

Appendix L

# **Biological Resources Documented at Battle Creek Project Sites**

## Appendix L

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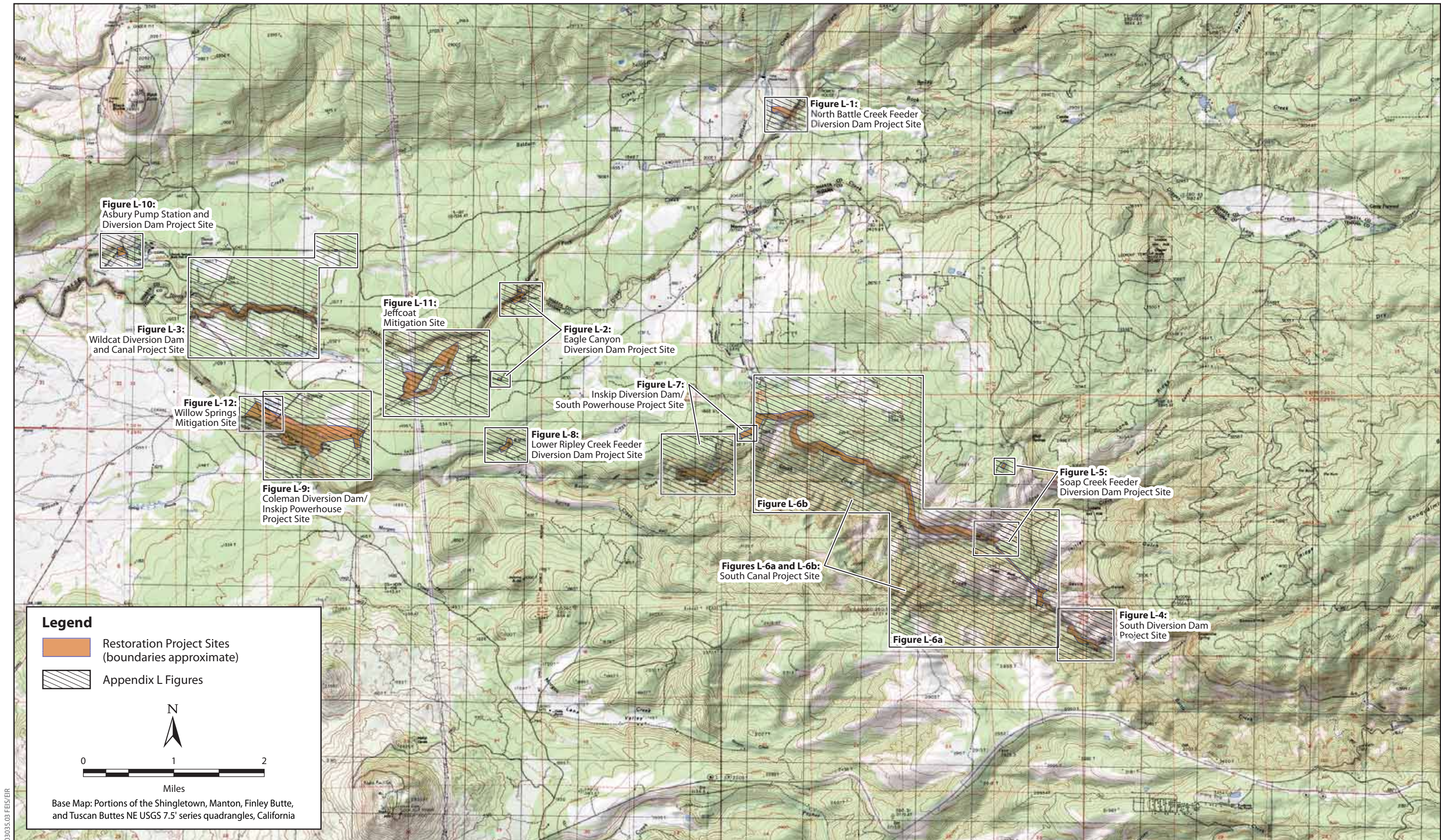
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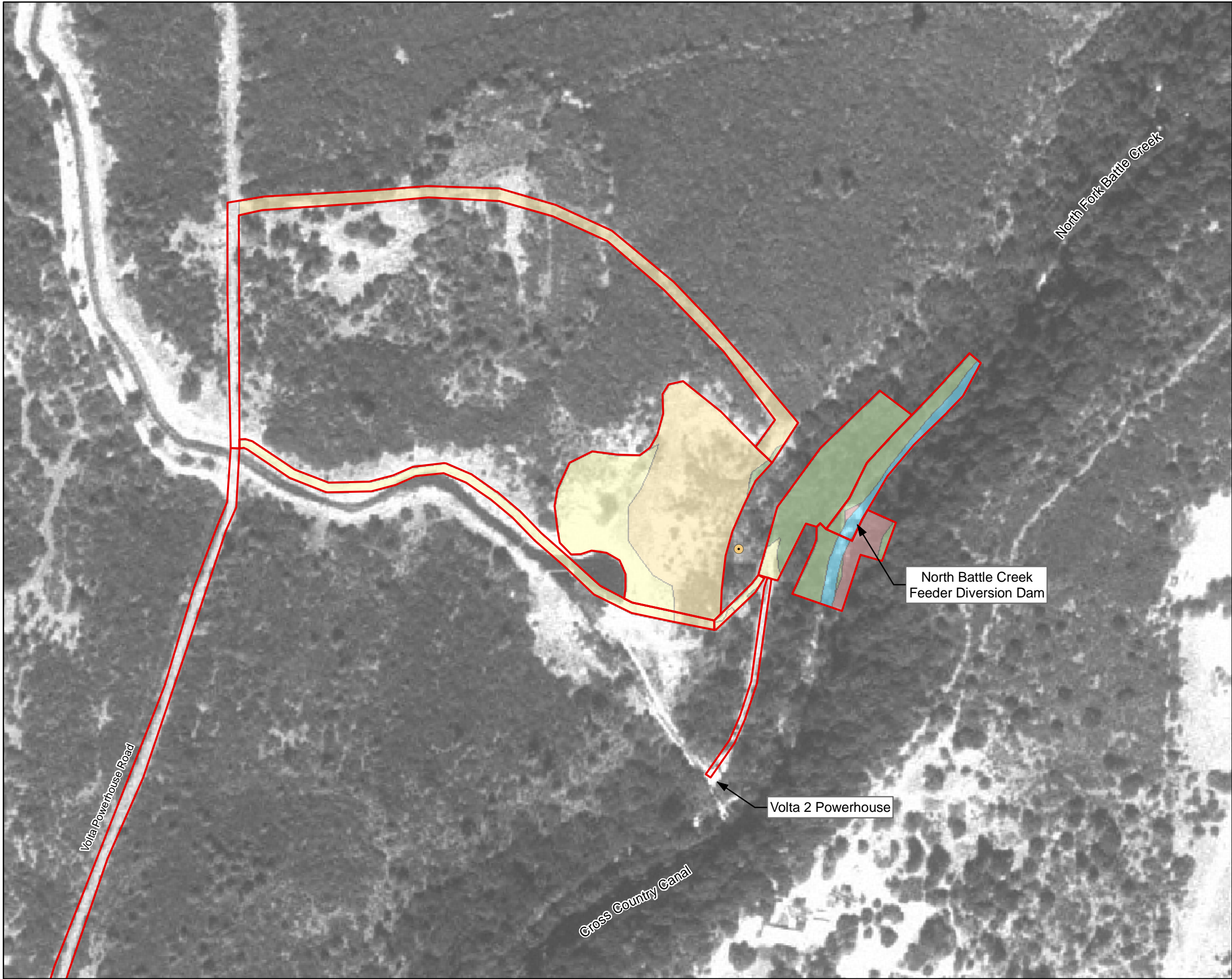




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**FIGURE L-1**

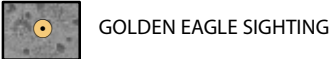
**BIOLOGICAL RESOURCES**

**NORTH BATTLE CREEK FEEDER  
DIVERSION DAM PROJECT SITE**

**HABITAT TYPES**



**BIOLOGICAL RESOURCES**

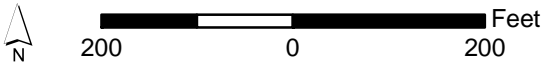


**BOUNDARIES**



HABITAT TYPE	AREA (ACRES)
ANNUAL GRASSLANDS	1.47
LIVE OAK WOODLAND	1.32
MIXED CHAPARRAL	2.74
RIPARIAN FOREST / RIPARIAN SCRUB	0.21
OTHER WATERS OF THE U.S.	0.33
<b>TOTAL AREA AFFECTED</b>	<b>6.07</b>

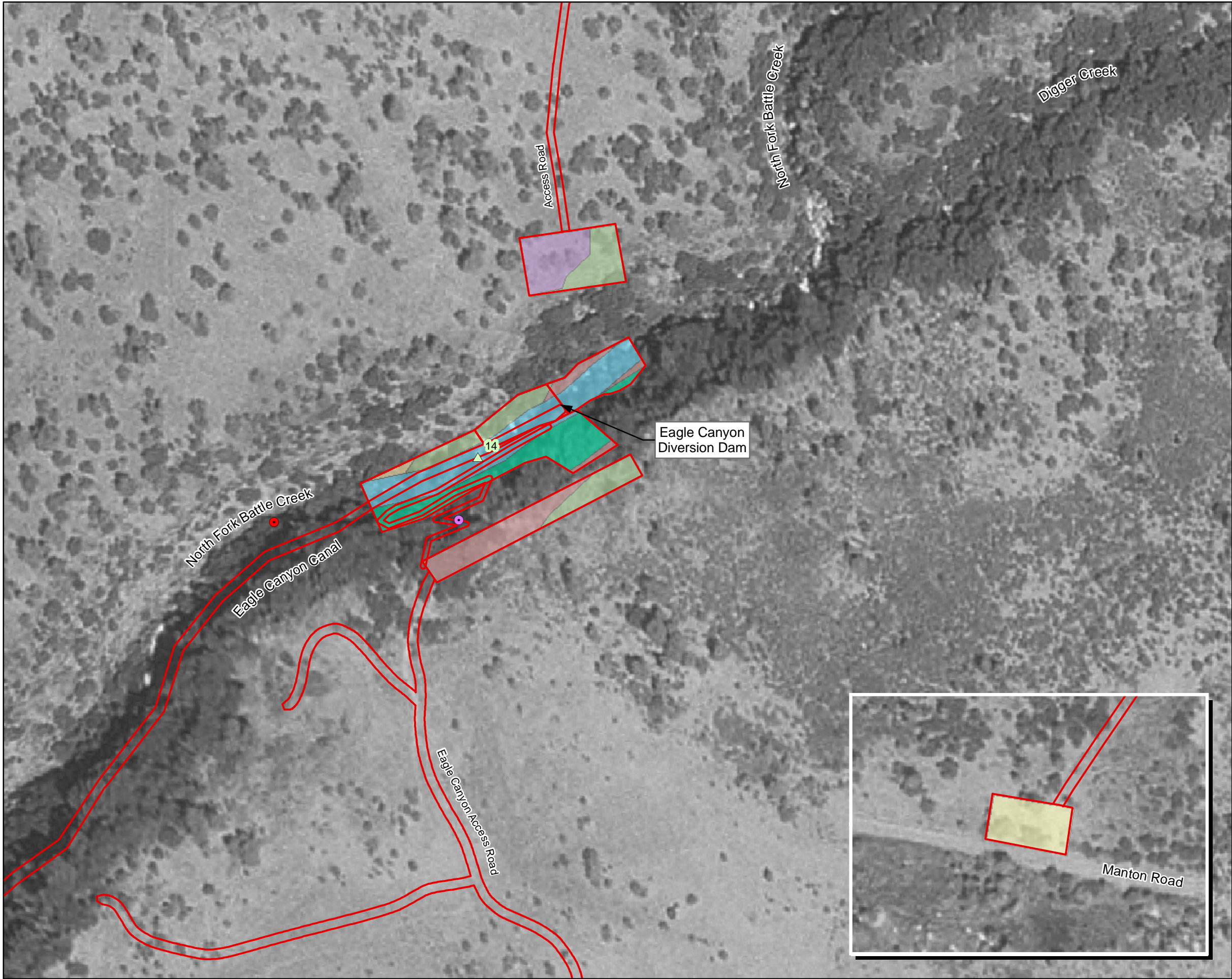
ACCESS ROADS EXISTING, NO ADDITIONAL IMPACTS  
THE AFFECTED ACREAGES OF WETLANDS AND OTHER WATERS OF THE U.S. WERE CALCULATED USING CONSTRUCTION DESIGN DRAWINGS PROVIDED BY RECLAMATION TO SATISFY THE REQUIREMENTS OF SECTION 404 OF THE CLEAN WATER ACT.



SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998

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State Water Resources Control Board  
by Jones & Stokes  
July 2005





**FIGURE L-2**

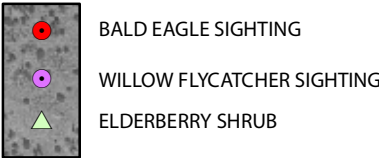
**BIOLOGICAL RESOURCES**

**EAGLE CANYON DIVERSION DAM  
PROJECT SITE**

**HABITAT TYPES**



**BIOLOGICAL RESOURCES**



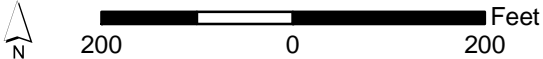
**BOUNDARIES**



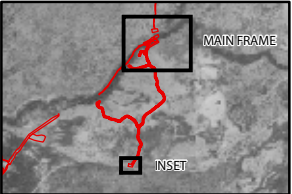
HABITAT TYPE	AREA (ACRES)
ANNUAL GRASSLANDS	0.37
GREY PINE / OAK WOODLAND	0.31
LIVE OAK WOODLAND	0.68
MIXED CHAPARRAL	0.02
RIPARIAN FOREST / RIPARIAN SCRUB	0.47
WETLANDS	0.11
OTHER WATERS OF THE U.S.	0.41

**TOTAL AREA AFFECTED 2.37**

ACCESS ROADS EXISTING, NO ADDITIONAL IMPACTS  
THE AFFECTED ACREAGES OF WETLANDS AND OTHER WATERS OF THE U.S. WERE CALCULATED USING CONSTRUCTION DESIGN DRAWINGS PROVIDED BY RECLAMATION TO SATISFY THE REQUIREMENTS OF SECTION 404 OF THE CLEAN WATER ACT.  
UNDER THE SIX DAM AND THREE DAM REMOVAL ALTERNATIVES, APPROXIMATELY 3,230 LINEAR FEET OF EAGLE CANYON CANAL WOULD BE AFFECTED BETWEEN MANTON ROAD AND THE PENSTOCK AT INSKIP POWERHOUSE.



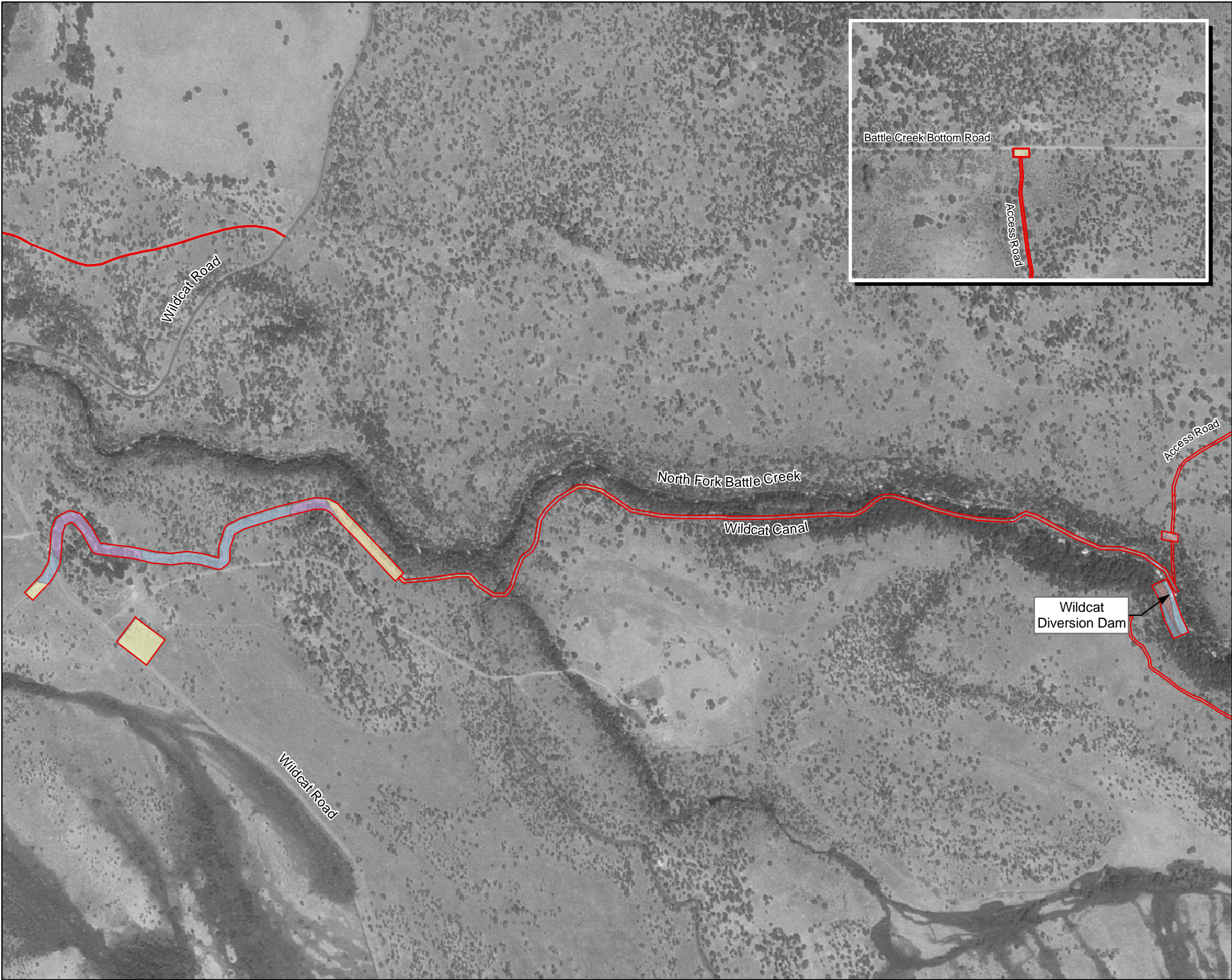
SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998



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**FIGURE L-3**  
BIOLOGICAL RESOURCES  
WILDCAT DIVERSION DAM AND CANAL  
PROJECT SITE

**HABITAT TYPES**



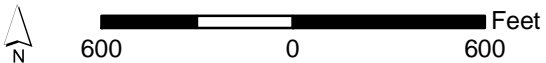
**BOUNDARIES**



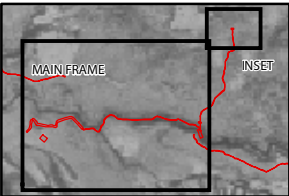
HABITAT TYPE	AREA (ACRES)	
	DAM	CANAL
ANNUAL GRASSLANDS	1.13	0.20
BLUE OAK WOODLAND / SAVANNA	0.19	2.49
GREY PINE / OAK WOODLAND		1.71
MIXED CHAPARRAL		1.25
RIPARIAN FOREST / RIPARIAN SCRUB	0.72	1.85
OTHER WATERS OF THE U.S.	0.26	

**TOTAL AREA AFFECTED**      **2.30**      **7.50**

ACCESS ROADS EXISTING, NO ADDITIONAL IMPACT  
THE AFFECTED ACRES OF WETLANDS AND OTHER WATERS OF THE U.S. WERE CALCULATED USING CONSTRUCTION DESIGN DRAWINGS PROVIDED BY RECLAMATION TO SATISFY THE REQUIREMENTS OF SECTION 404 OF THE CLEAN WATER ACT.



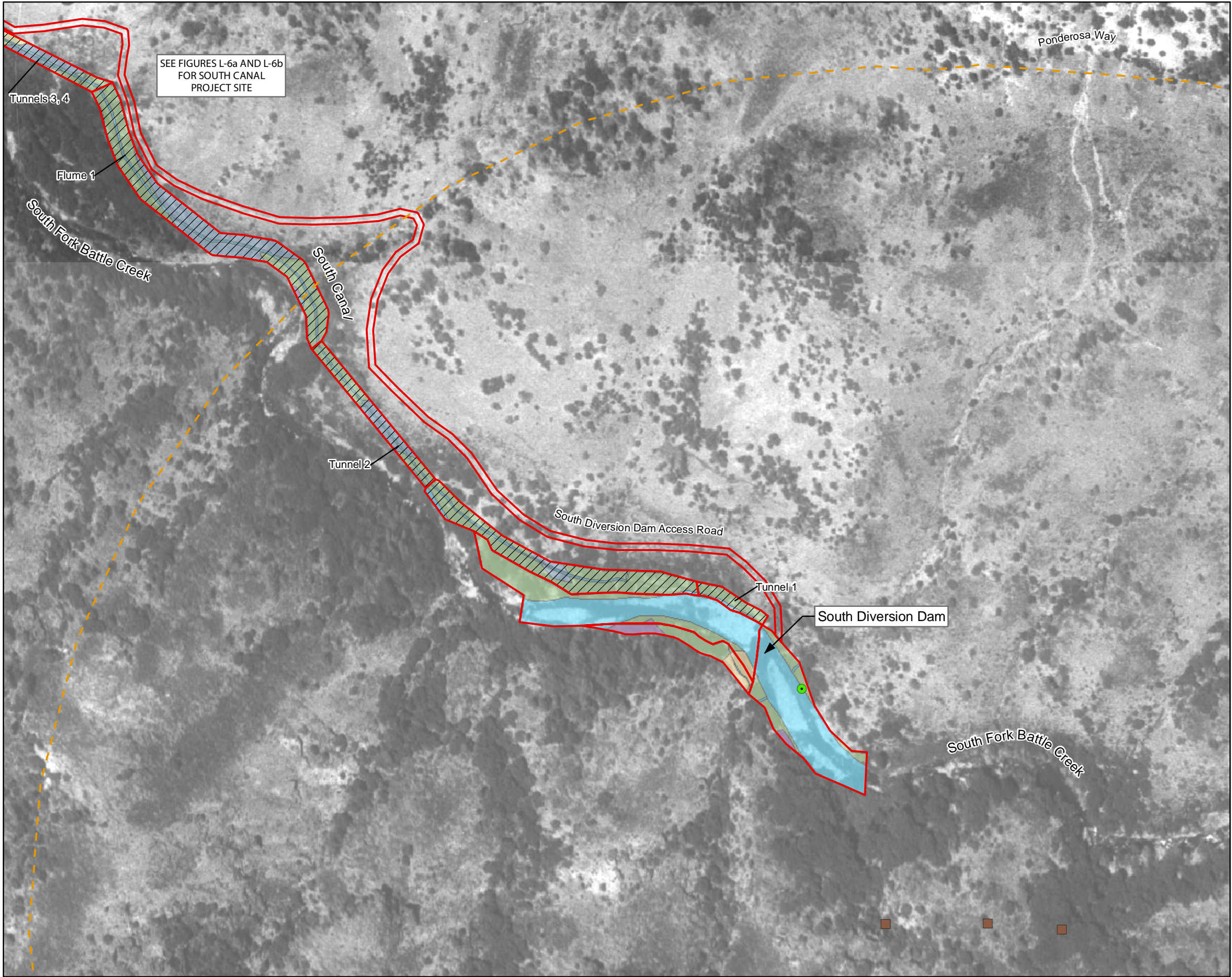
SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998



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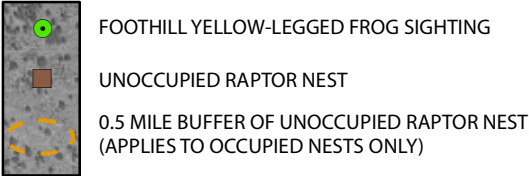


**FIGURE L-4**  
BIOLOGICAL RESOURCES  
SOUTH DIVERSION DAM PROJECT SITE

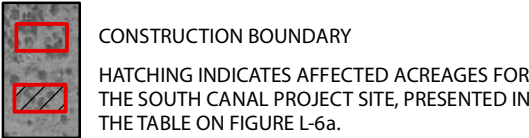
**HABITAT TYPES**



**BIOLOGICAL RESOURCES**

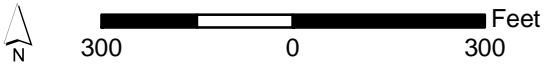


**BOUNDARIES**



HABITAT TYPE	AREA (ACRES)
GREY PINE / OAK WOODLAND	0.15
LIVE OAK WOODLAND	1.29
MIXED CHAPARRAL	0.16
RIPARIAN FOREST / RIPARIAN SCRUB	0.02
OTHER WATERS OF THE U.S.	2.67
<b>TOTAL AREA AFFECTED</b>	<b>4.29</b>

THE AFFECTED ACREAGES OF WETLANDS AND OTHER WATERS OF THE U.S. WERE CALCULATED USING CONSTRUCTION DESIGN DRAWINGS PROVIDED BY RECLAMATION TO SATISFY THE REQUIREMENTS OF SECTION 404 OF THE CLEAN WATER ACT.

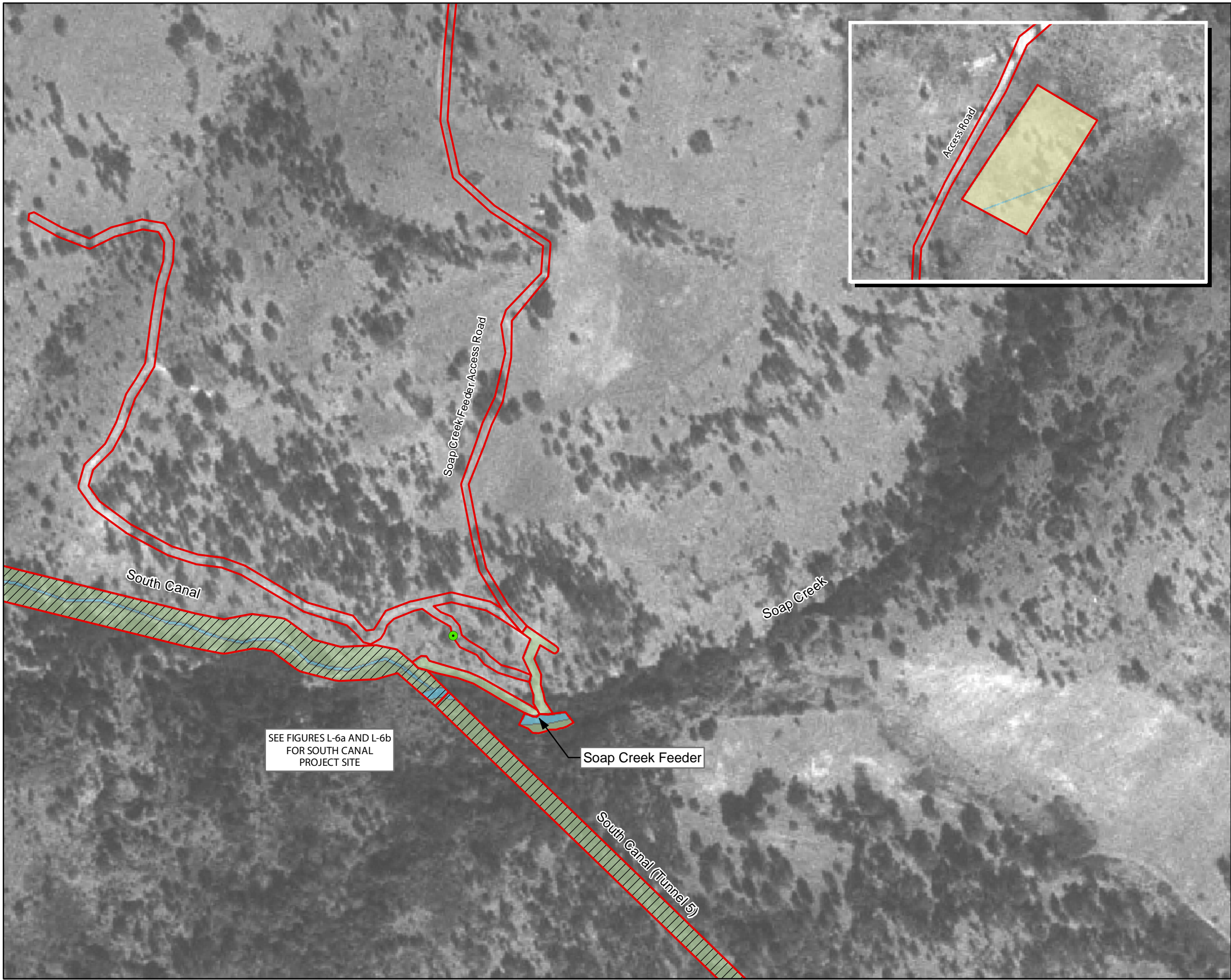


SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998

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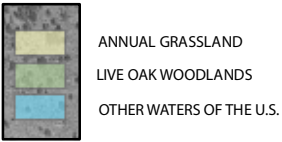


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**FIGURE L-5**  
BIOLOGICAL RESOURCES  
SOAP CREEK FEEDER DIVERSION  
DAM PROJECT SITE

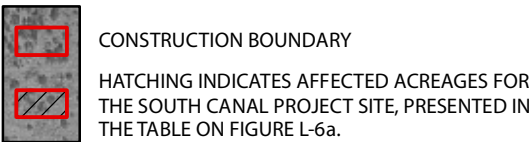
**HABITAT TYPES**



**BIOLOGICAL RESOURCES**



**BOUNDARIES**

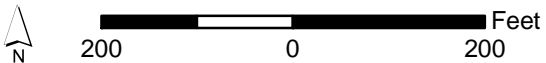


HABITAT TYPE	AREA (ACRES)
ANNUAL GRASSLANDS	0.93
LIVE OAK WOODLAND	0.27
OTHER WATERS OF THE U.S.	0.03

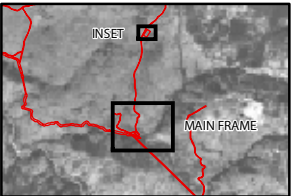
**TOTAL AREA AFFECTED** 1.23

ACCESS ROADS EXISTING, NO ADDITIONAL IMPACTS

THE AFFECTED ACREAGES OF WETLANDS AND OTHER WATERS OF THE U.S. WERE CALCULATED USING CONSTRUCTION DESIGN DRAWINGS PROVIDED BY RECLAMATION TO SATISFY THE REQUIREMENTS OF SECTION 404 OF THE CLEAN WATER ACT.



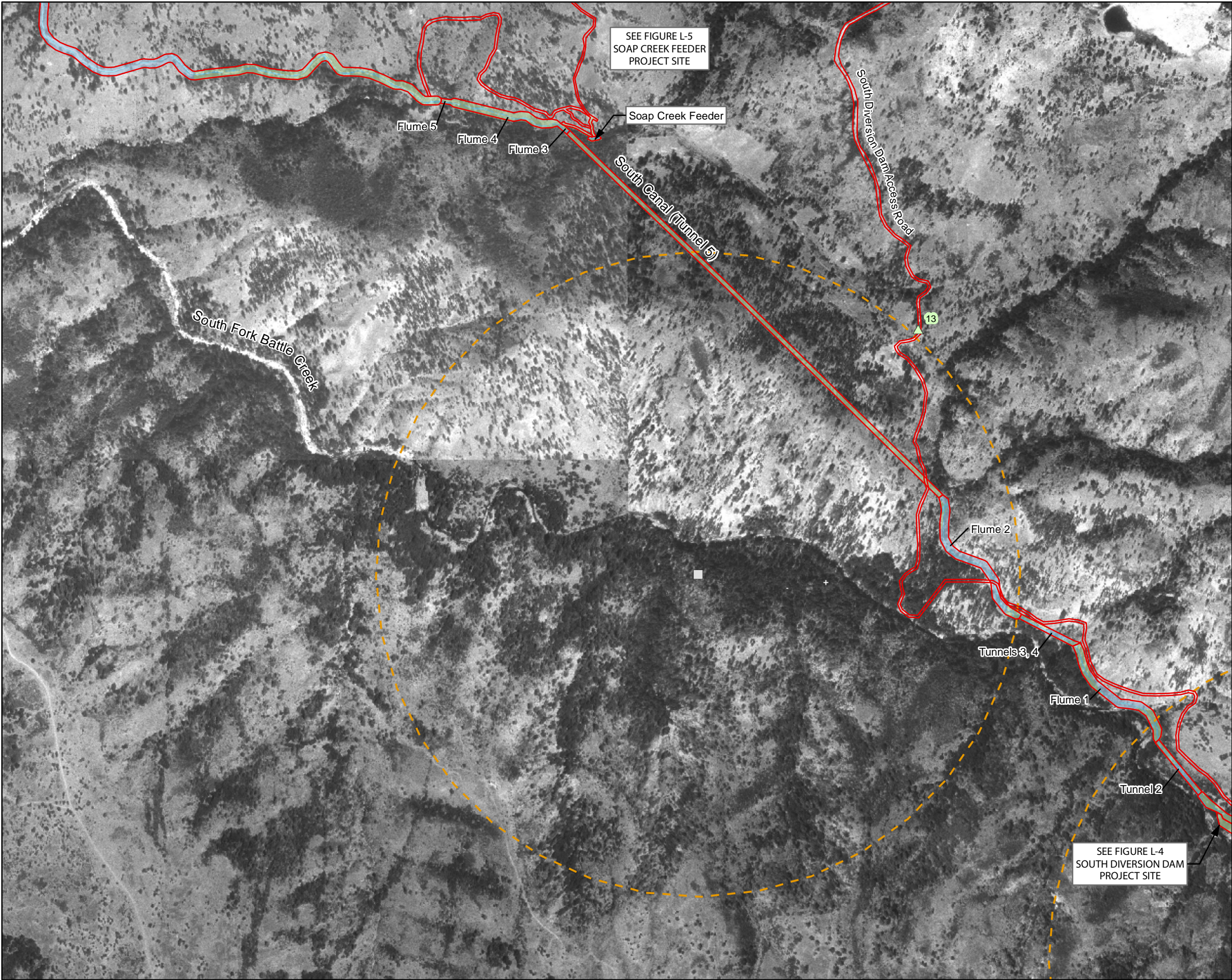
SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998



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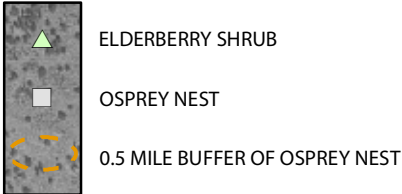


**FIGURE L-6a**  
BIOLOGICAL RESOURCES  
SOUTH CANAL PROJECT SITE

**HABITAT TYPES**



**BIOLOGICAL RESOURCES**



**BOUNDARIES**



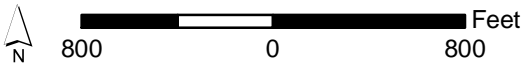
HABITAT TYPE	AREA (ACRES)
ANNUAL GRASSLAND	2.51
BLUE OAK WOODLAND / SAVANNA	23.54
GREY PINE / OAK WOODLAND	0.03
LIVE OAK WOODLANDS	13.90
OTHER WATERS OF THE U.S.	4.31
<b>TOTAL AREA AFFECTED</b>	<b>44.29</b>

ACCESS ROADS EXISTING, NO ADDITIONAL IMPACTS

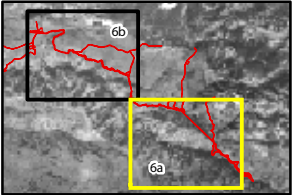
THE AFFECTED ACRES OF WETLANDS AND OTHER WATERS OF THE U.S. WERE CALCULATED USING CONSTRUCTION DESIGN DRAWINGS PROVIDED BY RECLAMATION TO SATISFY THE REQUIREMENTS OF SECTION 404 OF THE CLEAN WATER ACT.

FOR THE AFFECTED ACREAGE AT THE SOAP CREEK FEEDER DIVERSION DAM SITE, SEE THE TABLE ON FIGURE L-5.

FOR THE AFFECTED ACREAGE AT THE SOUTH DIVERSION DAM SITE, SEE THE TABLE ON FIGURE L-4.

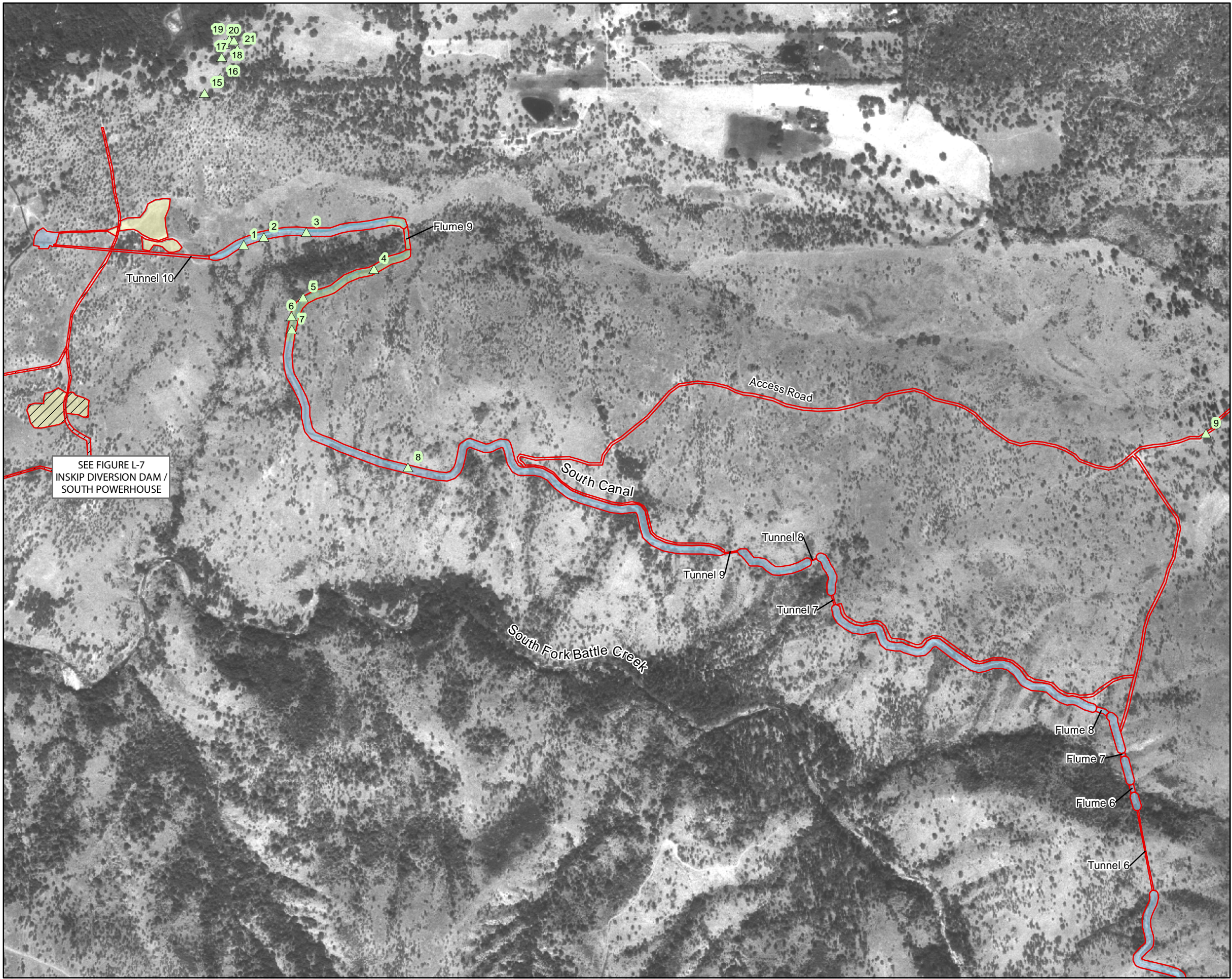


SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998



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**FIGURE L-6b**  
BIOLOGICAL RESOURCES  
SOUTH CANAL PROJECT SITE

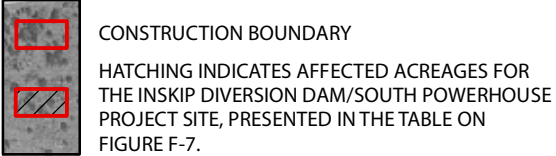
**HABITAT TYPES**



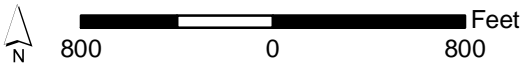
**BIOLOGICAL RESOURCES**



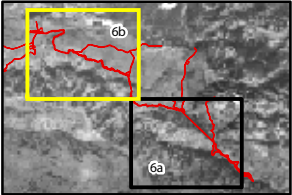
**BOUNDARIES**



FOR ACREAGE IMPACTS, SEE FIGURE L-6a



SOURCE: U.S. Geological Survey Digital Orthophoto Quarter Quadrangles 1998



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