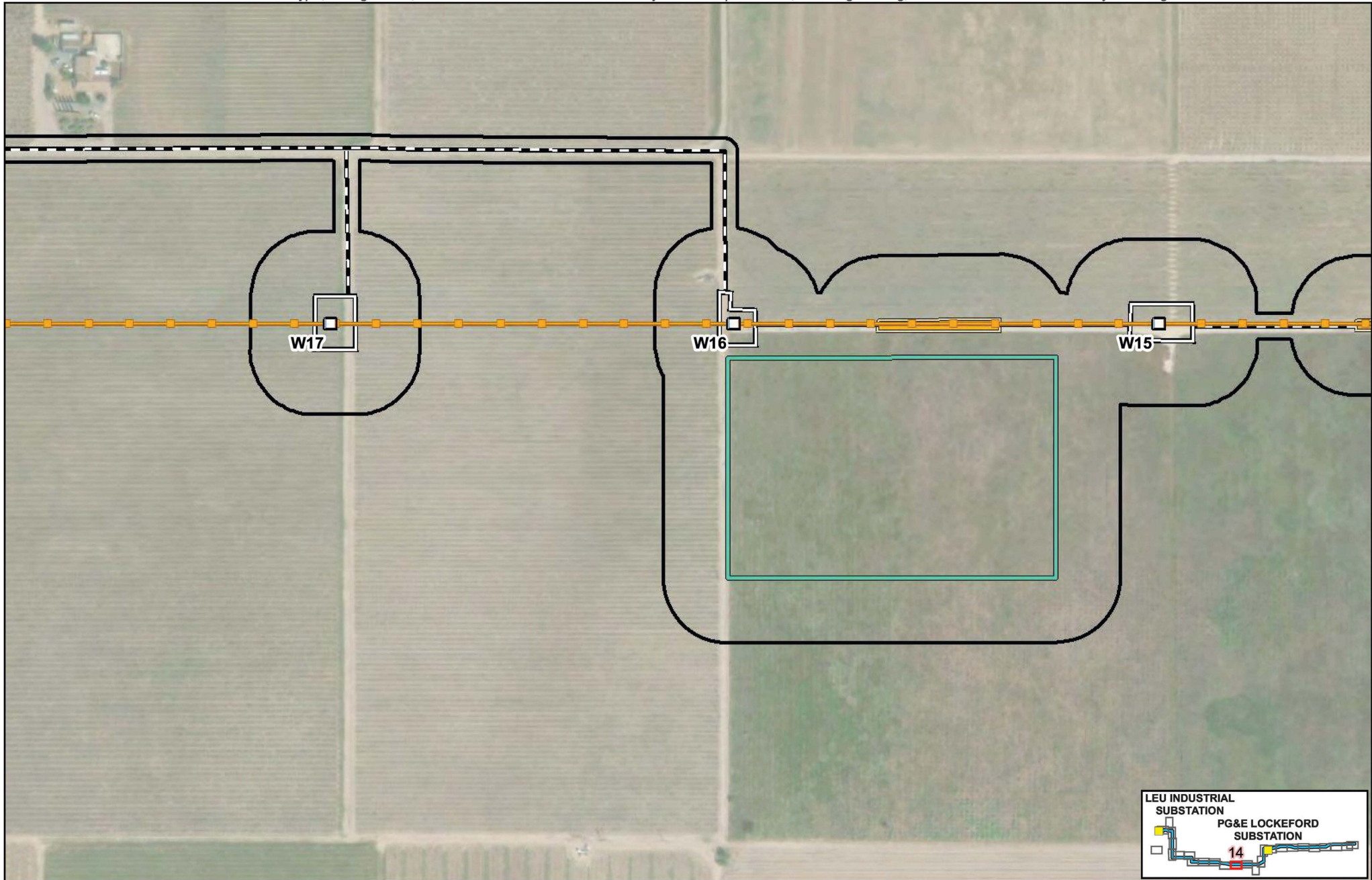


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Legend		
Biological Study Area (387.06 acres)	Proposed Structure	Potential Guard Structure Area
Substation	RO-L1 Proposed TSP	Proposed Access Route
PG&E New 230 kV Transmission Line	Structure: Modify or Replace	Proposed Work Area
Existing 60 kV Power Line	Structure: Remove	Proposed Pull Site
Existing 230 kV Transmission Line	Existing Guy Stub Pole: Remove	Proposed Fenceline
		Proposed Staging Area

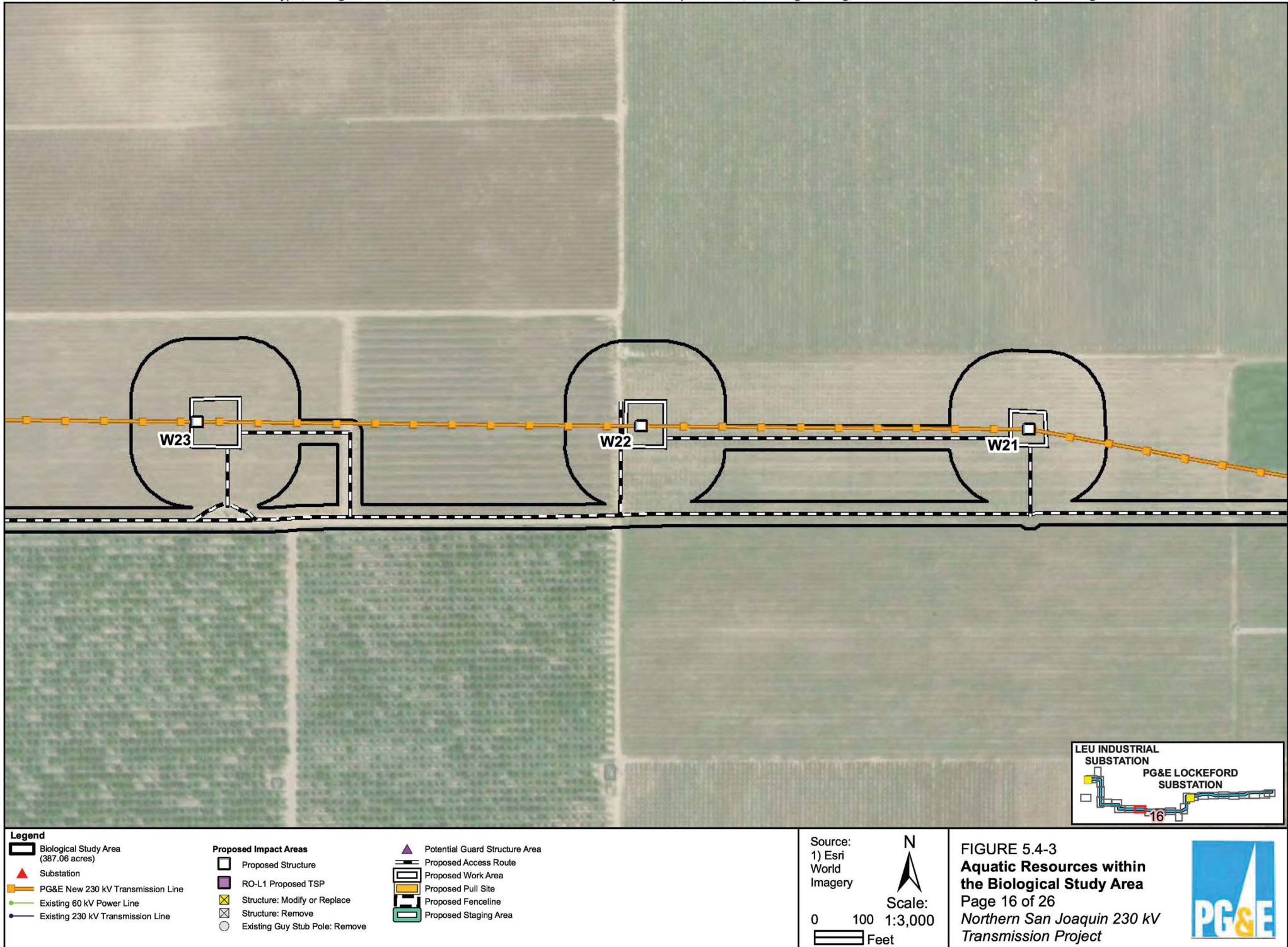
Source:
1) Esri
World
Imagery

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Scale:
0 100 1:3,000
Feet

FIGURE 5.4-3
Aquatic Resources within
the Biological Study Area
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Northern San Joaquin 230 kV
Transmission Project





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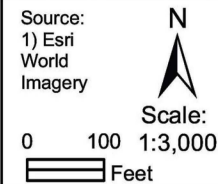
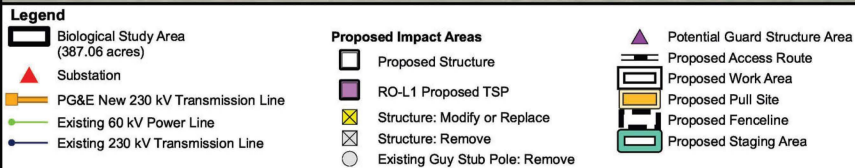
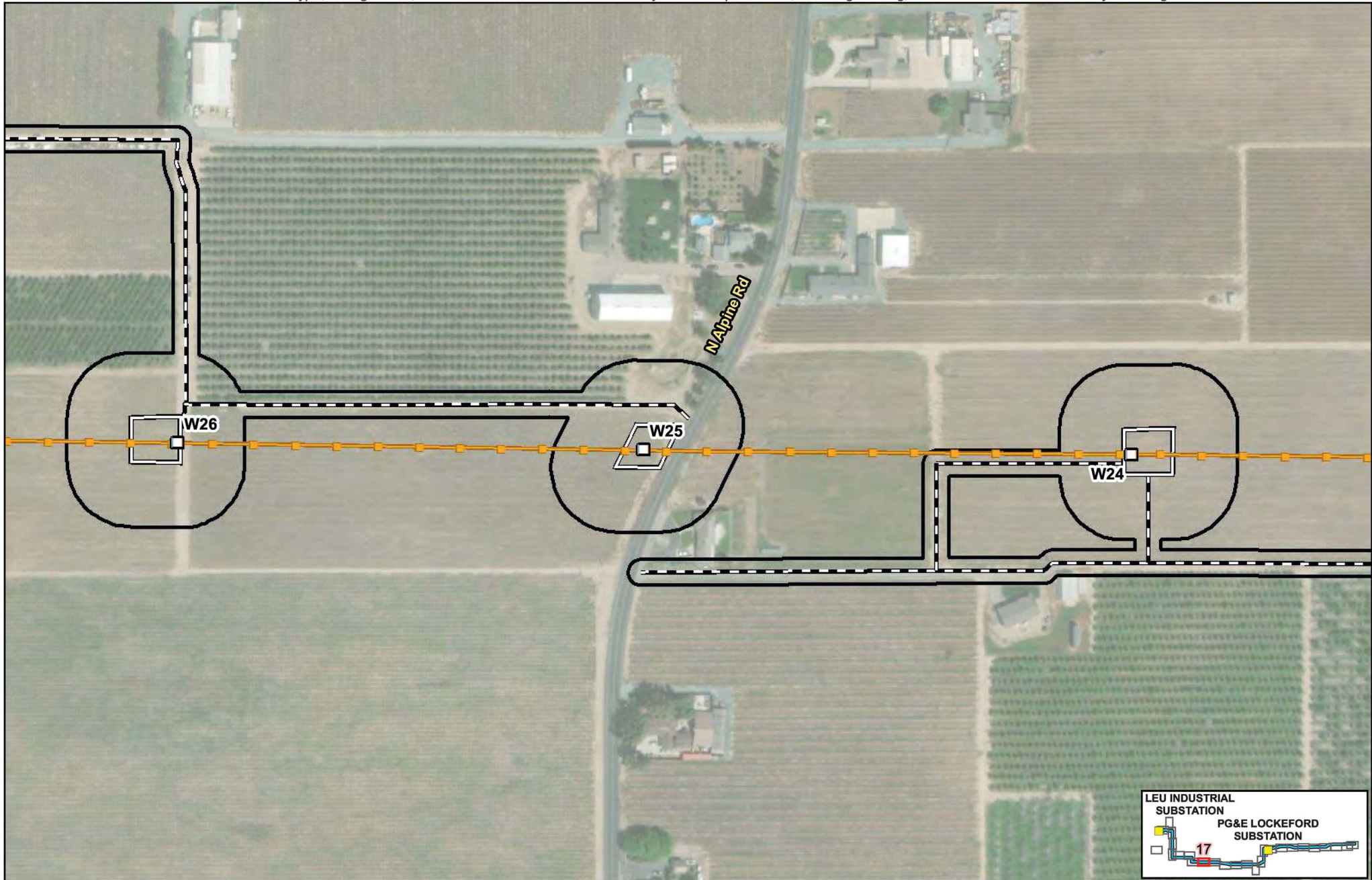
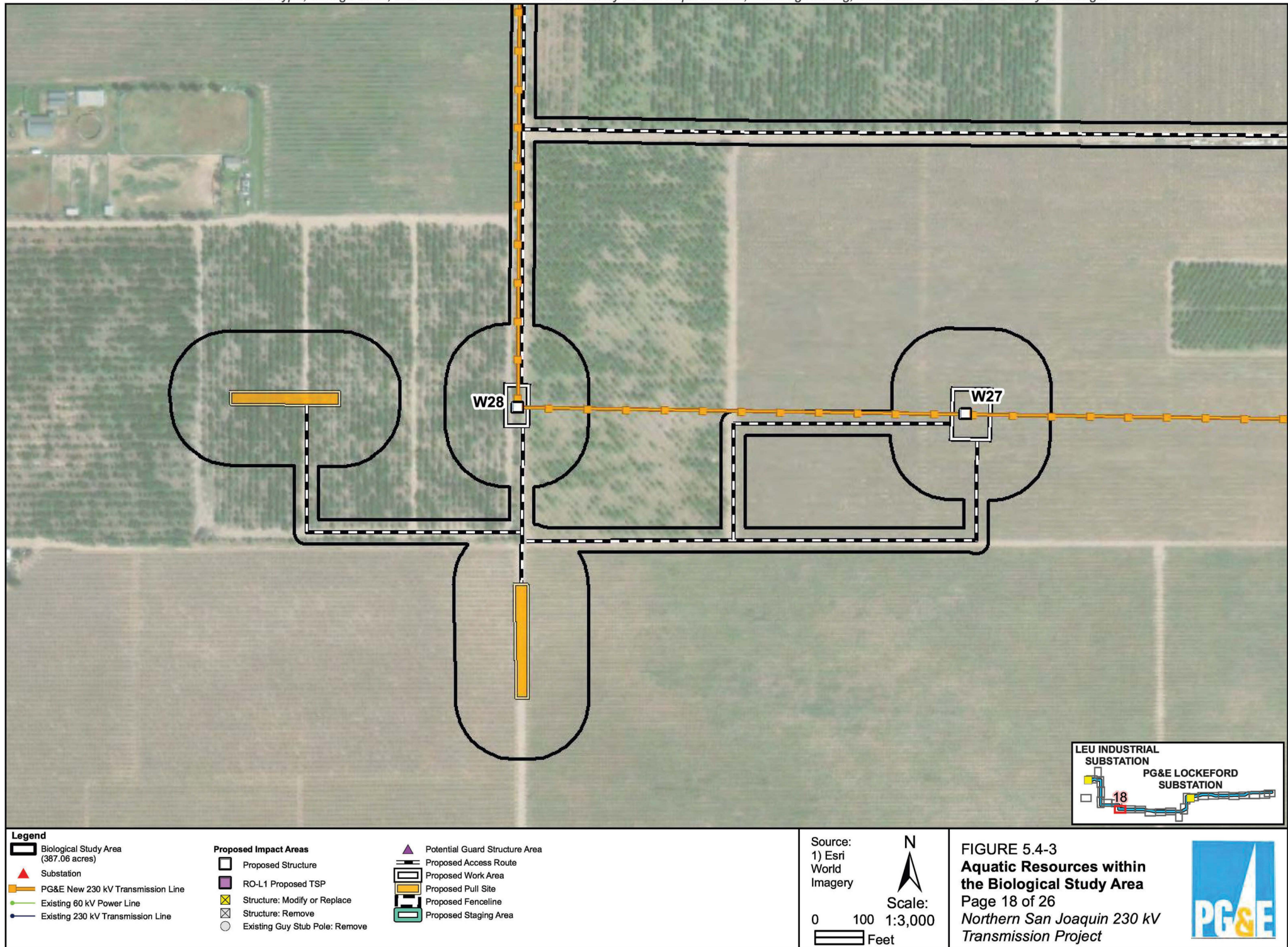
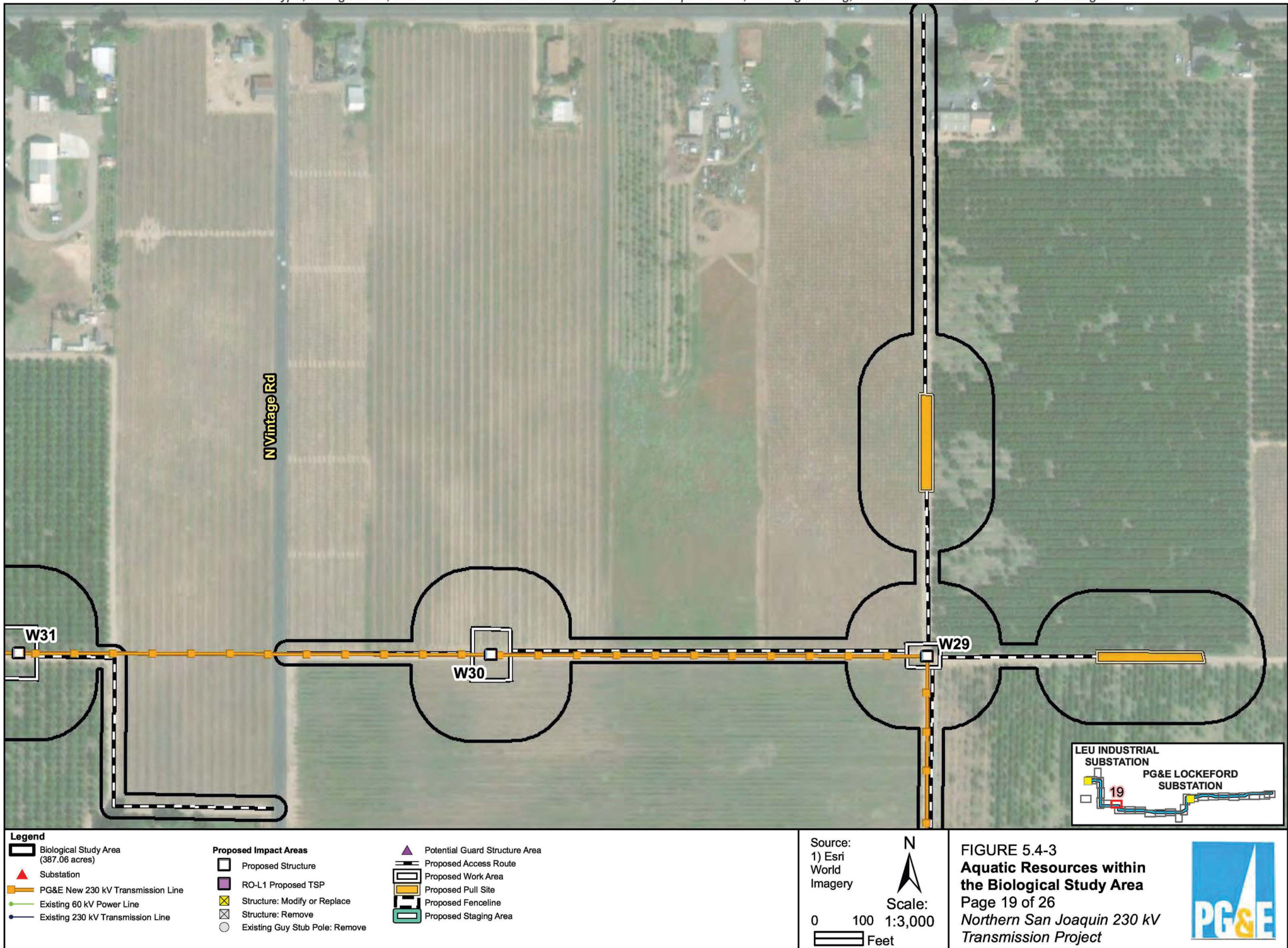


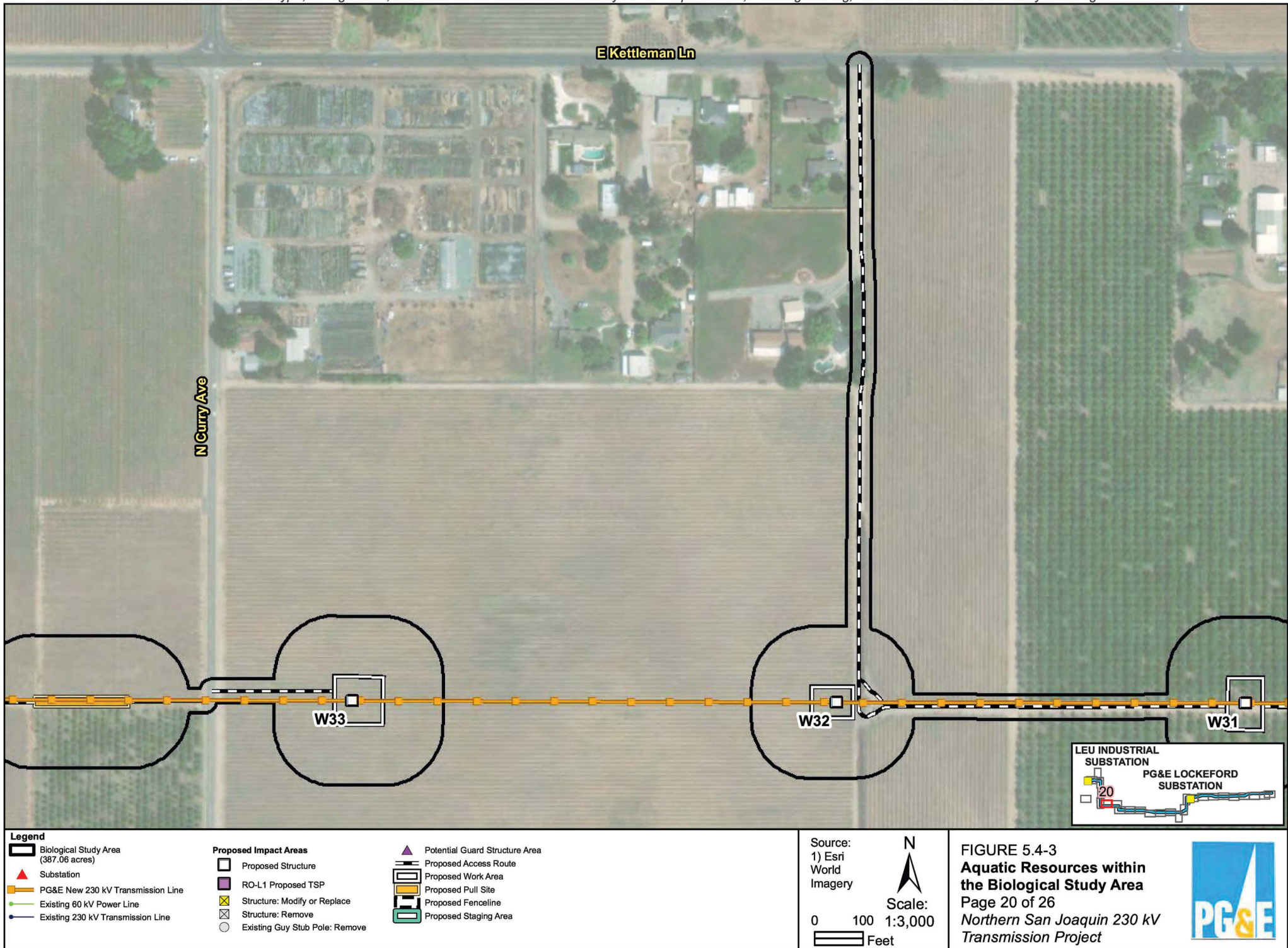
FIGURE 5.4-3
Aquatic Resources within
the Biological Study Area
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Northern San Joaquin 230 kV
Transmission Project



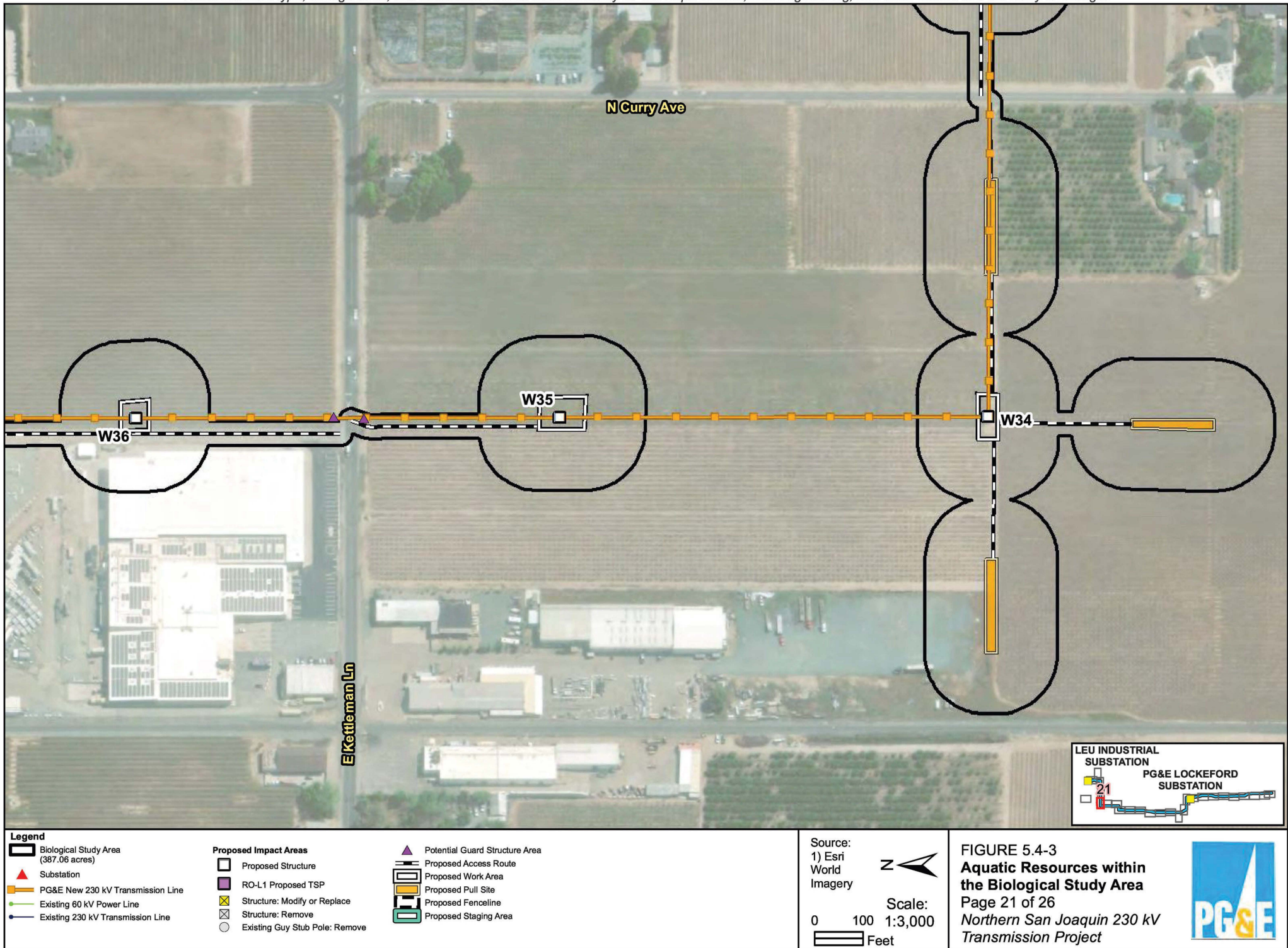
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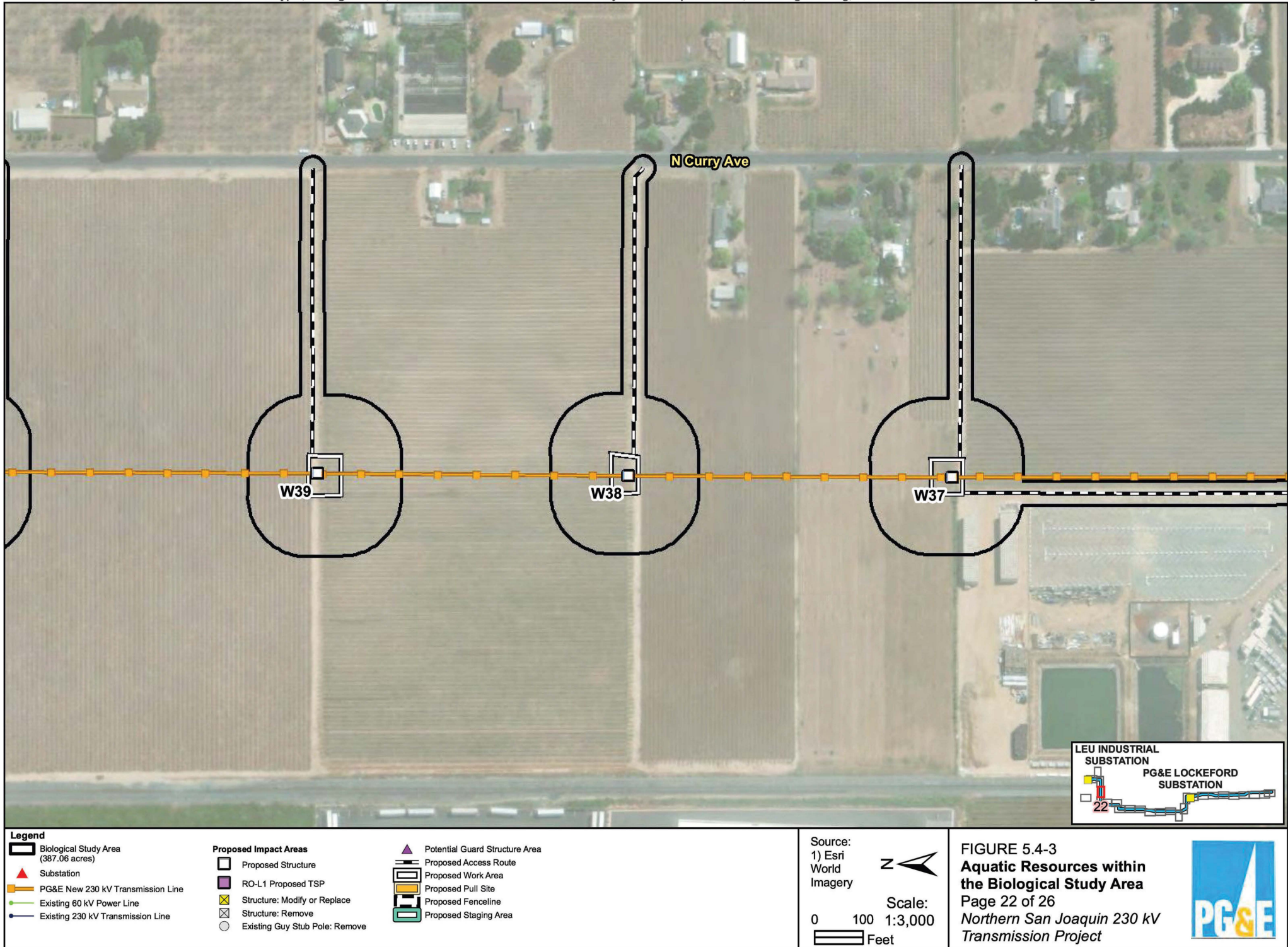


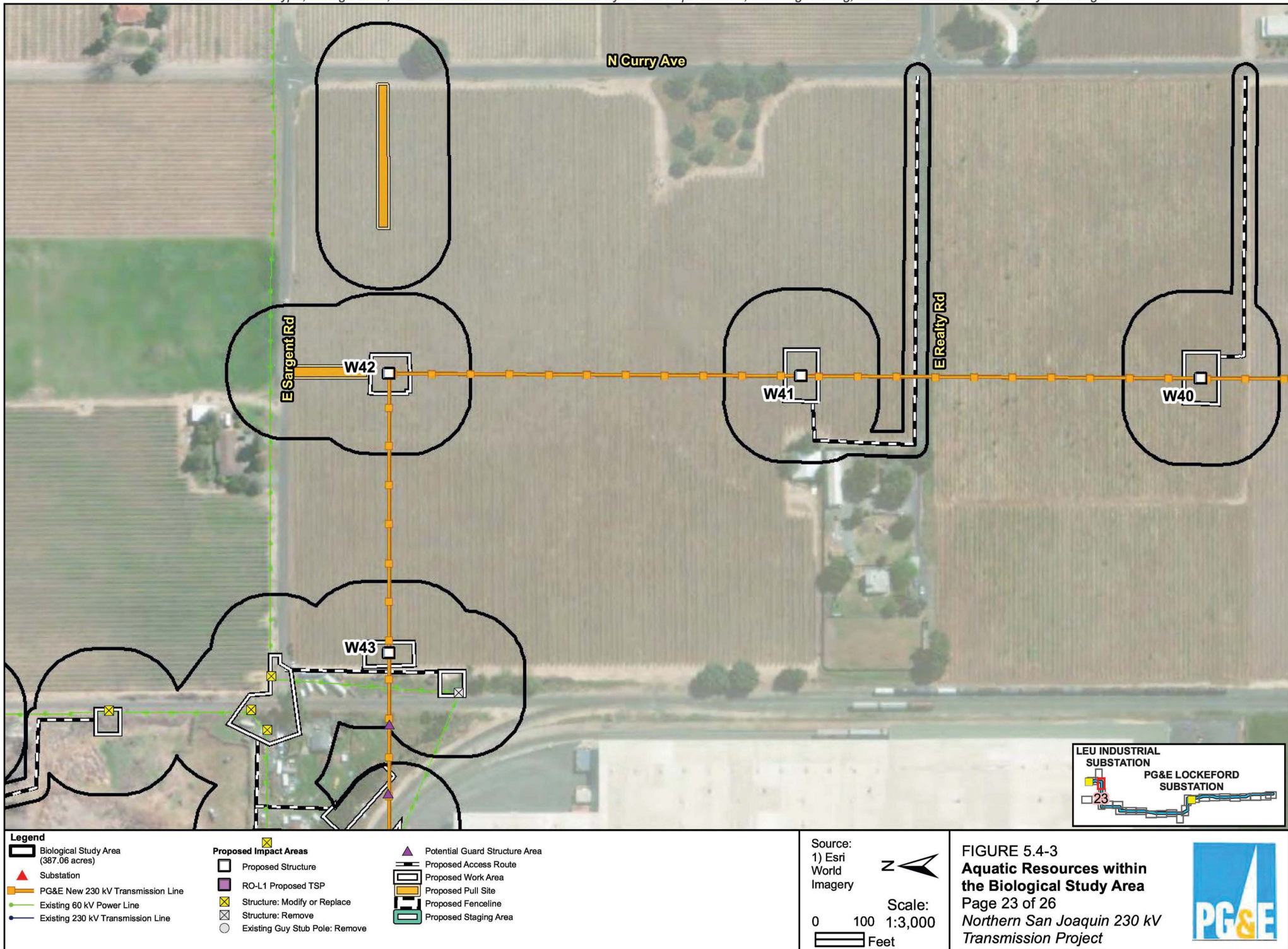


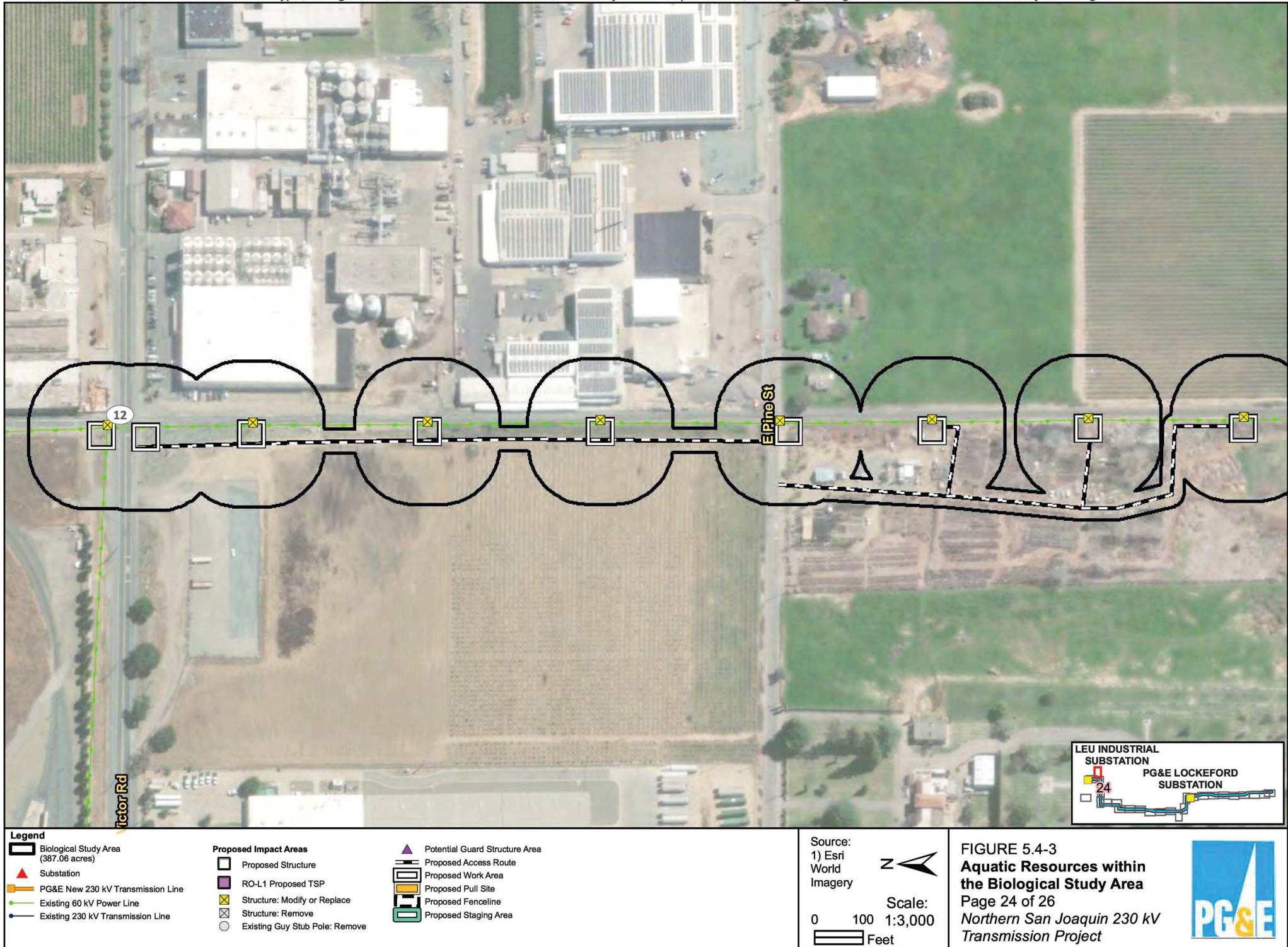


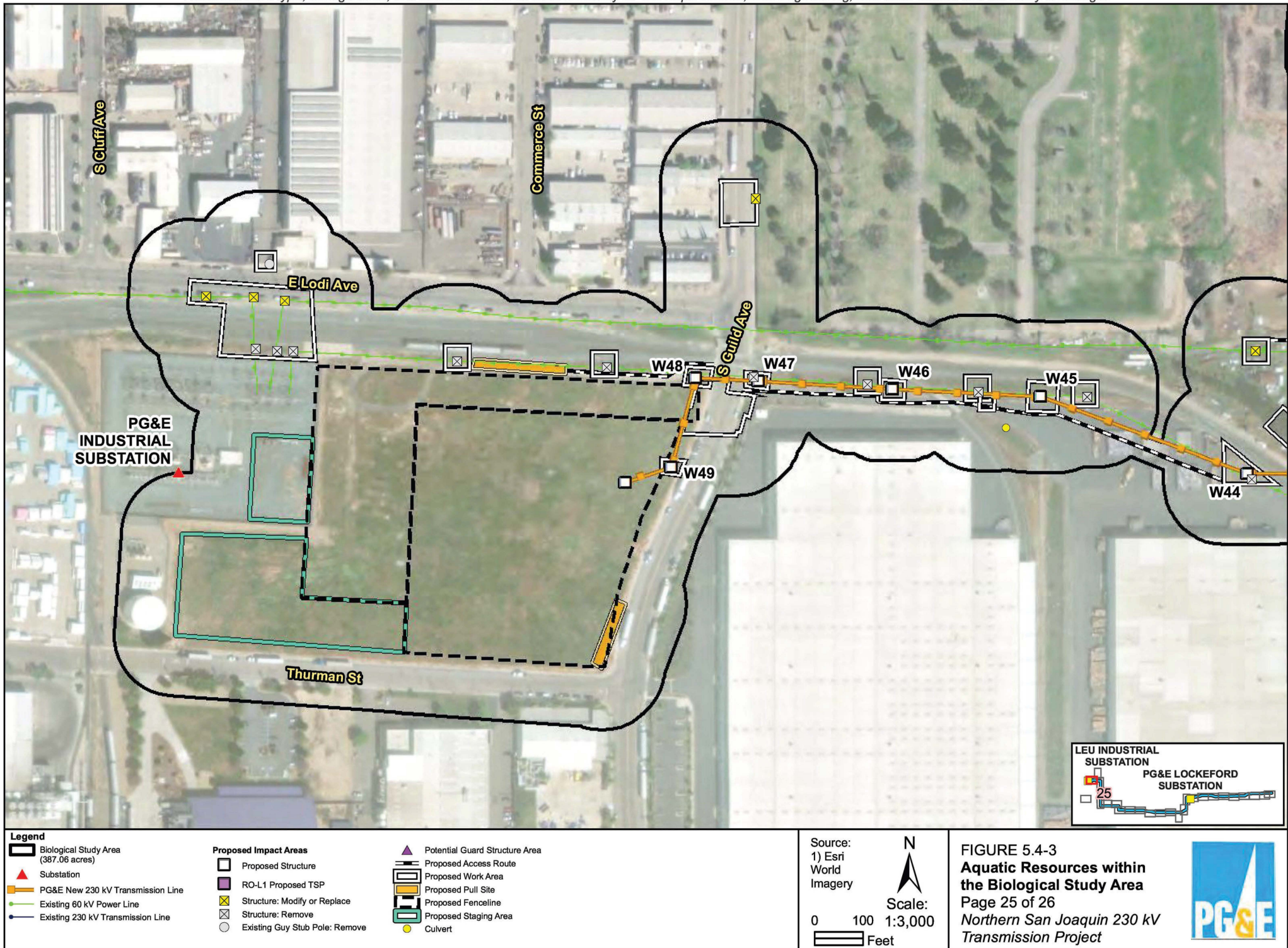
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