



Chamise Creek Watershed

Area	Hydrologic Units	Calwater Subbasins ---	(Planning Watersheds)
17,955 Acres 7,266 Hectares 28 Square Miles	18010105 4th Field HUC 111142	1111420502	Lower Kekawaka Creek

Location
Mendicino County
Humboldt County
Trinity County

4th Field Calwater

Species Potential	Miles of Streams with Species Present
So. Oregon/ No. California Coast Coho Eel River Diversity Stratum - Potentially Independent Population	<u>Coho</u> 0 CDFG, Coho Distribution, May 2007
Northern California Steelhead Lower Interior Diversity Stratum - Potentially Independent Population	<u>Steelhead</u> 9
California Coastal Chinook North Mountain Interior Diversity Stratum - Independent Population	<u>Chinook</u> 2 NOAA Fisheries, Critical Habitat Redesignation, 2005

Critical Habitat	Miles of Stream
Northern California Steelhead	9
California Coastal Chinook	2

Miles of Waterway ^A	Miles	Number of Dams ^C
Naturally Occurring Waterways		
Intermittent Stream	45	0
Perennial Stream	19	

^CPassage Assessment Database,
Pacific States Marine Fisheries Commission, 2008

^AUSGS National Hydrography Dataset, High Resolution, 2004. 1:24,000

USGS Gaging Stations ^B	Number of Barriers ^C
11474700 Chamise Creek near Island Mountain	11 0 Dams 1 Road Crossing 10 Non-structural (Falls, logjams, etc)

^BUS Environmental Protection Agency BASINS Project, 2001

^CPassage Assessment Database,
Pacific States Marine Fisheries Commission, 2008

EPA Total Maximum Daily Load Classification (TMDL)^I
Sediment \ Siltation; Water Temperature
Sources: Construction/Land Development; Erosion/Siltation; Habitat Modification; Harvesting, Restoration, Residue Management;
Removal of Riparian Vegetation; Range Grazing; Removal of Riparian Vegetation; Channel Erosion; Logging Road Construction/Maintenance

^IState Water Resources Control Board, 2003



Average Annual Precipitation^E	Average Annual Precipitation Range^E
62.3"	45" to 65 "

^ECalifornia Mean Annual Precipitation Zones, 1900-1960, CA Department of Forestry, 1990

Roads^A	Miles
Roads in Watershed	
Local, neighborhood, and rural road, city street, unseparated	43
Vehicular Trails	2

Road Density	
Miles of Roads per SqMi of Watershed	1.6
Miles of Roads per SqMi of 100m Riparian Buffer*	1.3

*Buffer is 100 meters on either side of the stream centerline

^AU.S. Census Bureau - Tiger 2000, 2002. 1:24,000

Slope^D	Acres	Percent of watershed
Lands of 0-2 percent slope	30	0%
Lands of 2-4 percent slope	60	0%
Lands of 4-10 percent slope	291	2%
Lands of 10-15 percent slope	485	3%
Lands of 15-30 percent slope	5,048	28%
Lands of 30-60 percent slope	9,057	50%
Lands of 60-100 percent slope	2,911	16%
Lands of > 100 percent slope	60	0%
Elevation Range	358 - 3881 ft	109 - 1183 m

^DSlope derived from USGS 10 meter Digital Elevation Models (DEM's)

Vegetation^G	Acres	Percent of watershed
Annual grassland	3,163	18%
Barren	12	0%
Conifer Forest		
Douglas Fir	6,121	34%
Montane Hardwood-Conifer	264	1%
Ponderosa Pine	5	0%
Hardwood Forest		
Montane Hardwood	7,969	44%
Shrub	408	2%
Water	2	0%

^GMulti-source Land Cover Data (2002 v2), CA Department of Forestry, 2002. 100 meter Grid

Erodability of Watershed^F	Acres	Percent of watershed
Ranking = 8	17,955	100%

^FDepartment of Conservation, Division of Mines and Geology; minimum mapping unit: approx. 8000 acres
Watersheds were rated based on slope, precipitation, and lithologic susceptibility to failure. Total erosion potential is based on a combination of the landslide potential, debris slide potential, and the surface erosion potential. Rating 0-10 [0 = Low slide potential, 10 = High slide potential]



Land Ownership^H	Acres	Percent of watershed
Private	14,824	83%
State	264	1%
Federal, BLM	2,853	16%

^HManagement Landscape, CA Department of Forestry, 2002 and US FWS (data supplied by major landowners who were undergoing an HCP), 2000

Area Under a Timber Harvest Plan^A past 10 years	Area Under a Timber Harvest Plan^A past 15 years
0	191 1% of watershed

^ACalifornia Department of Forestry, Timber Harvest Plans for Napa Watershed, 2006

Population^I	Housing^I
Total Population within the watershed -- 181 People	Total Housing Units within the watershed -- 81 Houses
	Housing Density
	0 to Less than 1 Housing Unit / 160 Acres 76%
	1 Unit / 160 Acres to 1 Unit / 20 Acres 23%
	1 Unit / 20 Acres to 1 Unit / 5 Acres 1%
	1 Unit / 5 Acres to 2 Units / Acre
	2 Units / Acres to Greater than or Equal to 5 Units / Acre

^ICensus 2000 Block Data (Migrated), CA Department of Forestry, 2003





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Chamise Creek Watershed CalWater Planning Watersheds





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Chamise Creek Watershed Fish Distribution and Critical Habitat








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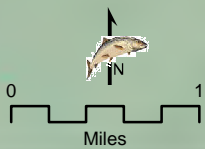
Chamise Creek Watershed Steelhead Current vs. Historical



 NC Steelhead Distribution and Critical Habitat
National Marine Fisheries Service,
August 2005. 1:100,000.

 Steelhead Intrinsic Potential
NMFS SWR Fisheries Science Center, 2005.
Potential historical suitable habitat

 1:24,000 Streams








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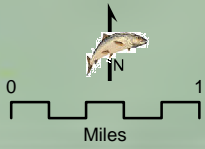
Chamise Creek Watershed Chinook Current vs. Historical



 CC Chinook Distribution and Critical Habitat
National Marine Fisheries Service,
August 2005. 1:100,000.

 Chinook Intrinsic Potential
NMFS SWR Fisheries Science Center, 2005.
Potential historical suitable habitat

 1:24,000 Streams





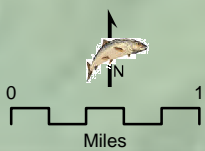
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Chamise Creek Watershed Elevation



Chamise Elevation (meters)

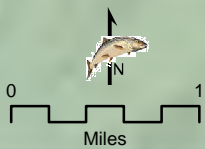
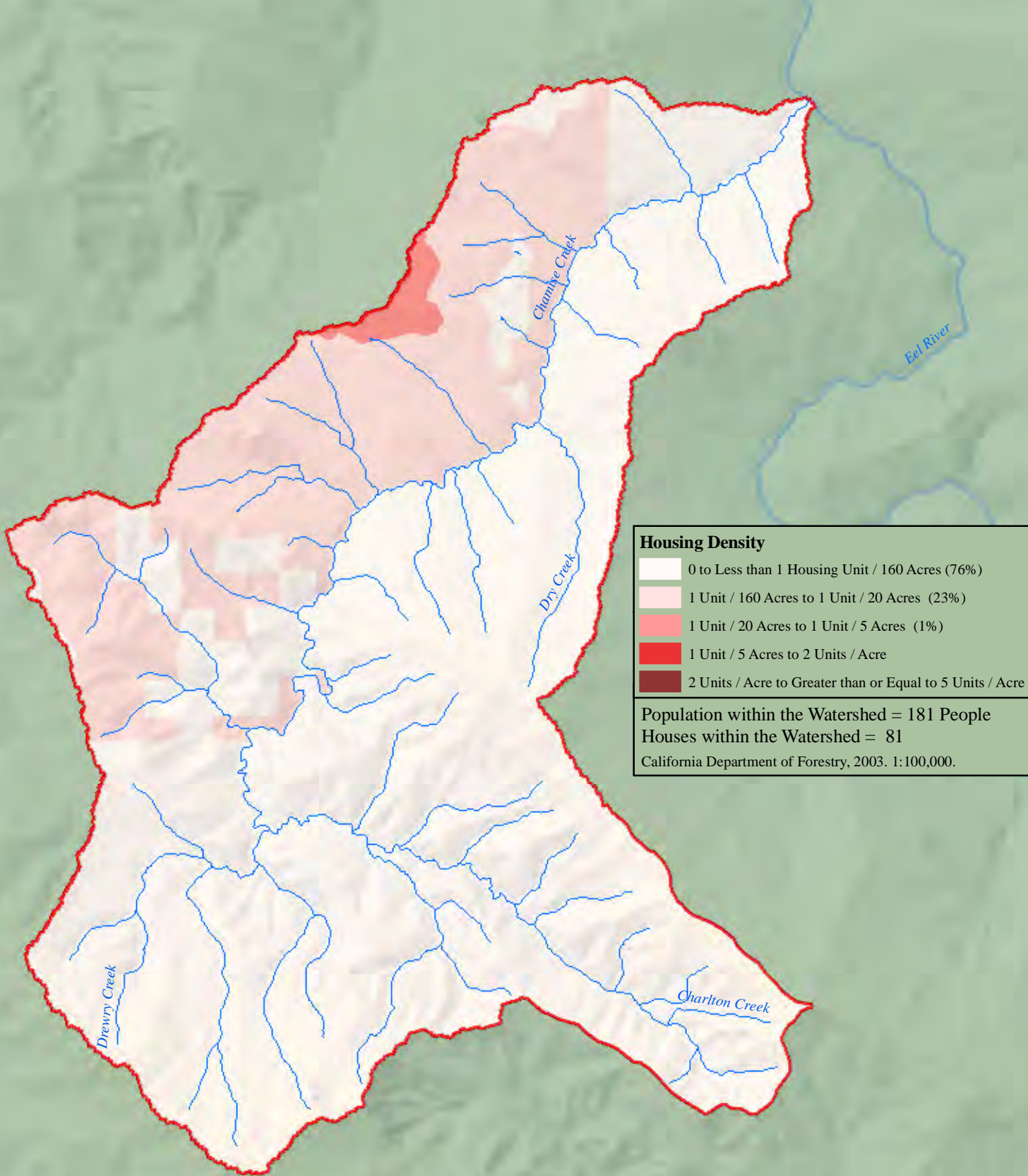
1183	SWR-SCFSC 10 Meter Digital Elevation
109	Model (DEM)





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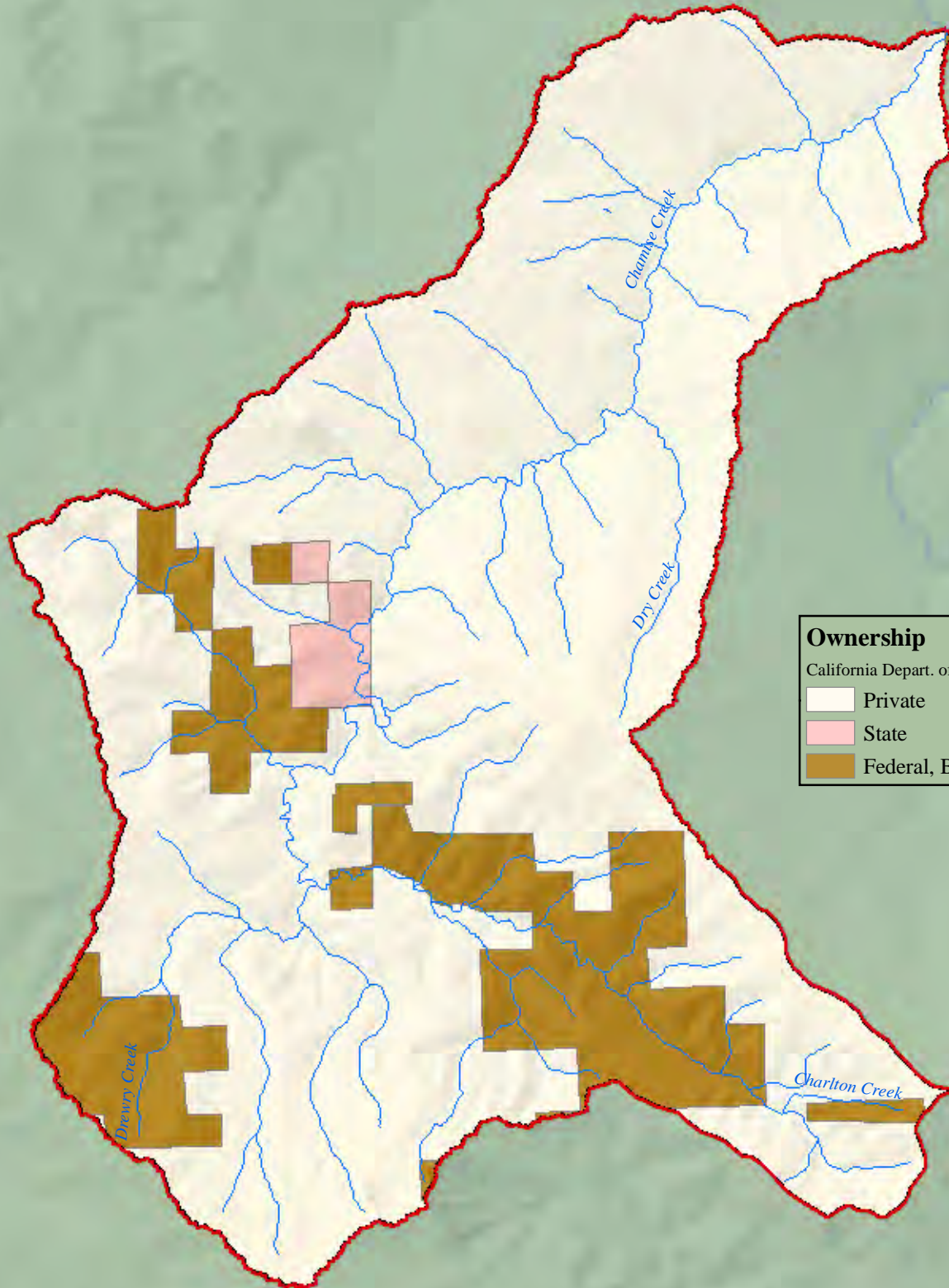
Chamise Creek Watershed Development





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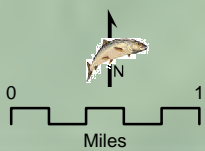
Chamise Creek Watershed Ownership



Ownership

California Depart. of Forestry, 1999. 1:100,000.

- Private
- State
- Federal, BLM







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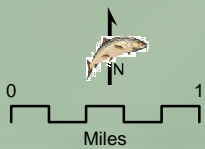
Chamise Creek Watershed Road Density



 Road
U.S. Census Bureau - Tiger 2000, 2002. 1:24,000

Road Density (Miles of Road per Square Mile of Watershed)

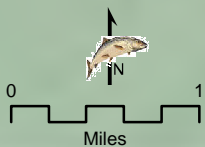
 1.6





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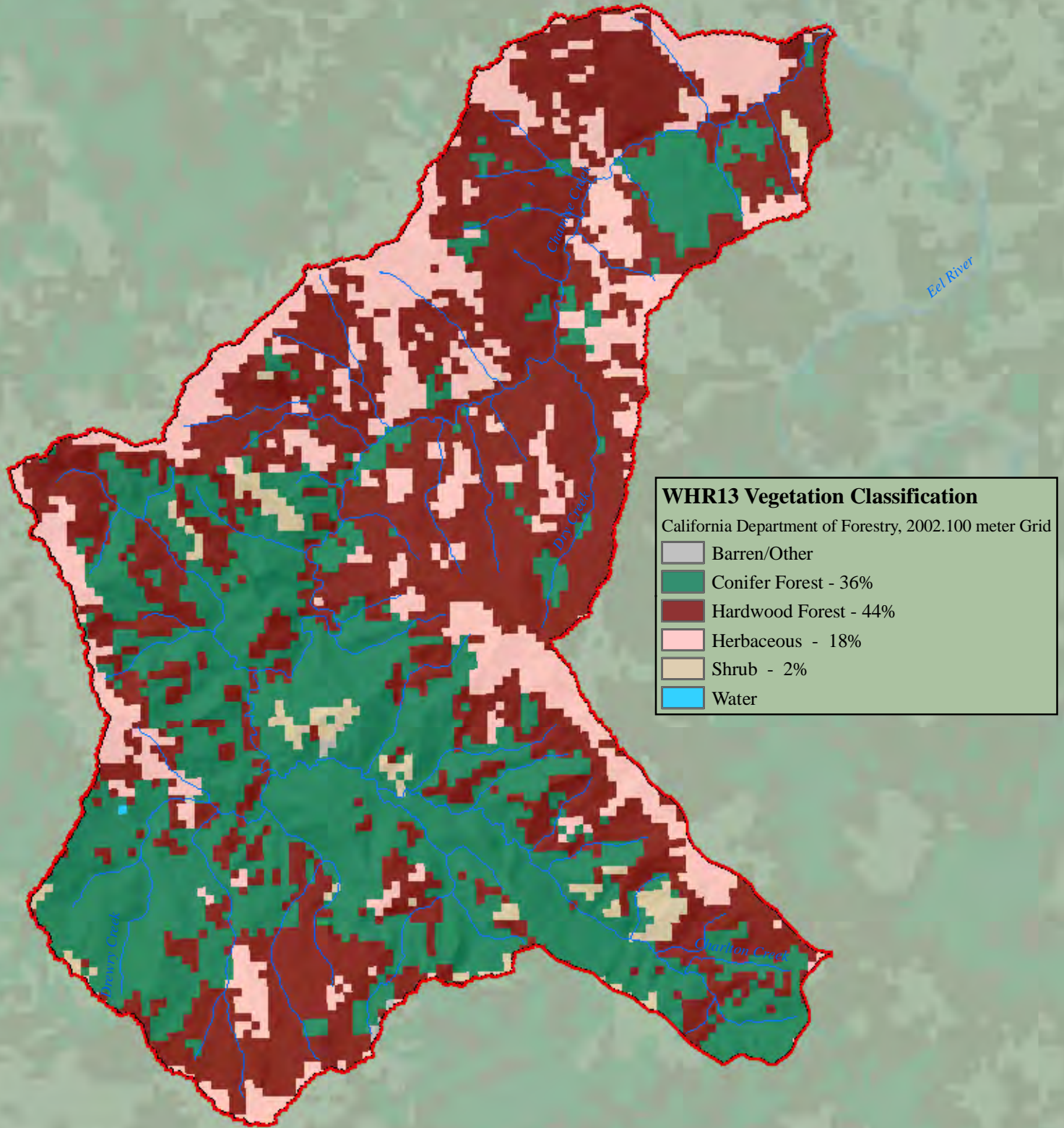
Chamise Creek Watershed Road Density in the Riparian Corridor





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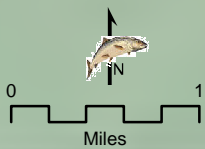
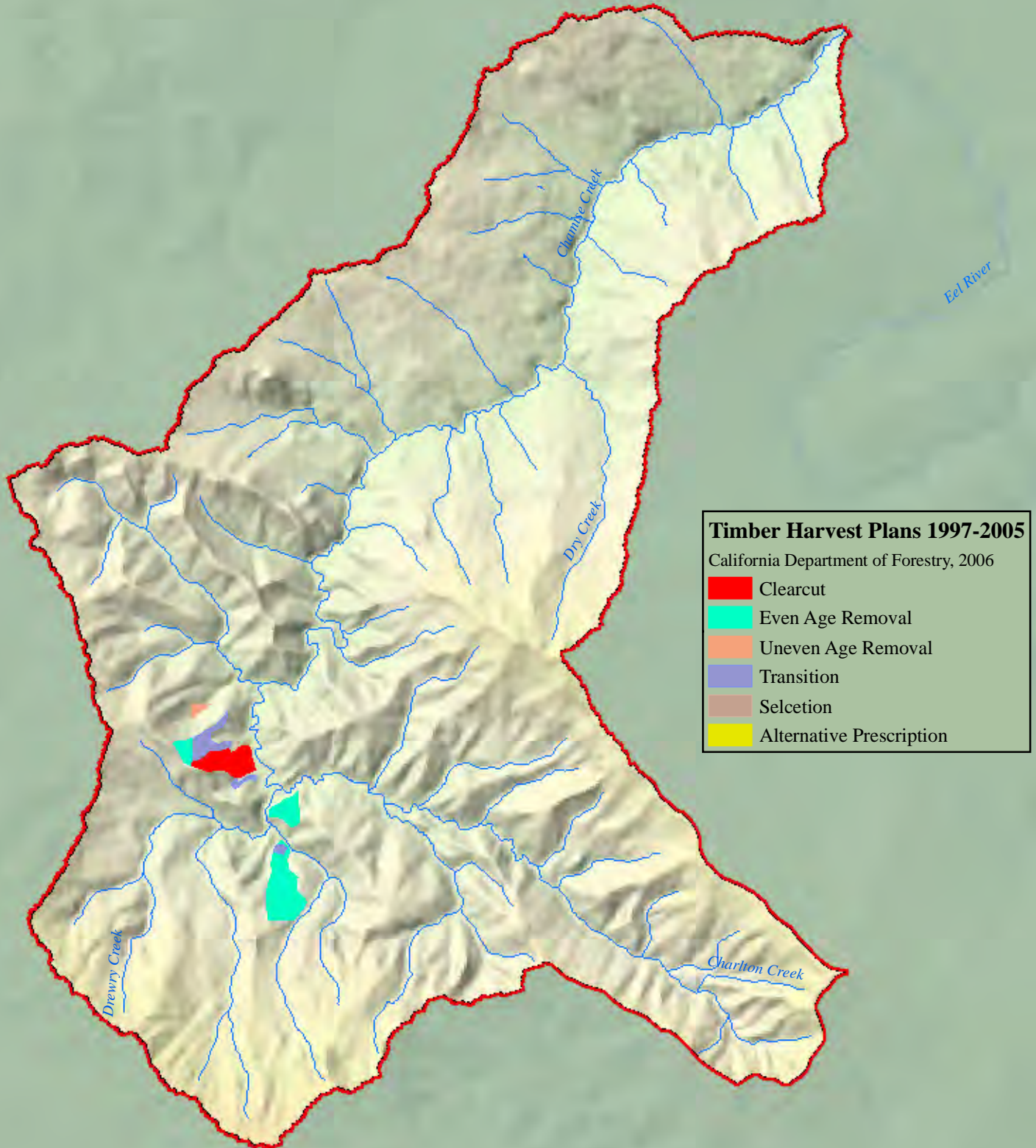
Chamise Creek Watershed Vegetation





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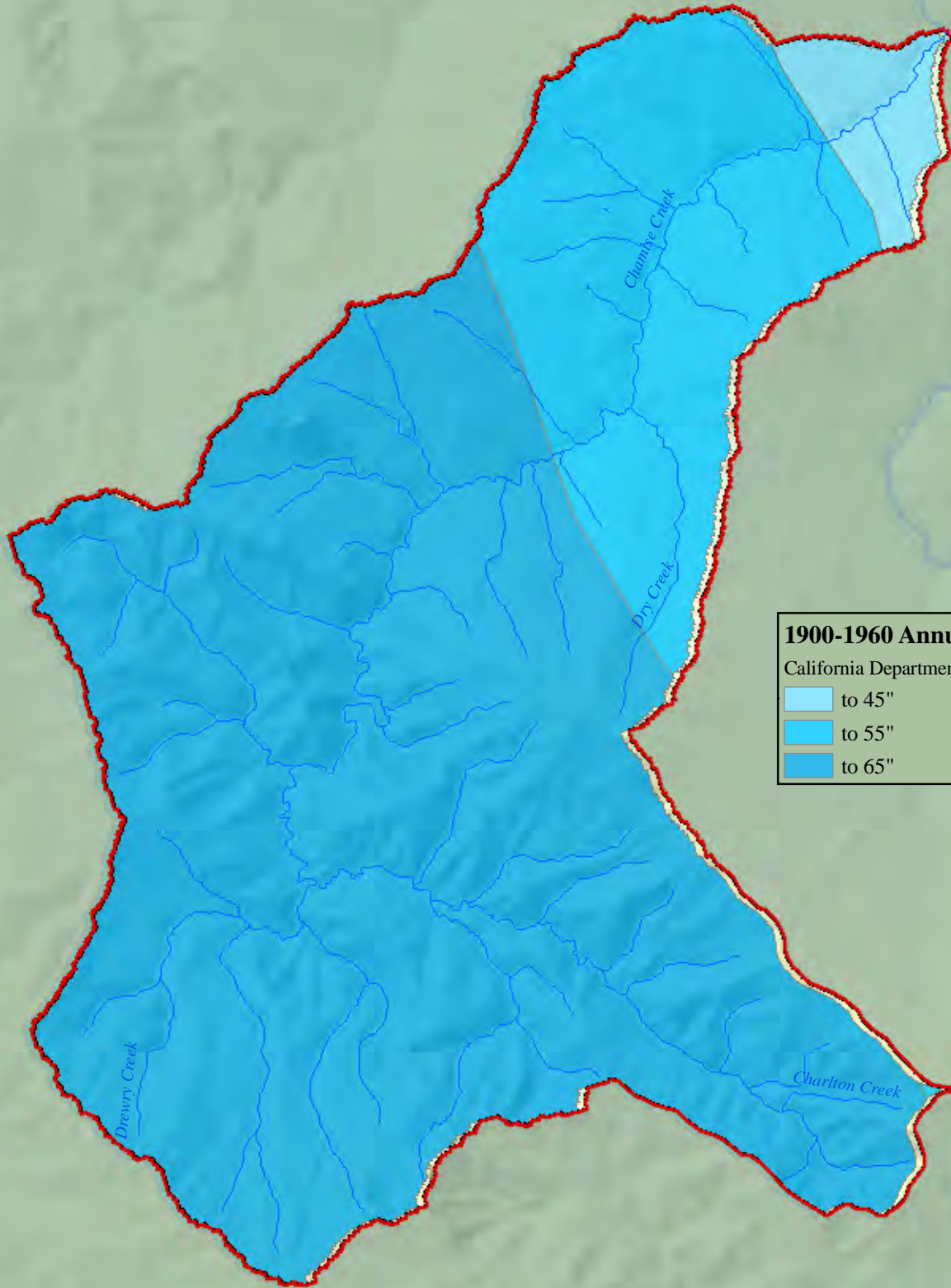
Chamise Creek Watershed Timber Harvesting 1997-2005





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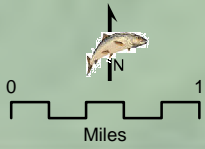
Chamise Creek Watershed Precipitation



1900-1960 Annual Precipitation
California Department of Forestry, 1990. 1:100,000

Light Blue	to 45"
Medium Blue	to 55"
Dark Blue	to 65"

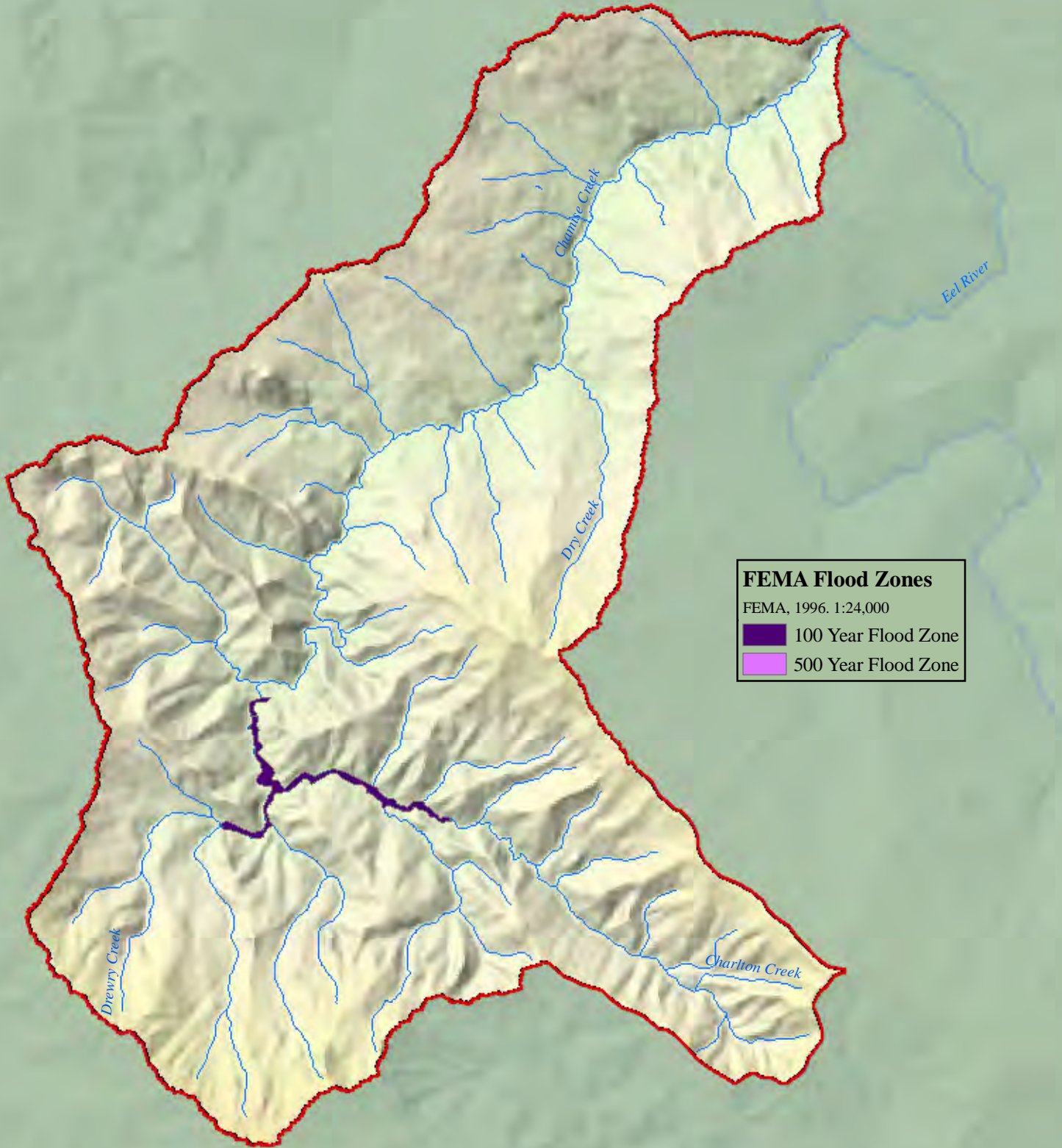
Watershed Average: 62.3"







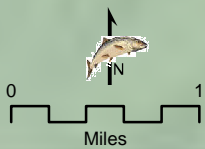
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Chamise Creek Watershed Flood Zone



FEMA Flood Zones
FEMA, 1996. 1:24,000

-  100 Year Flood Zone
-  500 Year Flood Zone





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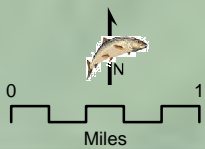
Chamise Creek Watershed Erosion Potential



Erosion Potential
Ca Dept. of Conserv., Division of Mines And Geology, 1994

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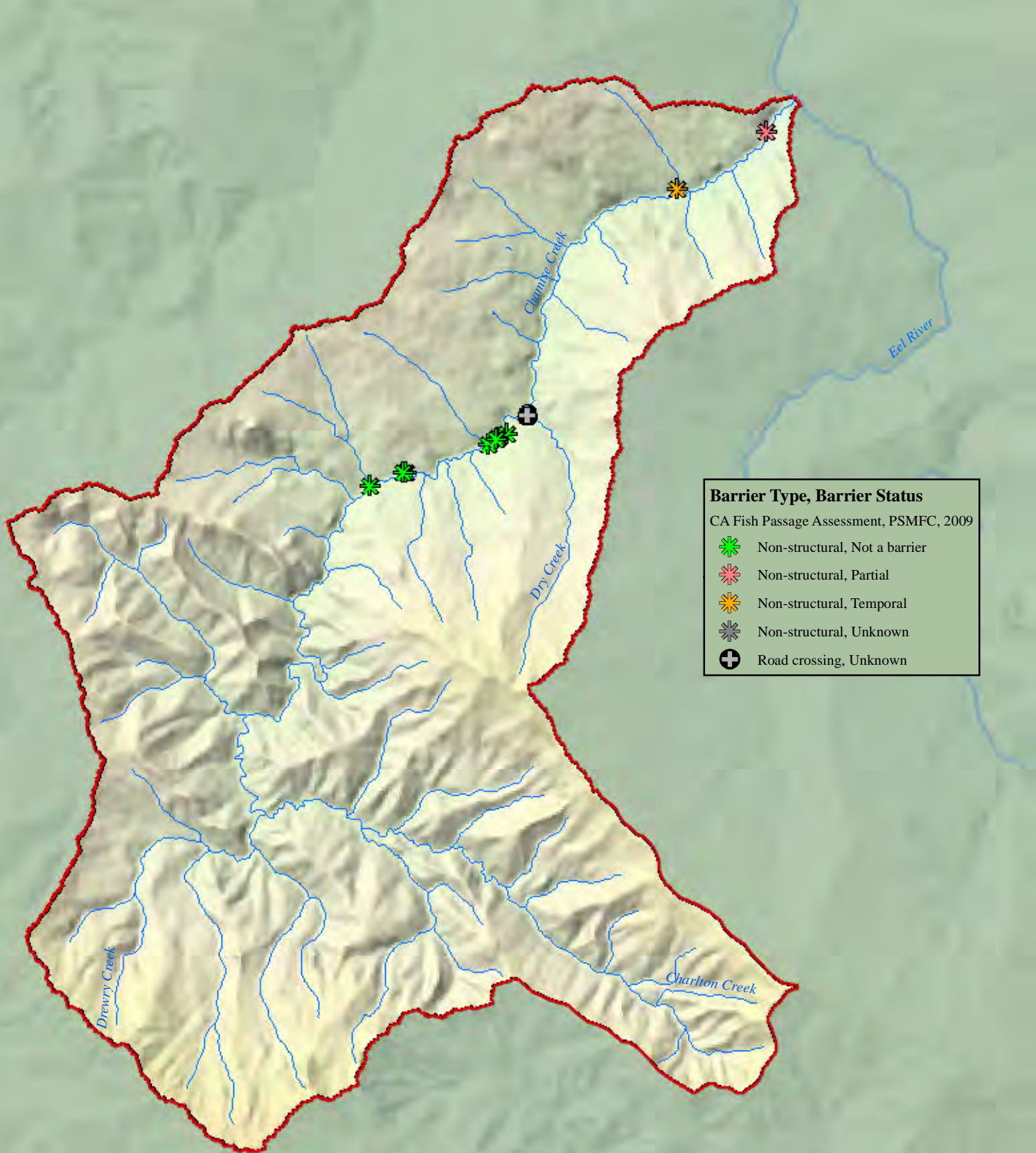
1 = Low Erosion Potential	10 = High Erosion Potential
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Chamise Creek Watershed Barriers



Barrier Type, Barrier Status
CA Fish Passage Assessment, PSMFC, 2009

- Non-structural, Not a barrier
- Non-structural, Partial
- Non-structural, Temporal
- Non-structural, Unknown
- Road crossing, Unknown

