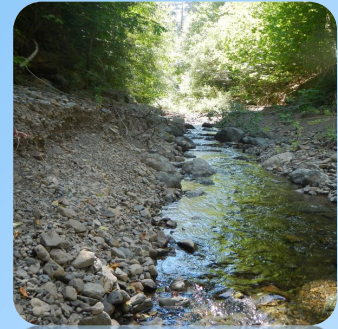




# Stream Temperatures in the Eel River Basin 1980-2015

## Phase 1: Compilation and Preliminary Analysis

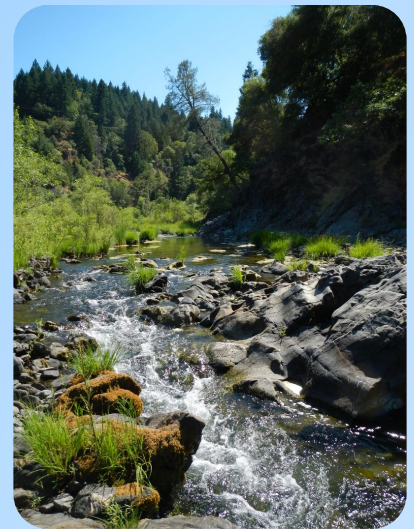


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**Eel River Recovery  
PROJECT**



Funded by:  
**State Water Resources Control Board**  
Grant Agreement 14-679-550

April 15, 2016

# Stream Temperatures in the Eel River Basin 1980-2015

## Phase 1: Compilation and Preliminary Analysis

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April 15, 2016

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*Photo credits for cover page (clockwise from top):*

All photos by Patrick Higgins: A. Main Eel at Ft Seward 10/4/15; B. Bear Creek Lower Eel 10/21/15; C. Outlet Creek, 6/21/12; D. Fall Chinook in Fortuna, 10/24/15; E. Lower Eel at High Rock, 9/10/10; F. Bruce Hilbach Barger and Round Valley Indian Tribe EPA staff at mouth of Williams Creek, 7/2/15.

## EXECUTIVE SUMMARY

Water temperature has long been identified as primary factor limiting production of salmon and steelhead in the Eel River Basin. There have been some previous analyses evaluating temperature data for the Eel River Basin, but this project compiled by far the most comprehensive dataset. The goal of this study was to 1) acquire, compile, and quality check all available water temperature data for the Eel River Basin, 2) calculate summary metrics for each site and year, 3) rate water temperature conditions according to suitability for coho salmon and steelhead trout, and 4) create tables and maps summarizing results. The results of this analysis will be used to refine monitoring plans and to inform development of future projects to restore aquatic habitat and watersheds within the Eel River.

The compiled dataset spans the years 1980 through 2015. Prior to excluding overlap between datasets, there were 13.4 million individual measurements and 7926 site-years of data. Excluding the overlap, there are a total of 988 sites, 453 reaches, and 5500 unique site-year combinations. Data contributors include the Humboldt County Resource Conservation District, Humboldt State University's Forest Science Project, Pacific Gas and Electric Company, Eel River Recovery Project, Friends of the Van Duzen River, UC Berkeley, Native Fish Society, California State Parks, multiple entities within the U.S. Forest Service (including the Mendocino National Forest, Six Rivers National Forest, and the Rocky Mountain Research Laboratory's NorWeST project), the North Coast Regional Water Quality Control Board, California Department of Fish and Wildlife, U.S Geological Survey, and U.S. Bureau of Land Management. All sites were assigned to reaches in a Geographic Information System (GIS) stream network from the National Stream Internet (NSI). Assigning the Eel River temperature monitoring points to NSI stream reaches will allow the data to be easily integrated into future stream temperature models such as the U.S. Forest Service's Rocky Mountain Research Lab's NorWeST project. In some analyses, we lump all sites within a reach together. We acknowledge that this lumping can mask important differences between sites; however, it makes spatial patterns much easier to visualize on maps at large scales.

During the course of this project, we were forced to confront the enormity of the task of assembling and cleaning such a large dataset, and were not able to do as much analysis as initially envisioned. We hope to conduct a separate future project within the next year to complete quality control on the dataset, acquire and compile additional datasets, and perform a thorough analysis of the stream temperature data which would include relationships with environmental variables such as air temperature and streamflow. We are making the provisional compiled dataset available to the public, but strongly encourage any potential users to contact us to discuss limitations and loose ends in the data. We conducted an intensive screening and trimming process which identified and corrected many errors and inconsistencies in the dataset, but considerable additional review and cleaning are necessary. One of the major issues is that same data were included in multiple compilations, resulting in up to four copies of the same data. We used automated methods in a preliminary attempt to mark much of the obviously duplicated data as overlap, but considerable overlap remains.

We also initiated a process of grouping similar sites together into "standardized" sites to prepare for time series analysis, but we have not had sufficient time to verify the appropriateness of every grouping. We initiated a process of grouping similar sites together into "standardized" sites to prepare for time series analysis. Unfortunately, we did not have sufficient time to verify the appropriateness of every grouping and there are likely instances where we grouped sites together whose temperatures are too dissimilar to warrant grouping. We hope to complete the site standardization in a future project.

We calculated daily and seasonal statistics for each site and year. Seasonal statistics included Maximum Daily Maximum Temperature (MDMT), Maximum Weekly Maximum Temperature (MWMT), and Maximum Weekly Average Temperature (MWAT). MWMT is the average daily maximum temperature



during the hottest seven-day period of the year. The four statistics are all highly correlated with each other. All four statistics were calculated and included in report appendices, but for the sake of simplicity the main text and figures in the report focus almost solely on MWMT. For purposes of differentiating categories of stream temperatures in the Eel River Basin and prioritizing areas where it may be feasible to restore coho salmon, MWMT thresholds for salmonid suitability were selected based on a literature review, with upper limits for coho salmon defined as  $<18\text{ }^{\circ}\text{C}$  as “likely suitable” and  $<20\text{ }^{\circ}\text{C}$  as “possibly suitable”.

Stream temperatures in the Eel River Basin typically peak in July or August. On average, July is slightly warmer than August. There is considerable year-to-year and site-to-site variation in the date that peak temperatures occur.

Many sites were monitored for only a few years, and therefore the available data do not encompass the full range of conditions that occurred during the 1980-2015 period. We applied an approximate index of cool vs. warm years based on the MWMT relative anomaly (i.e., ratio of MWMT for individual years to the mean MWMT calculated from all years), for the years 1994-2015 only. There were not enough sites in 1980-1993 to calculate the index. Based on the MWMT relative anomaly, the four warmest years were 2006, 2004, 1996, and 1997, and the five coolest years were 2002, 2010, 2011, and 2012. Despite having streamflows among the lowest on record and many streams drying up or becoming intermittent, stream temperatures in 2014 and 2015 ranked as cool and moderate, respectively. Analysis of why some years were warmer than others is outside the scope of this analysis, but potential factors include: air temperatures, streamflow, smoke from wildfire, disturbances to stream channels and riparian vegetation (e.g., debris torrents and timber harvest), and recovery from prior disturbance. Many streams were dry in 2014 and 2015 (and to a lesser extent 2013 also) and thus summary statistics could not be calculated due to missing data. It is possible that the large number of dry streams in 2013, 2014, and 2015 could have affected the population of streams that were available to calculate the relative anomaly and therefore biased the classification of cool vs warm years.

For analytical purposes, the Eel River was divided into six study watersheds: Lower Eel River, Middle Eel River, Upper Eel River, Van Duzen River, Lower South Fork Eel River, Upper South Fork Eel River, Middle Fork Eel River, and North Fork Eel River. Each of these watersheds contained sites with a diverse range of temperatures; however, there are differences in the temperature distribution between sub-basins. Temperatures were generally coolest Lower Eel River Subbasin, Van Duzen River sub-basin, and the western half of the Upper South Fork and Lower South Fork.

MWMT temperature is strongly correlated with drainage area, and most streams show the expected pattern of warming as water flows downstream from cold, well-shaded headwaters into wider alluvial channels which are more exposed to solar radiation (Figure ES-1). One exception is the mainstem Eel River which exhibits a more complex pattern where water warms prior to entry into Lake Pillsbury, cool water released from Scott Dam warms rapidly to reach a maximum around the confluence with Outlet Creek and then becomes progressively cooler as it flows downstream towards the Pacific Ocean where summer air temperatures are much lower. MWMT temperatures  $<18\text{ }^{\circ}\text{C}$  and  $<20\text{ }^{\circ}\text{C}$  occur primarily at sites with drainage areas less than  $100\text{ km}^2$ . For each of the Eel River’s sub-basins, the report presents a map showing site locations, a graph grouped into reaches showing MWMT temperatures for each site and year, and an annual time series of MWMT temperatures at a subset of sites.

Riverbend Sciences also recently performed a water temperature analysis of the South Fork Trinity River for the Watershed Research and Training Center (Asarian 2016), using methods and a report template that are similar to this Eel River analysis. A few charts demonstrating analytical techniques and methods of data display in the methods sections of this Eel River report are examples duplicated from the Asarian (2016) report.



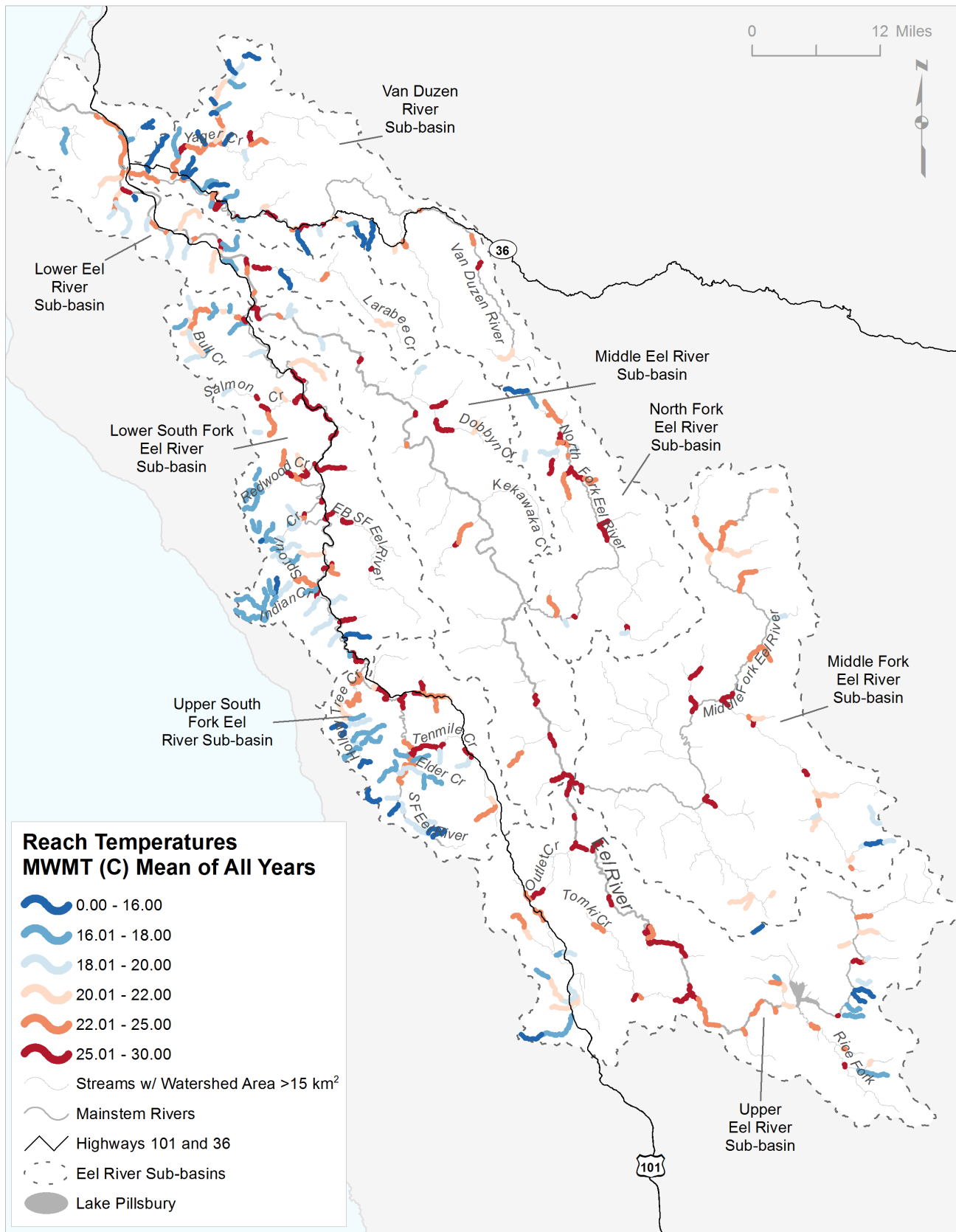


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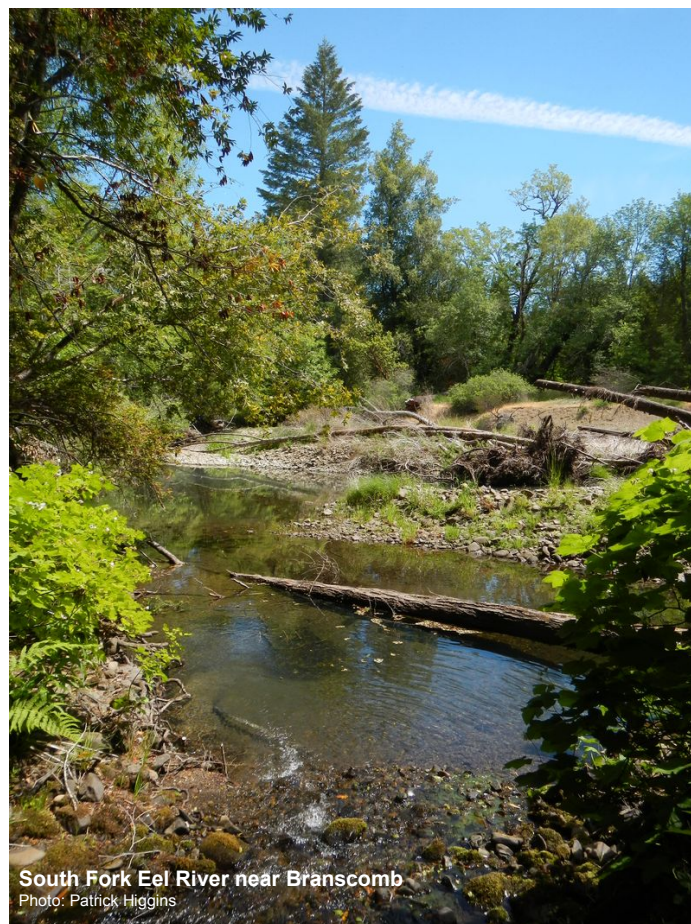
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# 1 INTRODUCTION

## 1.1 DESCRIPTION OF STUDY AREA

The Eel River Basin is located on the North Coast of California (Figure 1). The area has a Mediterranean climate with primarily mountainous terrain. Vegetation includes conifer forests, oak woodlands, and grasslands. Precipitation falls primarily as rain except at the highest elevations, which are at the southeastern end the basin in the headwaters of the Middle Fork Eel River and to a lesser extent the mainstem Eel River. Streamflows vary strongly by season, with streamflows during the rainy winter several orders of magnitude higher than during the dry summer and early fall (Power et al. 2015). The basin is home to three species of anadromous salmonid fishes: Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*Oncorhynchus kisutch*), and steelhead trout (*Oncorhynchus mykiss*). Chinook, coho, and steelhead are protected under the federal Endangered Species Act and all have declined greatly from historical levels (Yoshiyama and Moyle 2010). The lower-gradient valleys have the highest intrinsic potential for coho salmon (NMFS 2014).

The only significant dams in the Eel River Basin are Scott Dam and Cape Horn Dam on the upper mainstem, which are part of the Potter Valley Project and form Lake Pillsbury and Van Arsdale Reservoir, respectively (NMFS 2014). The largest water diversion in the Basin is from Van Arsdale Reservoir through a tunnel into the adjacent Russian River Basin (NMFS 2002). There are many smaller surface water diversions and groundwater wells associated with rural residences and marijuana cultivation sites throughout the Basin (Bauer et al. 2015, Power et al. 2015); pastures and forage crops in the Eel River Delta (Ferndale/Loleta), Little Lake Valley (Willits), Round Valley (Covelo), Long Valley (Laytonville); and municipal water systems including the communities of Willits, Scotia, Fortuna, Loleta, Ferndale, Laytonville, Redway, and Garberville.

Since California legalized medical marijuana in 1995, marijuana cultivation has expanded dramatically in the Basin, with associated increases in water diversions (Bauer et al. 2015). Inadequate summer streamflow has been identified as a primary contributor to declining populations of coho salmon in the Basin (NMFS 2014, Bauer et al. 2015).

For analytical purposes, the Eel River was divided into six study watersheds: Lower Eel River, Middle Eel River, Upper Eel River, Van Duzen River, Lower South Fork Eel River, Upper South Fork Eel River, Middle Fork Eel River, and North Fork Eel River (Figure 1). These sub-basins do not match a single level of the U.S. Geological Survey Hydrologic Unit Code (HUC) system, but rather were created by aggregating sub-watersheds together.

Additional information about the Eel River Basin can be found in California Fish and Wildlife watershed assessments (Downie et al. 2005, CDFG 2010, CDFG 2012, Kajtaniak 2014), the NMFS (2014) coho salmon recovery plan, and Yoshiyama and Moyle (2010).

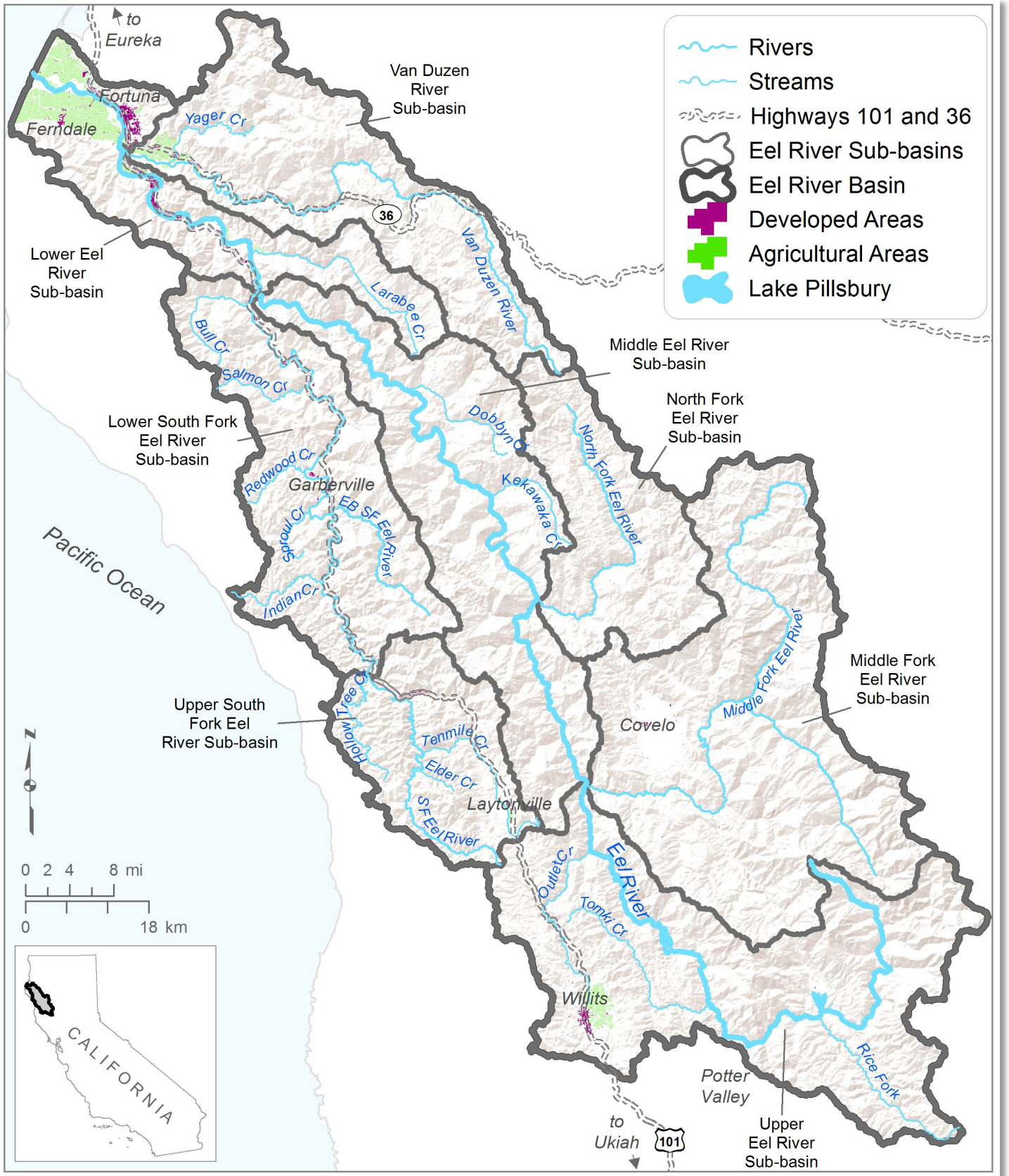


Figure 1. Major sub-basins, rivers, streams, and towns within the Eel River Basin and adjacent areas.

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## 1.2 PREVIOUS ASSESSMENTS OF STREAM TEMPERATURES IN THE EEL RIVER BASIN

Water temperature has long been identified as primary factor limiting production of salmon and steelhead in the Eel River Basin (Kubicek 1977, Yoshiyama and Moyle 2010, NMFS 2014). Most of the Eel River Basin is listed as impaired under the Clean Water Act Section 303(d) for both sediment and temperature, and the U.S. EPA has established Total Maximum Daily Loads for much of the basin<sup>1</sup>. Until recent years, the largest temperature monitoring effort in the Eel River Basin occurred in 1997-2003, when the Humboldt County Resource Conservation District coordinated a cooperative effort to monitor stream temperatures throughout in the Eel River Basin (Friedrichsen 1998, 2000, 2001, 2003). Additional Eel River temperature monitoring and data analyses are discussed in section 0.

In addition to local Eel River analyses mentioned in the previous paragraph, there have been two major stream temperature compilations and analysis projects in the northwest California region which encompass the Eel River Basin. The Humboldt State University (HSU) Forest Science Project (FSP) compiled data for 1990-1998 from a multitude of entities, including private timber companies, state and federal agencies, non-profit organizations, and consultants (Lewis et al. 2000). Lewis et al. (2000) then applied statistical models to these data to evaluate relationships between water temperature and variables including air temperature, distance from the Pacific Ocean, elevation, watershed area, and site-specific attributes (e.g., channel width, gradient, and canopy).

In 2015, the U.S. Forest Service's Rocky Mountain Research Lab's (RMRL) NorWeST<sup>2</sup> project completed a stream temperature modeling effort for northwest California, which NorWeST refers to as the "Northern California Coastal Klamath processing unit." The NorWeST project uses observed temperature data, Geographic Information Systems (GIS) data, and a multivariate spatial stream network statistical model to produce a spatially continuous prediction of mean August temperature throughout the entire stream network (Isaak et al. 2010, 2014). Once calibrated for current conditions, a variety of climate change scenarios were run. Model predictions<sup>3</sup> and daily/annual summaries of measured water temperature data<sup>4</sup> are available online. For calibration data, the 2015 NorWeST model for the region relied heavily on stream temperature data from the US Forest Service's Natural Resource Information System Aquatic Surveys (USFS NRIS AqS), with limited supplementation from other datasets. In the time since the NorWeST modeling began, several projects within the North Coast have been compiling new stream temperature datasets. These projects include the Eel River project discussed herein, other in-progress Riverbend Sciences projects in the South Fork Trinity River (Asarian 2016) and Klamath basins, and data compilation for the remainder of the region by the North Coast Regional Water Quality Control Board. Given the pending availability of large new temperature datasets within the North Coast, as well as previous compilations which were not utilized such as the HSU FSP project mentioned in the previous paragraph, RMRL has agreed to re-run the NorWeST model for the entire North Coast in fall 2016.

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<sup>1</sup> <https://www3.epa.gov/region9/water/tmdl/final.html>

<sup>2</sup> <http://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST.html>

<sup>3</sup> <http://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST/ModeledStreamTemperatureScenarioMaps.shtml>

<sup>4</sup> <http://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST/StreamTemperatureDataSummaries.shtml>



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### 1.3 STUDY GOALS

The goal of this study is to 1) acquire, compile, and conduct preliminary quality checks on all available water temperature data for the Eel River Basin, 2) calculate summary metrics for each site and year, 3) rate water temperature conditions according to suitability for coho salmon and steelhead trout, and 4) create tables and maps summarizing results. The results of this analysis will be used to refine monitoring plans and to inform development of future projects to restore aquatic habitat and watersheds within the Eel River.

During the course of this project, we were forced to confront the enormity of the task of assembling and cleaning such a large dataset, and were not able to do as much analysis as initially envisioned. We hope to conduct a separate future project within the next year to complete quality control on the dataset, acquire and compile additional datasets, and perform a thorough analysis of the stream temperature data which would include relationships with environmental variables such as air temperature and streamflow. We are making the provisional compiled dataset available to the public, but strongly encourage any potential users to contact us to discuss limitations and loose ends in the data. We conducted an intensive screening and trimming process which identified and corrected many errors and inconsistencies in the dataset, but considerable additional review and cleaning are necessary.

## 2 METHODS

Riverbend Sciences also recently performed a water temperature analysis of the South Fork Trinity River for the Watershed Research and Training Center (Asarian 2016), using methods and a report template that are similar to this Eel River analysis. A few charts demonstrating analytical techniques and methods of data display in the methods sections of this Eel River report are examples duplicated from the Asarian (2016) report.

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### 2.1 STREAM TEMPERATURE DATA SOURCES ACQUIRED AND COMPILED

We acquired data from a multitude of sources (Table 1). Often the same deployments were included in multiple compilations, resulting in up to four copies of the same data. We used automated methods<sup>5</sup> in a preliminary attempt to mark much of the obviously duplicated data as overlap, but considerable overlap remains. The overlap is retained in the master database, but was not used for site and reach summaries.

The data span the years 1980-2015. Prior to excluding the overlap, there were 13.4 million individual measurements and 7926 site-years of data. Excluding the overlap, there are a total of 988 sites, 453 reaches, and 5500 unique site-year combinations (Table 1). A complete list of sites is available in Appendix E. The vast majority of the data were acquired at their original temporal resolution, which ranged from 15 to 120 minutes, but data from the Pacific Gas and Electric Company were only acquired as daily summaries because the original hourly files are no longer available. Information on the individual datasets is provided in the sections 2.1.1 to 2.1.13. Section 2.1.14 lists the datasets that were not acquired.

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<sup>5</sup> After seasonal summary statistics were calculated (see section 0), we grouped data by FSP/HCRCID site ID code and compared maximum weekly average temperature MWMT. If MWMT values were within 0.1 °C, we excluded one of the copies of the data.

Table 1. Summary of the number of stream temperature sites and years monitored by each data source available in the Eel River Basin. Comments in the Overlap column and grey-colored text indicate portions of data sources that overlap (i.e., are duplicate copies of the same data) with other data sources and thus were excluded from summaries. The totals do not equal the sum of the individual rows because some sites and reaches are shared between datasets, and totals do not include the datasets marked as overlap. Data sources are listed in descending order of number of site-years. NRIS denotes datasets included in the U.S. Forest Service's national Natural Resource Information System database.

Source Entity Full Name	Source Entity Abbreviated	Marked as Overlap?	First Year	Last Year	# of Site Years	# of Sites	# of Reaches
Humboldt County Resource Conservation District	HCRCD		1999	2003	1592	309	252
Humboldt State University's Forest Science Project	HSU FSP	Superseded (mostly NRIS)	1993	1998	1264	360	277
			1996	1998	26	12	12
Pacific Gas and Electric Company	PGE		1980	2014	1126	70	31
Eel River Recovery Project, Friends of the Van Duzen River, UC Berkeley, and Native Fish Society	ERRP		2012	2015	572	278	135
California State Parks	State Parks		2003	2015	402	31	20
			1996	2003	52	19	19
NorWeST North Coast Regional Water Quality Control Board	NorWeST CAState SWRCB NorthCoast Region	Superseded (various) Likely air temperatures	1996	2009	238	105	99
			1997	1997	20	10	9
NorWeST Humboldt County Resource Conservation District (NRIS)	NorWeST NPO HCRCD NRIS		1996	2013	190	28	24
NorWeST U.S. Forest Service Six Rivers National Forest (NRIS)	NorWeST USFS SixRiversNF NRIS		1996	2010	130	21	17
NorWeST U.S. Forest Service Aquatic and Riparian Effectiveness Monitoring Program (NRIS)	NorWeST USFS AREMP NRIS		2002	2013	12	4	4
NorWeST U.S. Forest Service Mendocino National Forest (NRIS)	NorWeST USFS MendocinoNF NRIS		1998	2004	10	4	4
NorWeST California Department of Fish and Wildlife (NRIS)	NorWeST CAState CDFW PSWRegion NRIS		2009	2010	4	2	2
NorWeST Humboldt County Resource Conservation District	NorWeST NPO HCRCD	Superseded (HCRCD)	1996	2003	2134	397	302
NorWeST U.S Geological Survey, National Water Information System	NorWeST USGS NWIS CA	Superseded (USGS NWIS)	2010	2012	6	2	2
U.S. Forest Service, Redwood Sciences Lab	USFS PSWRS RSL		2004	2015	50	3	1
Friends of the Van Duzen River 2007-2008	FOVD		2007	2008	44	13	7
U.S Geological Survey, National Water Information System	USGS NWIS		2007	2015	28	2	2
U.S. Bureau of Land Management, Arcata Office	BLM Arcata		2012	2014	10	3	3
U.C. Berkeley PhD student Keith Bauma-Gregson (2015 only)	UCB KBG		2015	2015	14	7	7
<b>TOTALS EXCLUDING OVERLAP</b>			1980	2015	5500	988	453
<b>TOTALS INCLUDING OVERLAP</b>			1980	2015	7926		

### 2.1.1 US FOREST SERVICE, NATURAL RESOURCE INFORMATION SYSTEM AQUATIC SURVEYS

Nearly all temperature data collected by U.S. Forest Service (USFS) within the Eel River Basin is input into the national Natural Resource Information System (NRIS) Aquatic Surveys (AqS) database<sup>6</sup>. In addition, some data collected by the Humboldt County Resource Conservation District (see section 2.1.3) has also be input into NRIS. USFS is not currently collecting much temperature data within the Eel River Basin, but any data that are collected will likely be input into NRIS.

Hydrologist Callie McConnell of the USFS office in Corvallis, Oregon extracted all Eel River temperature data and provided it to us. We compared the list of sites from recent years and found that there were only two 2014 datasets<sup>7</sup> from the Eel River Basin in NRIS that were not already included in the NorWeST compilation (which included data through 2013). Therefore, we did not compile any of the data we received directly from NRIS, but rather relied on the NorWeST version of the NRIS data. There are some data for small headwater streams from other years that are in USFS NRIS but are not included in NorWeST, because NorWeST only compiled data for streams that are included in the 1:100,00 scale National Stream Internet GIS layer (see section 2.3).

### 2.1.2 HUMBOLDT STATE UNIVERSITY'S FOREST SCIENCE PROJECT

As noted above in section 1.2, Humboldt State University's (HSU) Forest Science Project (FSP) compiled data from the North Coast of California for 1990-1998 from a multitude of entities, including private timber companies, state and federal agencies, non-profit organizations, and consultants (Lewis et al. 2000). The FSP was later renamed the Institute for Forest and Watershed Management and is now dissolved. The data are extremely well organized and were rigorously reviewed during the Lewis et al. (2000) analysis, but one deficiency of the version of the publicly shared version of the database is that there is no way to ascertain which entity collected any particular piece of data, which inhibits transparency and made it difficult to determine potential overlap with other datasets.

### 2.1.3 HUMBOLDT COUNTY RESOURCE CONSERVATION DISTRICT

From 1996-2003, Gary Friedrichsen of the Humboldt County Resource Conservation District coordinated a cooperative effort to monitor stream temperatures throughout in the Eel River Basin. The first three years (1996-1998) are included in the HSU FSP database (see section 2.1.2). Data for 1999-2003 were compiled into a separate but identically-formatted Microsoft Access database<sup>8</sup> for each year that was distributed to the public along with summary reports (Friedrichsen 1998, 2000, 2001, 2003). Since those Access databases were the HCRCD's final products, during the process of marking overlap we gave them precedence over other versions of the same data that were compiled from more preliminary versions (i.e., the NorWeST data titled as source "NPO HCRCD" and "CAState SWRCB NorthCoastRegion").

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<sup>6</sup> <http://www.fs.fed.us/nrm/index.shtml>

<sup>7</sup> The only two 2014 datasets in the USFS NRIS as of 1/4/2016 were H2O\_BlackButte\_195 (Black Butte upstream of Spanish Creek) and H2O\_Temp\_BlackButte\_194 (Black Butte downstream of Spanish Creek).

<sup>8</sup> Same template as the HSU FSP database.

#### 2.1.4 PACIFIC GAS AND ELECTRIC COMPANY

Pacific Gas and Electric Company (PG&E) operates the Potter Valley Project and has been monitoring stream temperatures in the Upper Eel sub-basin since 1980. We acquired and compiled nearly all of this data, which were obtained from Paul Kubicek of PG&E and Park Steiner and David Menasian of Steiner Environmental Consulting. The data had been previously presented in reports, but to our knowledge, this is the first time that PG&E has shared its entire Potter Valley Project stream temperature dataset in easily accessible electronic form. Reports describing the dataset and results include VTN (1982), SEC (1998), and PG&E (2015). PG&E consultant Park Steiner provided us with spatial coordinates for the locations of the 2005-2014 monitoring sites.

We acquired the PG&E data in two pieces: 1) a collection of daily summary Lotus files for 1980-1995, and 2) a collection of hourly Excel files for 2005-2014. The 2005-2014 data include some data collected by the Mendocino County Water Agency (MCWA) that were recorded at a longer timestep than the PG&E data. To conveniently fit the MCWA data into their temperature data management system, PG&E had to modify the time of day in the MCWA data. The result is that the MCWA data have correct dates but incorrect times<sup>9</sup>. We did not attempt to correct this issue in our compiled database, because it does not affect daily and seasonal summary statistics, but at some point in the future it would be good to either correct the times or to replace PG&E's version of the MCWA data with a different version of the MCWA data.

The PG&E were generally very well organized and documented. The 2005-2014 dataset we received contained notes regarding when probes had been exposed to air or otherwise compromised. We removed the apparently erroneous data, largely following the notes provided. The 1980-1995 dataset contained some apparently erroneous zero values for mean temperature, which we removed.<sup>10</sup>

A few additional PG&E datasets were not acquired or compiled. These include 1) all of the 2015 data, which will not be made public until after review is completed and the 2015 annual report is released, 2) two supplemental monitoring sites during the summer 2014 in the upper mainstem Eel River between Scott and Cape Horn dams (Appendix B in PG&E 2015), and 3) thermal profiles within Lake Pillsbury in 2014 (Appendix C in PG&E 2015), and the year-round data for the Eel River below Scott Dam<sup>11</sup>. The Eel River below Scott Dam data are available online at CDEC, but the data are completely unprocessed and provisional, so would take substantial effort to clean and utilize.

#### 2.1.5 EEL RIVER RECOVERY PROJECT

The Eel River Recovery Project (ERRP) has facilitated a citizen assisted program to monitor water temperature in the Eel River Basin (Higgins 2013, 2014) since 2012 that has involved dozens of volunteers and partnerships with the NCRWQCB, FOVDR, UC Berkeley, and the Native Fish Society (NFS). ERRP has used Onset Instrument Optic Pro automated temperature gauges on loan from the NCRWQCB and more recently acquired additional probes with grant funding. ERRP follows standard protocols for probe placement (Lewis et al. 2000) and makes an

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<sup>9</sup> PG&E notified us of this issue when they sent us the data. The sequence of measurements are all still correct, but there is a gap at the end of each day.

<sup>10</sup> The dates with apparently erroneous zero values for mean were always accompanied by a missing value for minimum and maximum, which suggests it could be a spreadsheet calculation error.

<sup>11</sup> We did compile PG&E's summer data for Eel River below Scott Dam.

effort to occupy sites where similar data had been previously collected in order to be able to gauge trends. Modest grants from the Rose Foundation and Patagonia and contributions from a private firm, Pacific Watershed Associates, supported data collection from 2012-2014. SWRCB Grant Agreement 14-679-550 allowed expanded coverage in 2015. The latter includes support for the Round Valley Indian Tribe Environmental Protection Agency in monitoring waters on or near the Reservation in the Middle Fork and North Fork Eel River sub-basins. Over 100 volunteers have been involved in monitoring, which increases the places ERRP has access to and helps foster trust in the community of the data collected. Because many stream reaches have been de-watered as a result of the severe drought since 2013, ERRP chronicles where flows were disrupted and includes this information in annual reports (Higgins 2013, 2014)(See also Grant Agreement 14-679-550 Final Report).

## 2.1.6 CALIFORNIA STATE PARKS

California State Parks monitors stream temperatures within Humboldt Redwoods State Park and Richardson Grove State Park in the Lower South Fork Eel River sub-basin. State Parks organized a collection of 2003-2013 data files and submitted to the NorWeST, but the files were received too late for incorporation into NorWeST. Therefore, we compiled the State Parks data.

We received the collection of 2003-2013 files from Rich Fadness of California's North Coast Regional Water Quality Control Board (NCRWQCB). We received the data for 2014 and 2015 from Patrick Vaughan, Susannah Manning, and Shannon Dempsey, and those same individuals also provided answers to our questions regarding clarification of site locations and other matters.

## 2.1.7 NORWEST

As noted above in section 1.2, the U.S. Forest Service's Rocky Mountain Research Lab's (RMRL) NorWeST project compiled a large amount of stream temperature data for northwest California, including the Eel River Basin. These data came from a multitude of entities, including USFS NRIS (see section 2.1.1), California North Coast Regional Water Quality Control Board (NCRWQCB), U.S. Geological Survey (USGS) National Water Information System (NWIS) , and Humboldt County Resource Conservation District (see section 2.1.3) (Table 1). We compiled all the NorWeST data, but marked much of it as overlap except for the USFS data. The NorWeST database includes a column "Source" which designated the data contributor. In our compilation, we retained this column and added a "NorWeST" prefix to each entry.

In addition to downloading NorWeST's GIS shapefile of temperature locations from NorWeST's publicly-accessible website, we also requested and received additional files directly from NorWeST. These additional files included: 1) A Microsoft Access database with daily data and deployment details including the data contributor's original site codes, and 2) complete hourly dataset. The original sites codes were critically important in facilitating diagnosis of overlap. The hourly data is considered provisional.

In the following sections, we discuss some of the details of the NorWeST source datasets.

### 2.1.7.1 *NORWEST U.S. GEOLOGICAL SURVEY*

We downloaded a new and more complete set of USGS data directly from the NWIS website, so the NorWeST version of the USGS NWIS data was superseded and we marked it as overlap.



#### 2.1.7.2 *NORWEST U.S. FOREST SERVICE*

We used all the USFS NRIS data from NorWeST and did not mark any of it as overlap.

#### 2.1.7.3 *NORWEST NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD AND HUMBOLDT COUNTY RESOURCE CONSERVATION DISTRICT*

Data in NorWeST designated as source “CAState SWRCB NorthCoastRegion” and “NPO HCRCD” were submitted to NorWeST by Rich Fadness of the NCRWQCB. Fadness did not have copies of the final Microsoft Access compilations of the HSU FSP and HCRCD data, so he submitted individual files for each deployment from those datasets that he had in his files. We compiled all these data, but when marking overlap, we gave precedence to the Access databases over the NCRWQCB versions. We did not perform comprehensive checks to attempt to diagnose any discrepancies between the different versions of the HSU FSP and HCRCD data.

#### 2.1.8 *U.S. FOREST SERVICE, REDWOOD SCIENCES LAB*

The U.S. Forest Service’s Pacific Southwest Research Station in Arcata, California (aka Redwood Sciences Lab) collected temperature data at one site on Bull Creek (USGS gage on tributary to South Fork Eel River in Humboldt Redwoods State Park) year-round for 2004-2015 as part of a sediment monitoring study. We obtained these data from Rodney Nakamoto of Redwood Sciences Lab. Three temperatures probes were deployed simultaneously at the same site. We have retained them separately and have not attempted to combine them or compare them to see how different they are. For future analyses, it would probably make most sense to combine them into a single dataset because they each have different temporal coverages/gaps.

#### 2.1.9 *FRIENDS OF THE VAN DUZEN RIVER*

In 2007-2008 the Friends of the Van Duzen River<sup>12</sup> (FOVD) and Humboldt State University graduate student Karen Bromley monitored stream temperatures at sites in the Van Duzen River sub-basin (Bromley 2008, 2009; FOVD 2010). FOVD re-started its temperature monitoring program in 2012 in cooperation with ERRP. FOVD’s 2012-2015 data were compiled together with the rest of the ERRP data, but the 2007-2008 data were processed separately and are attributed to FOVD in the database.

#### 2.1.10 *NATIVE FISH SOCIETY*

The Native Fish Society<sup>13</sup> is a non-profit organization that “advocates for the recovery of wild, native fish and promotes the stewardship of the habitats that sustain them”. They base their advocacy on “best available science” and have taken an active interest in the Eel River Basin. In 2014 and 2015, NFS has placed and retrieved water temperature probes in the Middle Fork Eel River sub-basin and the upper Eel River sub-basin above the Potter Valley Project. NFS were able to borrow Onset Instrument water temperature probes from the NCRWQCB and used both paid staff time and volunteer to collect data.

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<sup>12</sup> <http://www.fov.org/>

<sup>13</sup> <http://nativefishsociety.org/>

#### 2.1.11 U.S. GEOLOGICAL SURVEY

We downloaded hourly data from the U.S. Geological Survey's (USGS) National Water Information System (NWIS) <sup>14</sup> for Elder Creek and Cahto Creek, which are the only sites in the Eel River Basin that have hourly data available in NWIS.

Due to time and budget constraints, as well as a focus on streams which have the potential to provide summer rearing habitat for juvenile coho salmon, historical daily summary data in NWIS for 19 sites in the Eel River were not utilized in this project. Some of these sites have data as far back as 1960.

#### 2.1.12 UNIVERSITY OF CALIFORNIA AT BERKELEY

The University Of California at Berkeley (UCB) manages the Angelo Coast Range Reserve near Branscomb in the Upper South Fork sub-basin. The university does not have a long-term stream temperature monitoring program, but temperature data are sometimes collected as part of specific research projects. We acquired all temperature data from current doctoral students Keith Bauma-Gregson and Phil Georgakakos. Georgakakos's 2015 data and Bauma-Gregson's 2013-2014 were lumped with ERRP's data during data processing, while Bauma Gregson's 2015 data are attributed to UCB in the database. UCB likely has stream temperature data from some sites prior to 2013 collected as part of previous research projects, but we did not attempt to acquire or compile those data. Additional data for Elder Creek would be particularly useful since that station is a key hydrologic benchmark for the North Coast region.

#### 2.1.13 U.S. BUREAU OF LAND MANAGEMENT, ARCATA OFFICE

Staff from the Arcata office of the U.S. Bureau of Land Management have monitored stream temperatures at several sites within the Eel Basin. These data were acquired from Dave Fuller, Sam Flanagan, and Zane Ruddy. Data for 2012-2014 were compiled, while the 2015 data was received too late to be compiled.

#### 2.1.14 ADDITIONAL DATASETS NOT ACQUIRED OR COMPILED

During the outreach and research over the course of this project, we became aware of some datasets for which we were not able to obtain the original electronic data, or did not have time to compile the data. These included:

- Humboldt Redwood Company monitors water temperature at many sites on their land in the Lower Eel Sub-basin and Van Duzen River sub-basin. We were not able to obtain any of the company's recent data, but some of the older data is likely included in the HSU FSP/HCRCD compilation. Annual MWAT values for 2003-2014 are included the 2014 annual monitoring report (HRC 2015) but we did not have time to transcribe them.
- Mendocino Redwood Company monitors stream temperature data in its holdings in the Upper South Fork Eel River sub-basin (MRC 2014. MRC owns land in the Hollow Tree Creek watershed, and the nearby streams Jack of Hearts, Mill Creek, and Low Gap Creek. We were not able to obtain any of the company's recent data, but some of the older data is likely included in the HSU FSP/HCRCD compilation.

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<sup>14</sup> <http://waterdata.usgs.gov/nwis>

- In 2007, the Redwood Forest Foundation<sup>15</sup> acquired a large tract of land, now known as the Usal Redwood Forest, in the South Fork Eel sub-basin and the adjacent coastal watersheds. There is a long history of temperature monitoring on property by the previous landowners (Georgia Pacific and Hawthorne Timber Company) and land managers (Campbell Global). Late in our project, we discovered a complete dataset of all Hawthorne Timber Company's 1993-2004 temperature data (Hawthorn Timber Company 2003, 2004) online including what later became the Usal Redwood Forest, but did not have time to compile it. We have been in contact with Redwood Forest Foundation forester Kevin Whitlock regarding obtaining an updated version of the database.
- California Trout collected temperature data in Sproul Creek (tributary to the South Fork Eel River) in 2015 as part of an instream flow study, but were not able to obtain the data in time to compile it.
- The Salmonid Restoration Federation (SRF) collected temperature data in Redwood Creek (tributary to the South Fork Eel River) in 2015 as part of an instream flow study. We obtained the data from SRF's Kate Rowe but did not have time to compile it.
- We acquired and compiled nearly all of Pacific Gas and Electric Company's (PG&E) temperature data, but there are a few exceptions which are described in section 2.1.4 above.
- From 1996 until 2010, Mendocino County Water Agency's (MCWA) Dennis Slota monitored stream temperatures at a network of sites across Mendocino County, including several sites in the Eel Basin near the confluence of the mainstem Eel River and Middle Fork Eel River. Portions of these data were included in data we compiled, including: 1) MCWA data for 1996-2003 are included in the HSU FSP and HCRCDC compilations, 2) the NorWeST NCRWCB dataset also includes MCWA data for 1996-2013<sup>16</sup> as well as 2009, and 3) some MCWA are included in the PG&E dataset. Late in this project, we contacted MCWA to attempt to acquire any remaining MCWA data. Slota has retired, but Sarah Dukett provided a collection of various temperature data files from Slota's old files. These files indicate that MCWA monitored sites in the Eel Basin through 2009 and the Russian River Basin through 2010. Late in this project, we also received a collection of MCWA's Eel Basin temperature files from Rich Fadness of the NCRWQCB which included each year 2000-2009 except 2006, including, most notably, the data for 2004 through 2009 which are likely not available from any other source (unless they are included in the PG&E data). We did not have time to compile any of the MCWA data.
- Puckett and Van Woert (1972) contains tables of daily water temperature data for 35 sites around the Eel River Basin. Some of the datasets are included in USGS NWIS, while others are yet to be transcribed into electronic data.
- UC Berkeley likely has stream temperature data from some sites for years prior to 2013 collected as part of previous research projects, but we did not attempt to acquire or compile those data.
- As discussed in section 0 above, we did not acquire or compile historical daily summary data from the U.S. Geological Survey's (USGS) National Water Information System (NWIS)<sup>17</sup>.

<sup>15</sup> <http://www.rffi.org/>

<sup>16</sup> We did not check whether every site is present for every year

<sup>17</sup> <http://waterdata.usgs.gov/nwis>

- As noted in section 2.1.13 above, the U.S. Bureau of Land Management data from 2015 data (just one site) was received too late to be compiled and included in this report.
- Kubicek (1977) presents a table of daily summary data for the Eel River at Island Mountain for June-September 1973. Nicholas Cusick acquired and transcribed these data but we did not have time to merge them into the rest of the dataset.

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## 2.2 QUALITY CONTROL AND CLEANING OF STREAM TEMPERATURE DATA

Data collected with continuous probes, such as the temperature data that is the subject of this project, must be cleaned/trimmed to remove data corrupted when a probe malfunctions or is exposed to air during pre/post deployment or when a stream dries up. The condition of the datasets we received varied among data sources and year, so we began a fairly intensive screening and trimming process informed by protocols from Dunham et al. (2005), Sowder and Steel (2012), and Stamp et al. (2014); however, this process proved to be too time-consuming to be feasible given the extremely large dataset (7926 site-years). For example a task that takes only one minute per site-year would take a total of 132 hours for the 7926 site-years. Therefore, we focused our attention only on those data which had not been previously analyzed, which is everything except NorWeST, HCRC, and HSU FSP. We were not able to complete the quality control process, and therefore all data should be considered provisional. We hope to do a second phase of this project which would include additional quality control.

For ERRP data only, if a stream appeared to go dry during summer or fall prior to retrieval of the temperature probe, we excluded the entire deployment (i.e., that site and year) from the database. For source entities other than ERRP, we removed the data values for the period when the stream appeared to be dry but retained the remainder of the deployment.

Air temperature data is very useful for informing the cleaning of water temperature data (Sowder and Steel 2012). We obtained air temperature data for 1991-2015 from the CalFire remote automated weather station (RAWS) at Alderpoint<sup>18</sup> (site code CAPT) near the center of the Eel Basin, available online from the Western Regional Climate Center<sup>19</sup>. Some of water temperature datasets used in this project also included air temperature for a few sites and years; however, for the sake of consistency and efficiency, we used the Alder Point RAWS air temperatures instead. There are additional RAWS sites in the Eel Basin, and for future QA analysis it would be better to use a different RAWS site for each sub-basin due to climate variability across the Eel Basin.

We created and briefly reviewed a series of graphs for each year and site. These graphs included: 1) overlay of 7-day average temperature data at all sites monitored by a source entity in a single year (e.g., Figure 2 shows an example of ERRP sites for 2012), 2) hourly water temperature overlaid on the hourly Alderpoint air temperature (e.g., Figure 3 shows an example of Canoe Creek), and 3) multi-panel comparison of hourly temperature data at all sites within a single year and source entity. A complete set of graphs illustrating the data is available as Electronic Appendix 1 and examples are shown in Appendix D.

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<sup>18</sup> Official RAWS site name is 'Alder Point' but we refer it as 'Alderpoint', the more commonly used name for that location.

<sup>19</sup> <http://raws.dri.edu/cgi-bin/rawMAIN.pl?caCAPT>

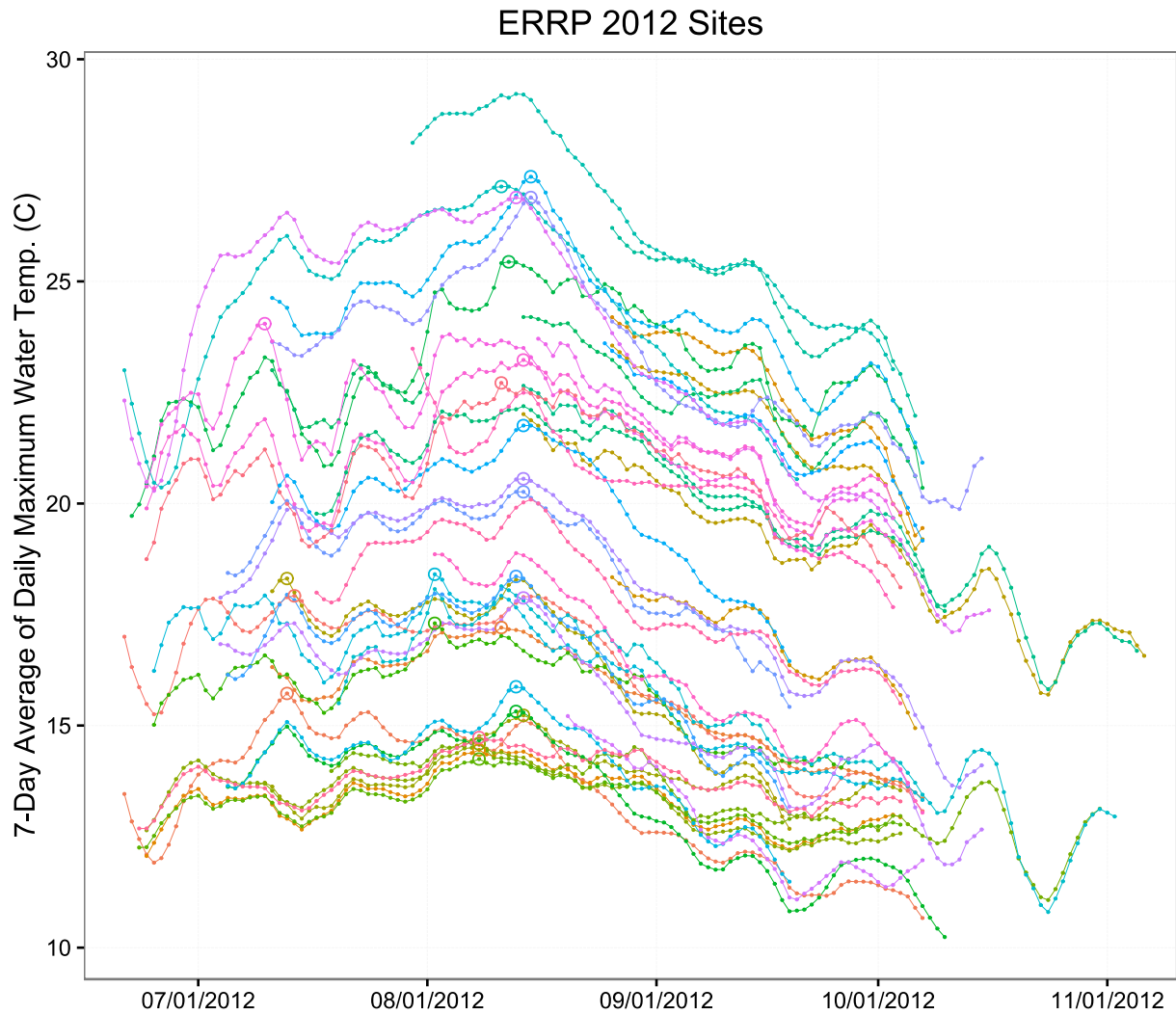


Figure 2. Example data quality assessment graph comparing 7-day average of daily maximum water temperatures at all sites monitored by the Eel River Recovery Project in 2012. The large circles indicate MWT values. The purpose of the graph is to determine if any sites do not follow the same pattern as the rest of the sites, so that those data can be further investigated. It is not possible to differentiate so many colors, so the legend is omitted and a different graph must be used to determine the identity of any particular site.



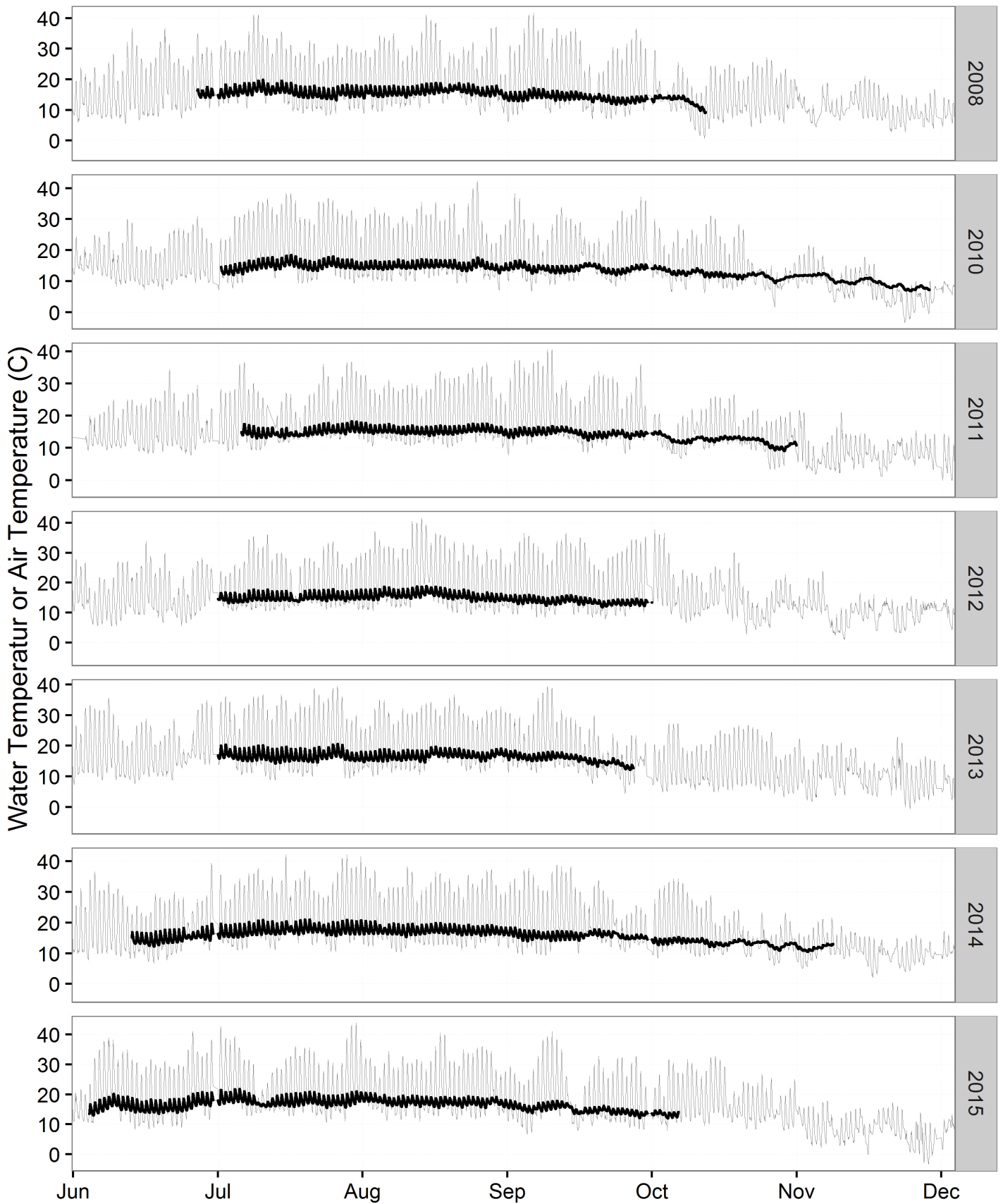


Figure 3. Example data quality assessment graph comparing hourly water temperature data at a single site (Canoe Creek data collected by California State Parks) (black line) and Alderpoint air temperature (light grey line) across all years.

### 2.3 ASSIGNING STREAM TEMPERATURE MONITORING SITES TO STREAM NETWORK GIS REACHES

All stream temperature datasets had x-y spatial coordinates (e.g., UTM or latitude/longitude) when we acquired them; however, assigning each site to a GIS stream network (rather than solely x-y coordinates) greatly increases the utility of the data. The National Stream Internet (NSI) Hydrography Network<sup>20</sup> was selected as the GIS stream network due to its use in the NorWeST model. NSI network was created by the U.S. Forest Service's Rocky Mountain Research Lab by modifying the NHD-Plus<sup>21</sup> Version 2 medium-resolution (1:100,000-scale) hydrography layer for all streams in the contiguous United States. NHD-plus contains a large database of descriptors for each reach (e.g., stream name, watershed area, stream gradient, climate variables, and percent of various land-use types within the watershed) which are useful predictor variables in spatial analyses. Assigning the Eel River temperature monitoring points to NSI/NHD-plus stream reaches will allow the data to be easily integrated into NorWeST and other stream network models.

An added benefit of assigning points to the NSI/NHD-plus network is the ability to group nearby sites together for analysis. Each tributary junction along a stream defines the start and end point of a reach. Each stream reach in NSI/NHD-plus has a unique identifier called "COMID" (i.e., common identifier). Once temperature monitoring points are assigned to an NSI/NHD-plus reach, then sites sharing that reach (i.e., share a COMID) can be grouped together for trend analysis (Figure 4). Due to their spatial proximity, data from these sites are comparable and can be analyzed together (Figure 5). We acknowledge that this lumping can mask important differences between sites; however, it makes spatial patterns much easier to visualize on maps at large scales (e.g., Figure ES-1).

For reaches with temperature data in the Eel River Basin, mean length is 2.1 km, standard deviation is 1.4 km, minimum is 0.1 km, and maximum is 8.8 km. Details of the steps used to assign temperature monitoring sites to the NSI/NHD-plus GIS stream network are provided in Appendix A.

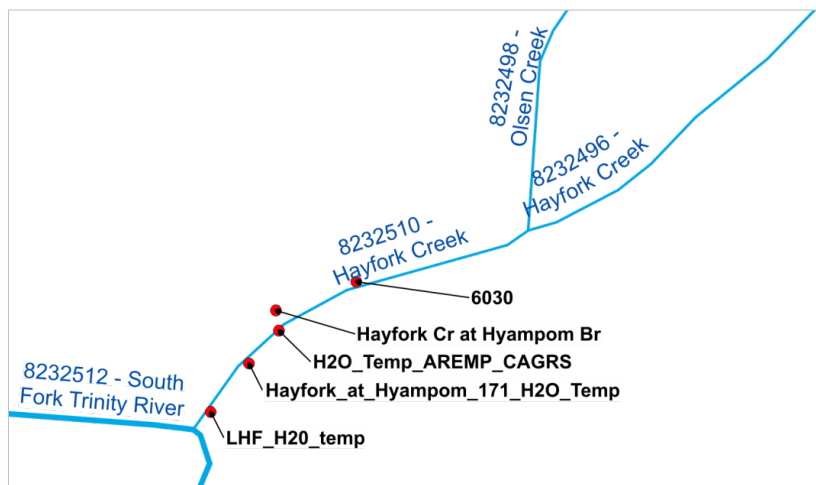


Figure 4. Example map showing how several water temperature datasets from slightly different locations are assigned to a single NSI/NHD-plus stream reach. Labels for stream reaches include the 7-digit COMID. Figure from Asarian (2016).

<sup>20</sup> [http://www.fs.fed.us/rm/boise/AWAE/projects/NationalStreamInternet/NSI\\_network.html](http://www.fs.fed.us/rm/boise/AWAE/projects/NationalStreamInternet/NSI_network.html)

<sup>21</sup> [http://www.horizon-systems.com/nhdplus/NHDPlusV2\\_home.php](http://www.horizon-systems.com/nhdplus/NHDPlusV2_home.php)

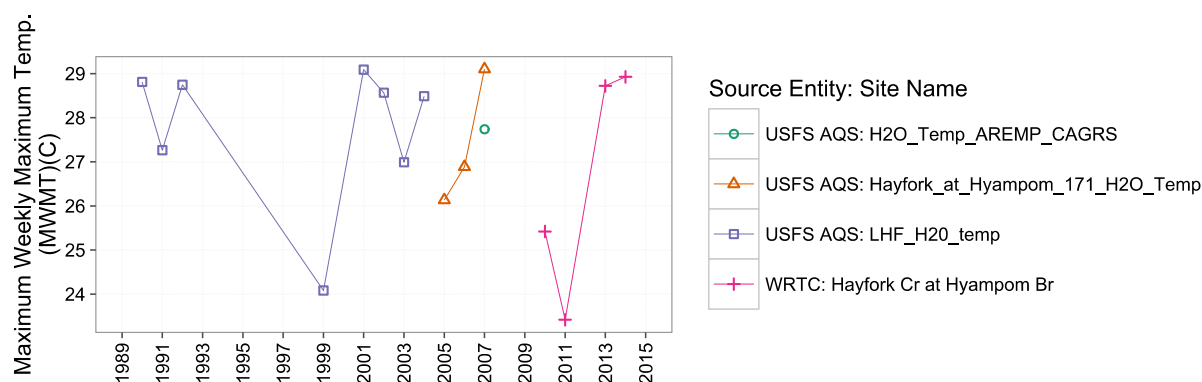


Figure 5. Example of range of MWMTs from four temperature monitoring stations on lower Hayfork Creek within the NSI/NHD-plus stream reach COMID 8232510 used as an example in Figure 4 above. Figure from Asarian (2016).

## 2.4 STANDARDIZING SITE LOCATIONS

We initiated a process of grouping similar sites together into “standardized” sites to prepare for time series analysis. For each standardized site, we assigned a three or four digit Standardized Site ID, using the HSP/FSP and HCRCID Site IDs, or creating a new code if none already existed. Unfortunately, we did not have sufficient time to verify the appropriateness of every grouping and there are likely instances where we grouped sites together whose temperatures are too dissimilar to warrant grouping. We hope to complete the site standardization in a future project.

## 2.5 CALCULATION OF DAILY AND SEASONAL SUMMARIES

### 2.5.1 DAILY SUMMARY STATISTICS

The vast majority of the data were acquired at their original temporal resolution, which ranged from 15 to 120 minutes. For each site, daily statistics were calculated when data completeness was at least 80% (e.g., for data with temporal resolution of 30 minutes, 38 out of 48 individual measurements must be present). Daily statistics included number of measurements, minimum, maximum, mean, and range. All metrics were calculated using R (R Core Team 2012).

### 2.5.2 INITIAL CALCULATION OF SEASONAL AND MONTHLY SUMMARY STATISTICS

Key seasonal temperature metrics were selected based on a review of previous stream temperature analyses (Lewis et al. 2000, Welsh et al. 2001, Dunham et al. 2005, Isaak et al. 2010, McCullough 2010) and calculated for each site and year, including:

- *Maximum Daily Maximum Temperature (MDMT)* – The highest instantaneous maximum temperature recorded during the summer (Figure 6).
- *Maximum Weekly Maximum Temperature (MWMT)* – The highest seven-day average of the daily average temperature. In simple terms, it is the average temperature during the warmest seven-day period of the year. Steps for calculation (Figure 6):
  - o Step 1. Calculate maximum temperature for each day.
  - o Step 2. Calculate 7-Day Average of the Daily Maximum (7DADM), which is calculated for each day as the average of the daily maximum temperature (Step 1) for the three prior days, the current day, and three following days.

- Step 3. Select highest 7DADM (Step 2) value of the year.
- *Maximum Weekly Average Temperature (MWAT)* – The highest seven-day moving average of the daily maximum temperatures. In simple terms, it is the average daily maximum temperature during the warmest seven-day period of the year. Steps for calculation (Figure 6):
  - Step 1. Calculate mean temperature for each day.
  - Step 2. Calculate 7-Day Average of the Daily Average (7DADA), which is calculated for each day as the average of the daily mean temperature (Step 1) for the three prior days, the current day, and three following.
  - Step 3. Select highest 7DADA (Step 2) value of the year.
- *Mean August temperature (Aug\_mean)* – Metric used in the NorWeST model because August is often the warmest month in snowmelt-dominated streams. Metric only calculated when data available for 90% (28 of 31) of days.

Summer temperature metrics are all highly correlated with each other (Dunham et al. 2005), including within streams in the Eel River Basin (see section 3.1).

The date of occurrence of MDMT, MWMT, and MWAT was also calculated. In cases where the same maximal value was reached on more than one date, the seasonal statistic date was assigned to the date on which a larger number of sites had the maximal value<sup>22</sup>.

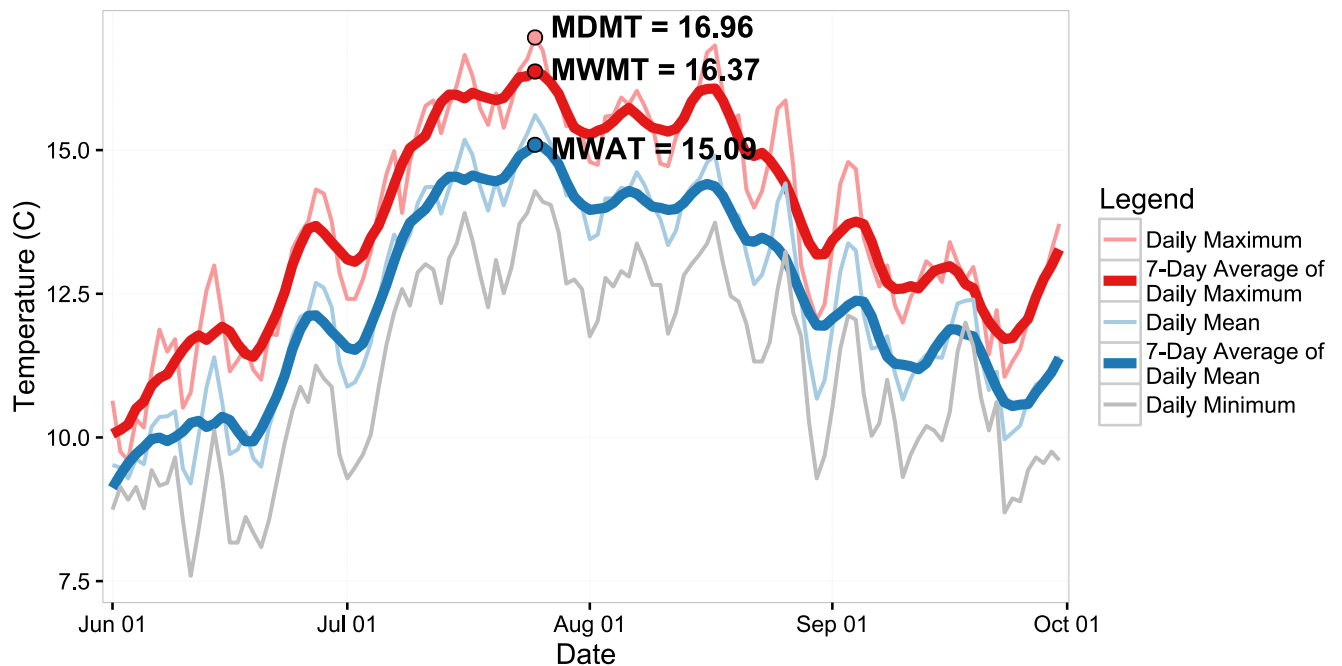


Figure 6. Daily time series of daily maximum, daily mean, daily minimum, 7-day average of daily mean, and 7-day average of daily maximum, MDMT, MWMT, and MWAT at an example site. MDMT, MWMT, and MWAT are the highest annual values for daily maximum, 7-day average of daily mean, and 7-day average of daily maximum, respectively.

<sup>22</sup> Potential alternatives would be to randomly choose one of the dates, or to assign the mean date, but in cases where long distances separate the occurrence of maximal values, then the mean date might be during a cool period. For example, if maximal values are reached on July 1 and July 30, then the mean date would be July 16.



### 2.5.1 REFINING SEASONAL STATISTICS ACCORDING TO DATA COMPLETENESS

Seasonal summary statistics are relatively simple to calculate when data are available for the entire warm season (i.e., June through September); however, many datasets only contained data for part of the summer season. Seasonal statistics may be biased low if they are calculated from only a short period and did not include the warmest days of the year. Conversely, excluding seasonal statistics when gaps occurred outside the warmest days would be an unnecessary loss of important information. As described in Section 2.5.2, seasonal statistics were initially calculated for all years and sites. Values were then either retained (i.e., kept) or excluded (i.e., deleted) based on data completeness.

We developed an automated multi-step procedure to screen data completeness followed by an optional manual override. Since MWMT, MWAT, and MDMT almost always occur in July or August (see section 3.1), seasonal statistics were retained<sup>23</sup> for datasets which included all of July and August<sup>24</sup>. For datasets that were missing some days in July or August, seasonal statistics were only automatically retained if the data were present at that site for each day on which that statistic occurred at least two other sites<sup>25</sup>. Finally, we reviewed graphs for each source entity and year (similar to Figure 2 but with each site a separate panel rather than all sites plotted into a single panel) and if the data gaps did not appear to substantially affect the summary statistic (i.e., if data at nearby sites indicated the period with data present had similar values to the period with missing data) then we retained the value using a manual override.

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## 2.6 SELECTING TEMPERATURE CATEGORIES FOR THE EEL RIVER BASIN BASED ON SUITABILITY FOR SALMONIDS

High summer water temperatures in the Eel River Basin have been identified as a limiting factor for steelhead trout, spring-run Chinook salmon, and coho salmon. High summer water temperature can cause mortality if it reaches critically lethal levels or can have chronic detrimental effects on bioenergetics and growth. Of the three species, coho salmon have the most stringent requirements for cool water and are the focus of this section.

Selecting “salmonid suitability” thresholds is extremely difficult due to site-specific variation in natural stream systems. Recent reviews on this topic include U.S. EPA (2003), Richter and Kolmes (2005), McCullough (2010), Stenhouse et al. (2012), and Nichols et al. (2013). Approaches to setting thresholds include laboratory studies, bioenergetics modeling, field studies comparing fish distribution with observed temperatures, and observing movement of fish into thermal refugia. *The summary of information presented here is not intended to be a comprehensive literature review, but rather to provide enough information to inform selection of criteria that will be useful for differentiating categories of stream temperatures in the Eel River Basin and prioritizing areas where it may be feasible to restore coho salmon* (Table 2).

To successfully reproduce, anadromous salmonids must grow to become large enough to survive the transition to the ocean environment. Growth rates are determined by the relative balance of energy consumed versus energy expended, which are strongly affected by food and temperature,

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<sup>23</sup> Seasonal statistics were initially calculated for all years and sites. Values were then either retained (i.e., kept) or excluded (i.e. deleted) based on data completeness.

<sup>24</sup> Actually June 28 through September 2 because the 7-Day Average of the Daily Maximum (7DADM) and 7-Day Average of the Daily Average (7DADA) require data to be present for three days before and three days after.

<sup>25</sup> I chose two sites as the threshold rather than one site because a single site might have unique characteristics or a data quality issue whereas two or more sites should indicate a more widespread pattern.

respectively (McCarthy et al. 2009, Weber et al. 2014). The growth optimum for juvenile coho with access to maximum food is 15.0 °C (Edsall et al. 1999) and bioenergetics modeling indicates coho most efficiently convert food into growth when daily average water temperatures range from 14.7°C to 15.7°C (Willey 2004). Metabolic demands are greater when fish are exposed to higher temperatures and faster water velocities, requiring greater food resources to compensate (Weber et al. 2014). In the Mattole River, a coastal watershed southwest of the Eel River that lacks those favorable features, juvenile coho salmon were not found in streams where MWMT exceeded 18 °C (Welsh et al. 2001) but were present in all streams where MWMT was less than 16.3°C. In streams with extremely rich food resources, such as streams recovering from the Mt St. Helens eruption (Bisson et al. 1988) or the spring-fed streams in the Shasta Valley northeast of the Eel River (Nichols et al. 2013), coho salmon can grow rapidly and thrive even when MWMT exceeds 18 °C. In the West Fork Smith River on the Oregon Coast<sup>26</sup>, Ebersole et al. (2009) found reduced densities of coho salmon juveniles at sites with MWMT values >20 °C.

Another set of information to consider when selecting temperature thresholds are observations of movement of fish between thermal refugia and mainstem rivers. For example, multiple studies on the Klamath River found that juvenile salmonids congregated in thermal refugia at tributary confluences when mainstem temperatures reach approximately 22-23 °C (Sutton et al. 2007, Strange 2010, Sutton and Soto 2012, Brewitt and Danner 2014). In the West Fork Smith River, Raskauskas (2005) found coho salmon moved into thermal refugia when temperature exceeded 20 °C.

Steelhead/rainbow trout can tolerate warmer water than coho salmon (Richter and Kolmes 2005, McCullough 2010, Parkinson et al. 2015). For example, in Southern California streams, juvenile steelhead/rainbow trout have been documented successfully over-summering in pools reaching daily maximum temperatures greater than 30 °C (Sloat and Osterback 2013), whereas the Ultimate Upper Incipient Lethal Temperature (UUILT)<sup>27</sup> for coho salmon is 25.0 °C (Brett 1952). At temperatures greater than approximately 24 °C, time spent by steelhead/rainbow trout on feeding and agonistic behaviors declines (Sloat and Osterback 2013). Based on a review of previous studies, Boughton et al. (2015) characterized days with daily maximum temperatures greater than 21°C as “stressful” in a bioenergetics model of steelhead/rainbow trout. In biological surveys of 49 interior Canadian streams, abundance of rainbow trout was lower (but remained above zero) for streams with MWAT greater than approximately 21 °C (Parkinson et al. 2015). A steelhead/rainbow trout bioenergetics model calibrated with field data from nine low-order tributaries of the South Fork Trinity River watershed indicated that growth declined precipitously when temperatures exceeded 20 °C, and that feeding rate and temperature limit the growth and productivity (McCarthy et al. 2009).

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<sup>26</sup> Not to be confused with the Smith River in northwest California and Southwest Oregon.

<sup>27</sup> According to McCullough (2010), Ultimate Upper Incipient Lethal Temperature (UUILT) “is the highest UILT possible under conditions where organisms with prior temperature acclimation are then subjected to a test temperature for a period of either 1000 min or 24 h, producing 50% survival.”

Table 2. Categories for evaluating the suitability of water temperatures for supporting salmonids in streams in the Eel Basin. MWMT = maximum weekly maximum temperature (i.e., highest value of the year for 7-day moving average of daily maximum temperatures).

MWMT (°C)	Category	Explanation
<16	Excellent	Optimal for coho salmon and steelhead/rainbow trout
16-18	Very good	Likely suitable for coho salmon and steelhead/rainbow trout
18-20	Good	Possibly suitable for coho salmon if abundant food resources and velocity refuge are present. Likely suitable for steelhead/rainbow trout.
20-22	Fair	Unsuitable for coho salmon. Likely suitable for steelhead/rainbow trout.
22-25	Poor	Marginal for steelhead/rainbow trout
>25	Very poor	Very marginal for steelhead/rainbow trout

### 3 RESULTS AND DISCUSSION

#### 3.1 OVERALL SEASONAL PATTERNS IN STREAM TEMPERATURE AND RELATIONSHIPS BETWEEN TEMPERATURE METRICS

Stream temperatures in the Eel basin typically peak in July or August (Figure 7). Averaged across all years and sites, the peak occurs in late July (Figure 7). On average, July is slightly warmer than August but much warmer than June (Figure 9). There is considerable year-to-year (and to a lesser extent, site-to-site) variation in the date that peak temperatures occur (Figure 8). MWMT temperatures occurred earlier in 2015 than in any other year (Figure 8).

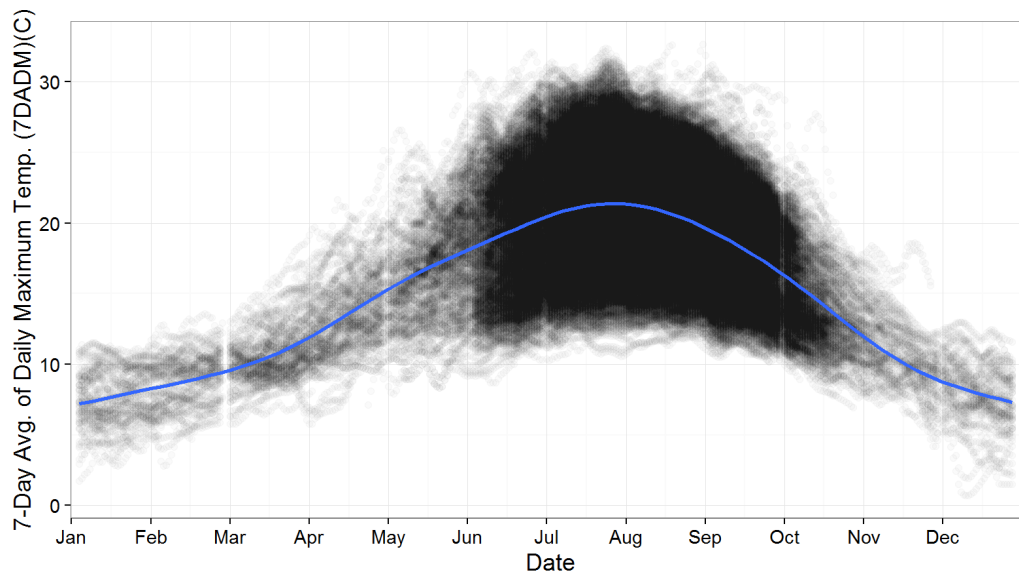


Figure 7. Seven-day moving averages of daily maximum temperature (7DADM) for every site and every year in the Eel basin. Blue line is LOESS (LOcally Estimated Scatterplot Smoothing) smoother.

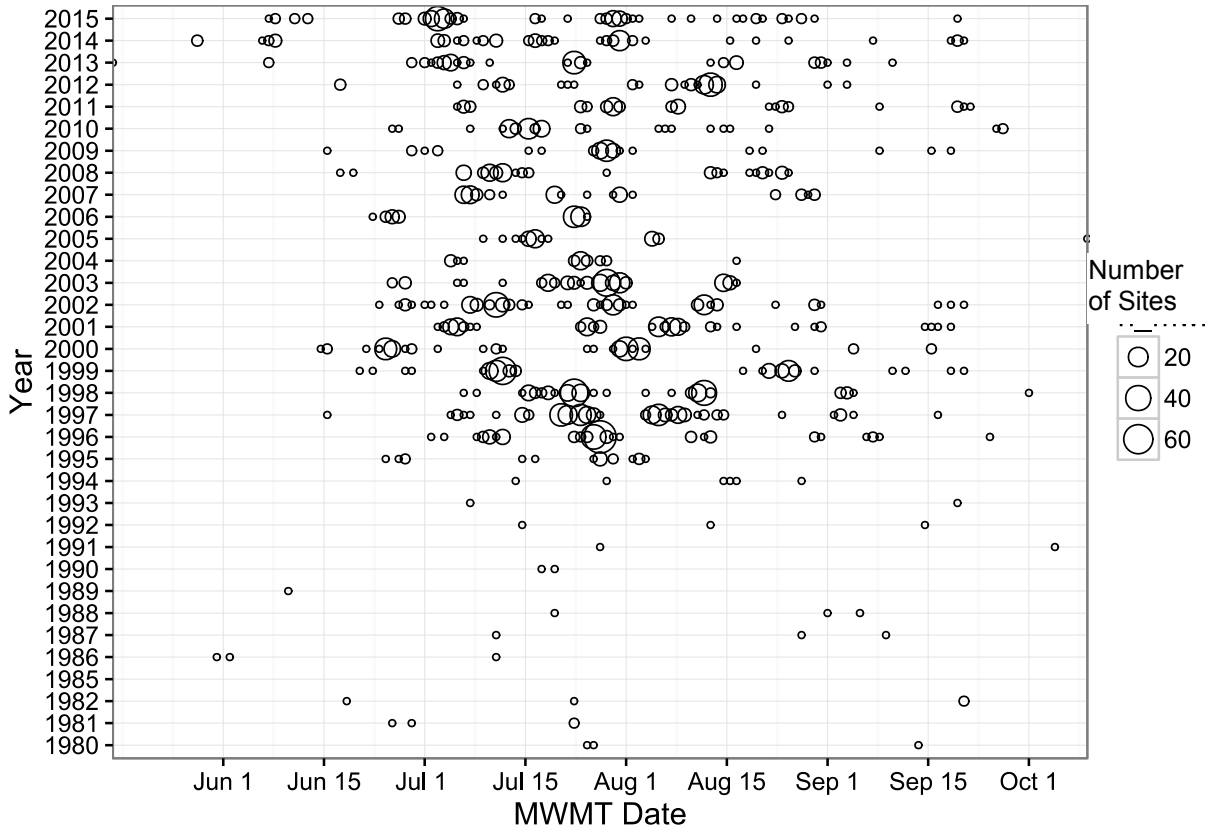


Figure 8. Date each year 1980-2015 upon which MWMT temperature occurred at sites in the Eel basin. Size of circles corresponds to the number of sites. MWMTs occurring before June 15 or after September 15 may be artifacts of incompletely trimmed datasets (we did not have time to investigate).

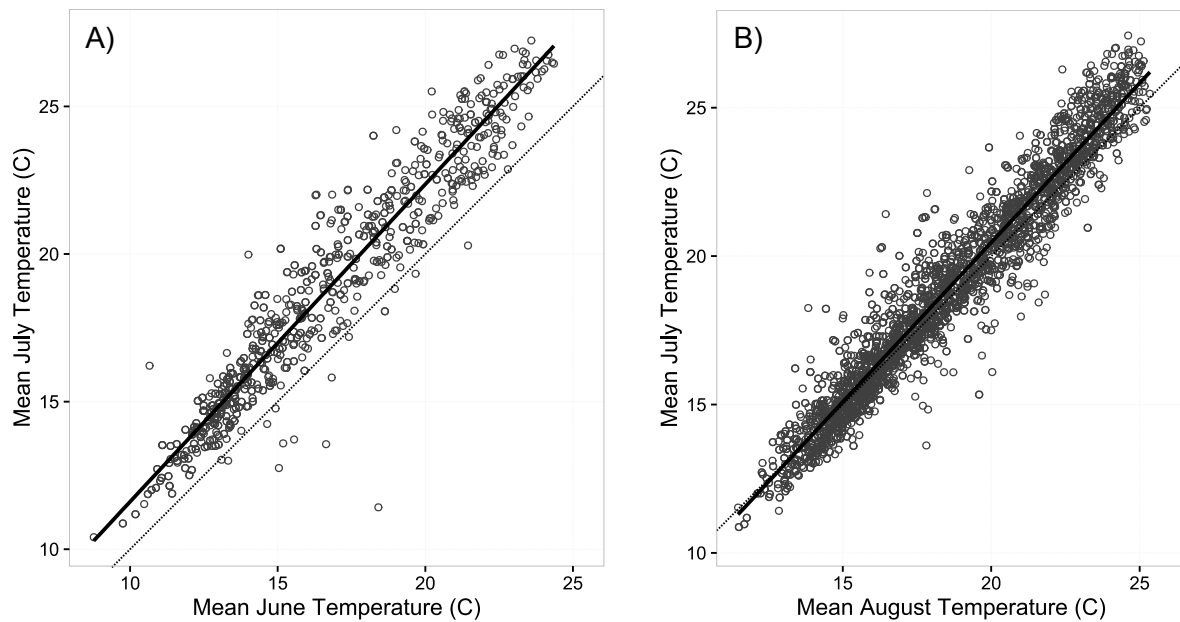


Figure 9. Comparison of mean July stream temperatures with (A) mean June stream temperatures, and (B) mean August stream temperatures, for the entire Eel basin dataset. Each dot represents a single site and year. Thick solid line is a linear regression and the thin dotted line is the 1:1 ( $Y=X$ ) line.

Maximum weekly maximum temperature (MWMT), maximum weekly average temperature (MWAT), annual single maximum (MDMT), and August mean (Aug\_mean) temperatures for the entire Eel basin dataset are all highly correlated (Figure 9). The strongest correlation is between MWMT and MDMT, with a Pearson Correlation Coefficient of 0.997 (Figure 10).

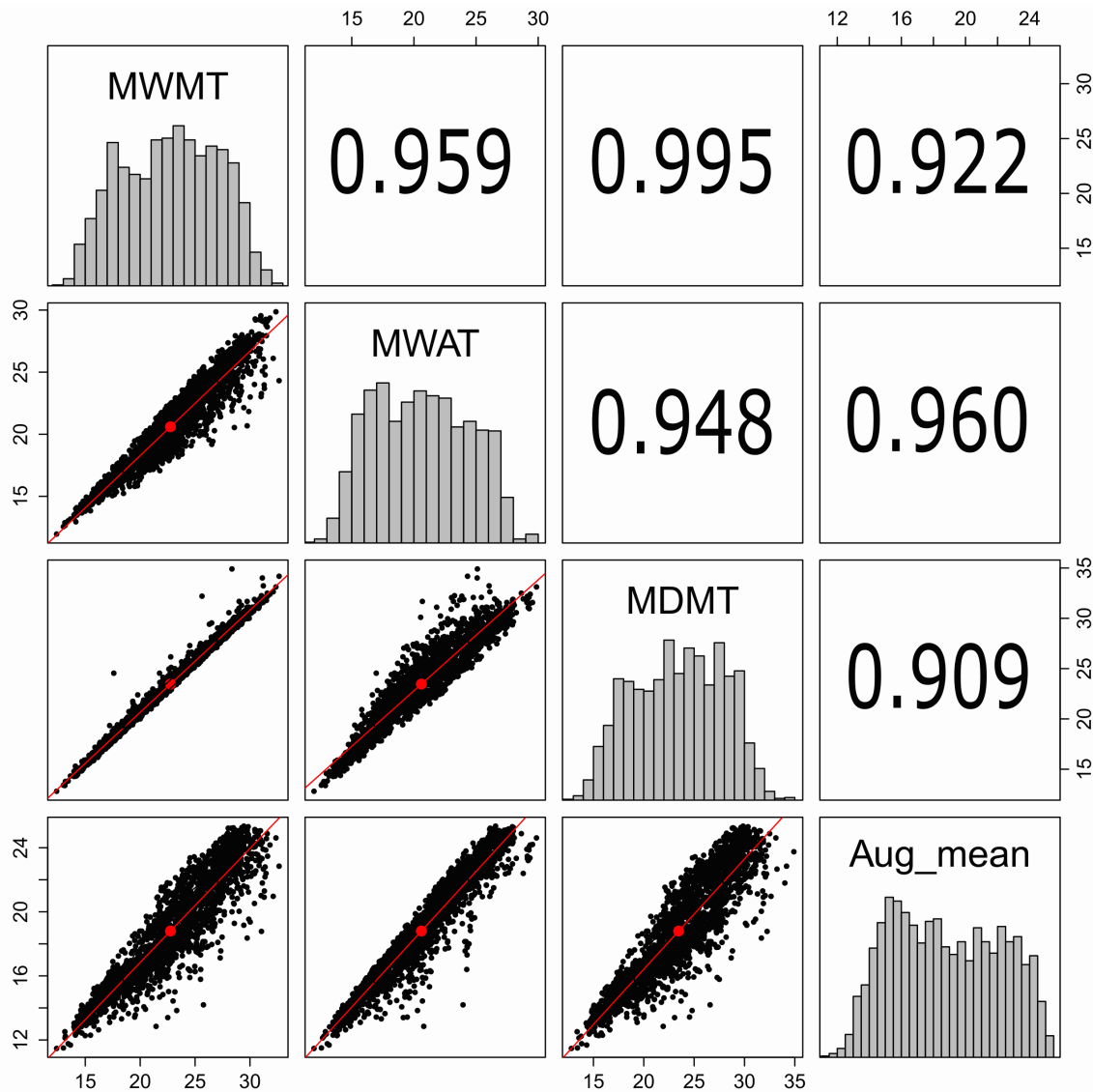


Figure 10. Correlation matrix comparing maximum weekly maximum temperature (MWMT), maximum weekly average temperature (MWAT), annual single maximum (MDMT), and August mean (Aug\_mean) temperatures for the entire Eel basin dataset. The matrix includes a row and column for each variable, and the intersection of a row and column shows the correlation between a pair of variables. For example, the left column of the bottom row is a plot of MWMT vs. Aug\_mean with linear trend line shown in red and each dot representing a single site and year, and the number (0.935) in the right column of the upper row is the Pearson Correlation Coefficient<sup>28</sup> between MWMT and Aug\_mean. Grey bars along the symmetrical axis of the matrix are histograms showing the distribution of data for each variable.

<sup>28</sup> 1.000 would indicate a perfect positive correlation between the variables while zero would indicate a complete lack of relationship between the two variables



### 3.2 INTER-ANNUAL VARIATION IN STREAM TEMPERATURE

Given that the network of sites monitored varied each year, care must be taken when making basinwide generalizations about “cool” vs. “warm” years. We applied an approximate index of cool vs. warm years based on the MWMT relative anomaly (i.e., ratio of MWMT for individual years to the mean MWMT calculated from all years) previously developed by Asarian (2016) and as calculated as follows. First, using only those sites with at least five years of data, we calculated each site’s mean MWMT. For a hypothetical “Example site 1” there are six years of MWMT values, with a mean value of 21.12 °C (Table 3). For each site, we then divided the MWMT for each year by the mean MWMT (Table 3). The result is the relative anomaly, a unitless ratio which can then be averaged across all sites within a year, allowing relatively “apples-to-apples” comparisons of the general warmth of each year (Figure 11). To increase the consistency of the year type classifications, we excluded sites on the mainstem Eel River between Scott Dam and the confluence with the Middle Fork Eel River because those sites might be strongly affected by operations at Scott Dam<sup>29</sup>, and also excluded “special” sites such as isolated pools and vertical profiles in pools. We did not calculate year types for 1980-1993 because there so few sites that met criteria<sup>30</sup>. The four warmest years were 2006, 2004, 1996, and 1997, and the five coolest years were 2002, 2010, 2011, and 2012 (Figure 12). Despite having streamflows among the lowest on record and many streams drying up or becoming intermittent, stream temperatures in 2014 and 2015 ranked as cool and moderate, respectively. Analysis of why some years were warmer than others is outside the scope of this analysis, but potential factors include: air temperatures, streamflow, smoke from wildfire, disturbances to stream channels and riparian vegetation (e.g., debris torrents and timber harvest), and recovery from prior disturbance. Many streams were dry in 2014 and 2015 (and to a lesser extent 2013 also) and thus summary statistics could not be calculated due to missing data. It is possible that the large number of dry streams in 2013, 2014, and 2015 could have affected the population of streams that were available to calculate the relative anomaly and therefore biased the classification of cool vs warm years. Appendix B presents a sensitivity analysis which shows that the results (i.e., warm vs. cool years) for MWAT are quite similar to MWMT and that it makes relatively little difference whether five or ten years of data are used as a minimum threshold.

Table 3. Example calculation of a single site’s mean MWMT and relative MWMT anomaly for each year. The relative MWMT anomaly is the ratio of each year’s MWMT to the mean MWMT.

Site	Year	MWMT (°C)	Relative MWMT Anomaly
Example site 1	2010	20.53	0.972
Example site 1	2011	20.15	0.954
Example site 1	2012	19.98	0.946
Example site 1	2013	21.75	1.030
Example site 1	2014	21.66	1.025
Example site 1	2015	22.67	1.073
Example site 1	Mean of all Years	21.12	1.000

<sup>29</sup> For example, whether water was released from top of bottom of reservoir.

<sup>30</sup> Not highly influenced by Scott Dam, has  $\geq 5$  years of data, and not a “special” site.

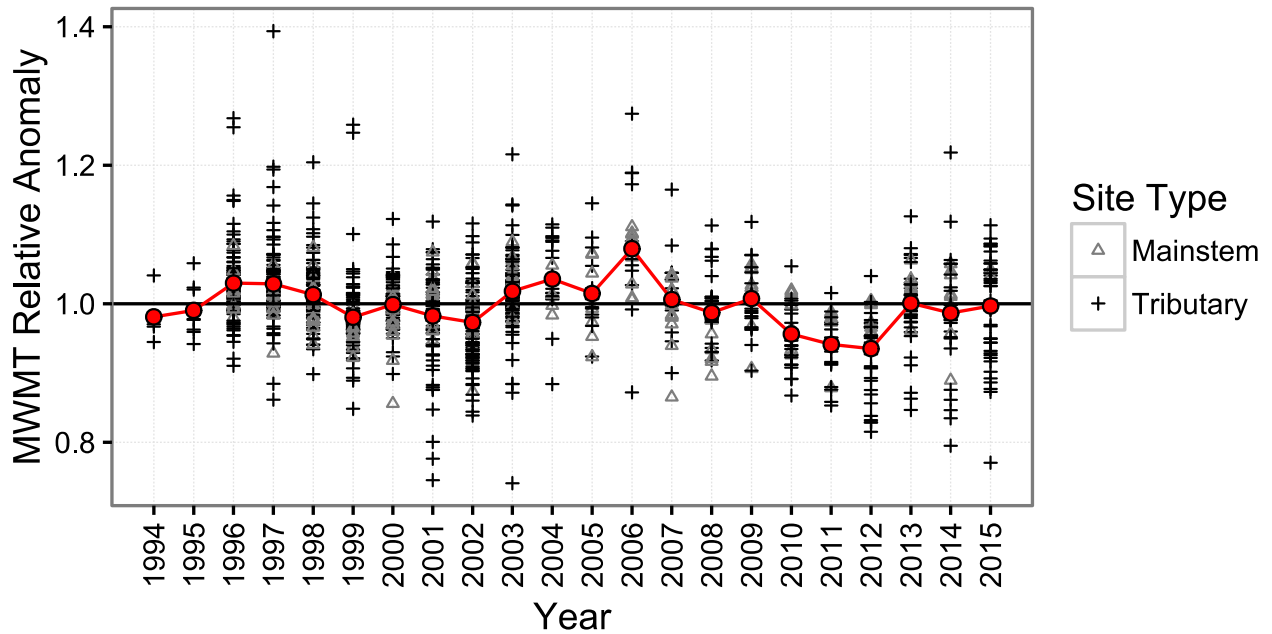


Figure 11. Annual time series of MWMT relative anomaly (i.e., ratio of a site-year's MWMT to a site's mean MWMT) for each site and year (black circles). Large red circles are the mean of all sites within a year. Warm years have relative anomalies greater than 1 while cool years have relative anomalies less than 1.

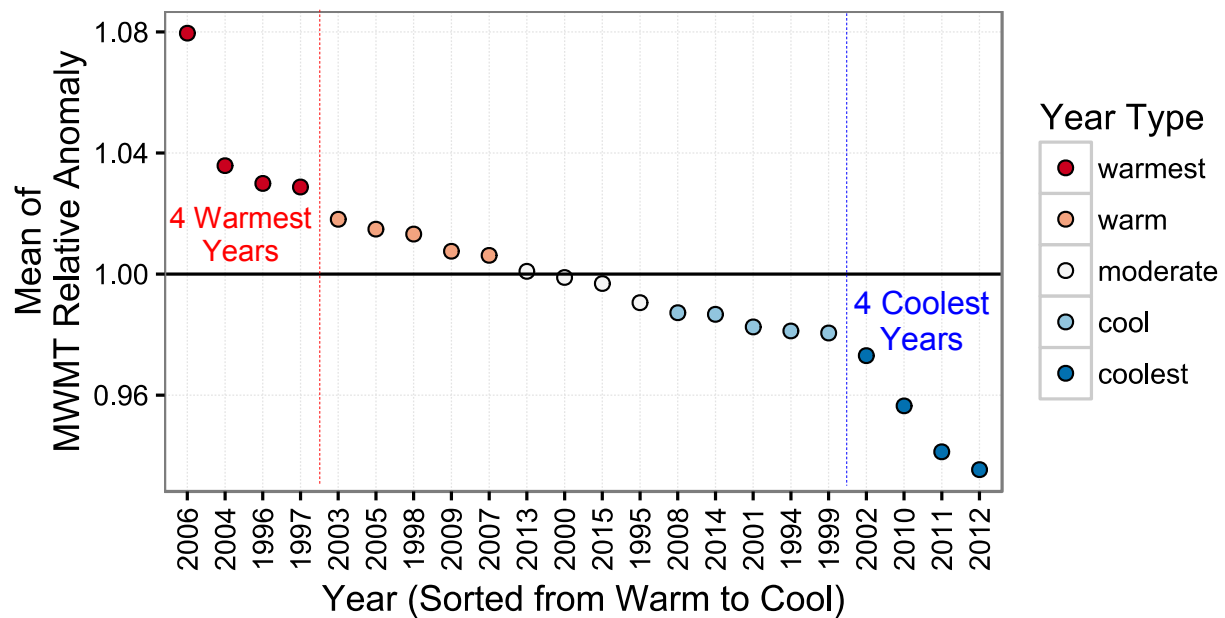


Figure 12. Mean of MWMT relative anomaly (i.e., mean ratio of a single-year MWMT to a mean MWMT) for each year 1994 to 2015 (there were not enough sites to assess 1980-1993), indicating generalized basinwide cool and warm years. X-axis is sorted in same order as y-axis. Points in this graph are the same as the red circles in Figure 11. Warm years have relative anomalies greater than 1 while cool years have relative anomalies less than 1.

### 3.3 SUMMARY OF SPATIAL PATTERNS IN STREAM TEMPERATURE

MWMT temperature is strongly correlated with drainage area (Figure 13), and most streams show the expected pattern of warming as water flows downstream from cold, well-shaded headwaters into wider alluvial channels which are more exposed to solar radiation (Figure 15). One exception is the mainstem Eel River which exhibits a more complex pattern where water warms prior to entry into Lake Pillsbury, then water released from Scott Dam creates a cooler regime downstream to Cape Horn Dam where most of the summer flow is diverted to the Russian River. The Eel River then warms rapidly to reach a maximum around the confluence with Outlet Creek, cools slightly as it flows to Dos Rios, and then attains another thermal maxima at Nashmead below Dos Rios. From there the Eel River becomes progressively cooler as it flows downstream towards the Pacific Ocean due to marine influence on air temperatures in lower reaches (Figure 14, Figure 15).

MWMT temperatures  $<18^{\circ}\text{C}$  and  $<20^{\circ}\text{C}$  occur primarily at sites with drainage areas less than  $100\text{ km}^2$  (Figure 13).

In addition to varying by reach and site, temperatures also vary by year. Figure 16 shows reach-level MWMT temperatures in coolest years only (2002, 2010, 2011, and 2012) and Figure 17 shows reach-level MWMT temperatures in the warmest years only (2006, 2004, 1996, and 1997). Appendix C provides a similarly formatted figure for the all-years mean of MWAT, with reaches labeled by the number of years of available data.

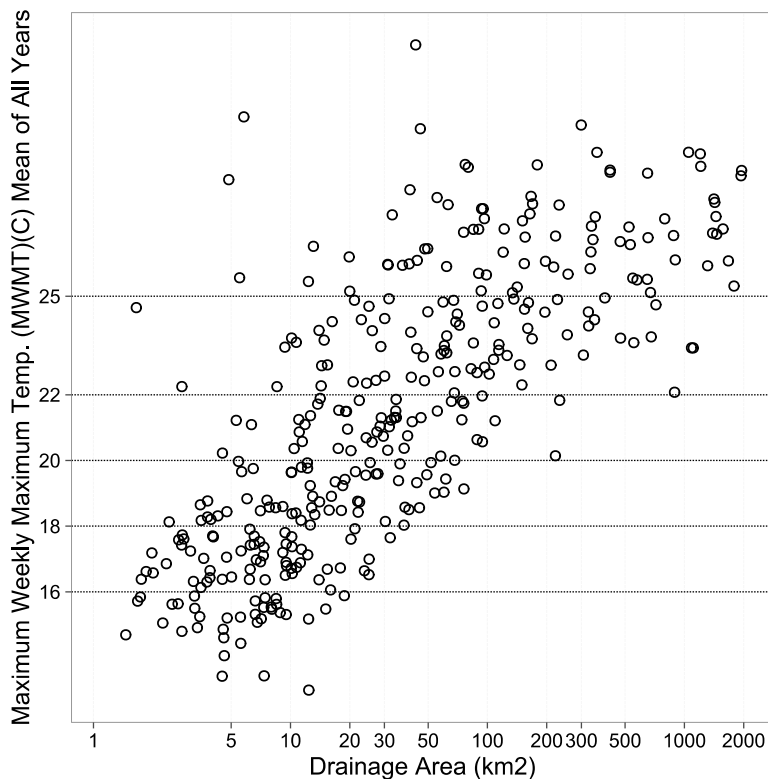


Figure 13. Mean MWMT temperature vs. drainage area (on log scale) for reaches within the Eel basin, excluding the mainstem Eel River. Mean reach MWMT values were calculated as the mean of all MWMTs across all years (1980-2015) and sites within a reach. Horizontal gridlines correspond to the MWMT salmonid suitability categories in Table 2. Reaches are labeled by an abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS) and reach identifier (COMID).

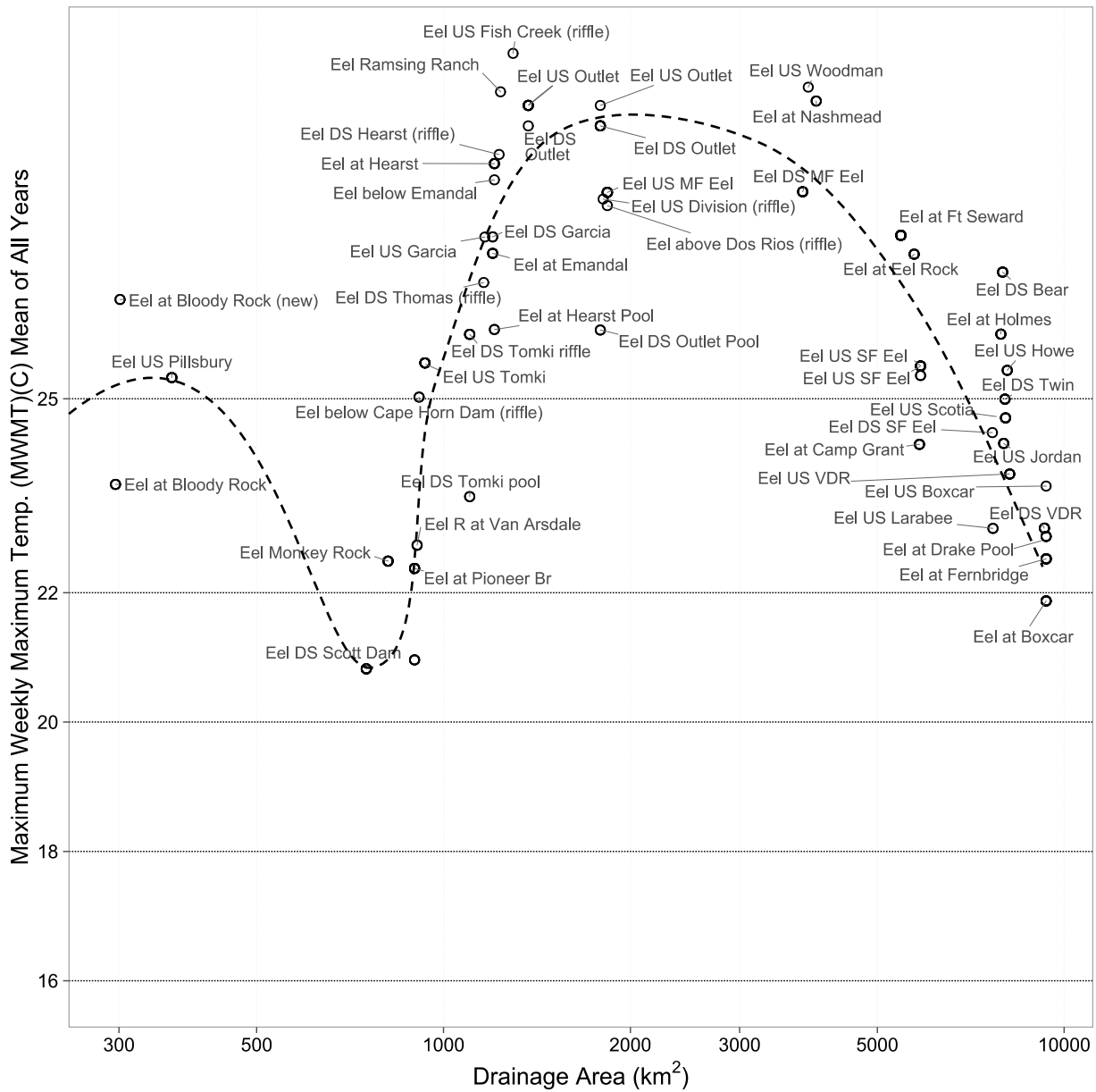


Figure 14. Mean MWMT temperature vs. drainage area (on log scale) for mainstem Eel River reaches only. Dashed line is a visual aid manually drawn to show the overall pattern. Mean reach MWMT values were calculated as the mean of all MWMTs across all years (1980-2015) and sites within a reach. Horizontal gridlines correspond to the MWMT salmonid suitability categories in Table 2. Reaches are labeled by standardized site name.

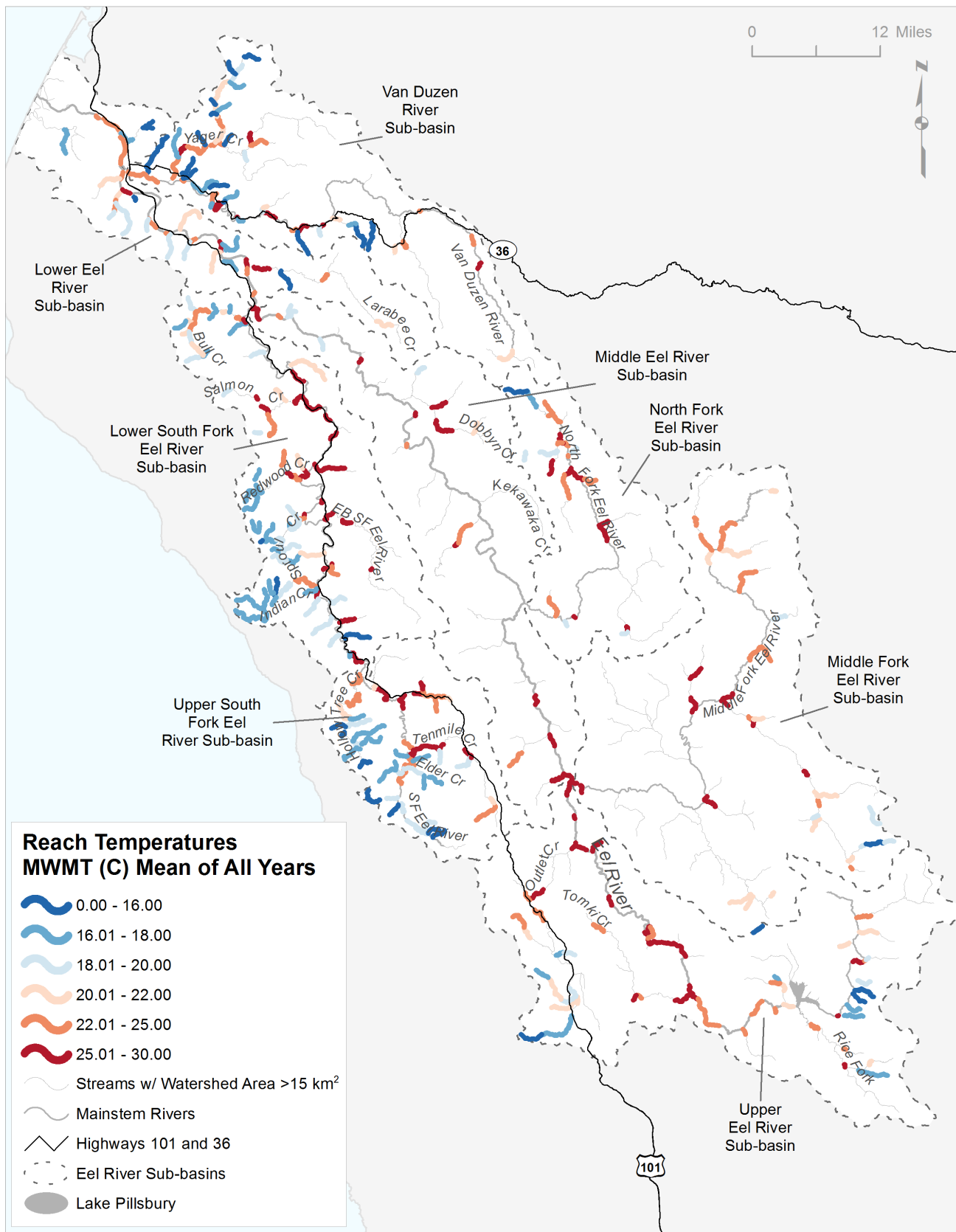


Figure 15. Map with all-year reach-level summary of MWT stream temperatures within the Eel River basin. Mean reach MWT values were calculated as the mean of all MWTs across all years (1980-2015) and sites within a reach. Reaches are color-coded according to the MWT salmonid suitability categories in Table 2 and labeled by stream name.



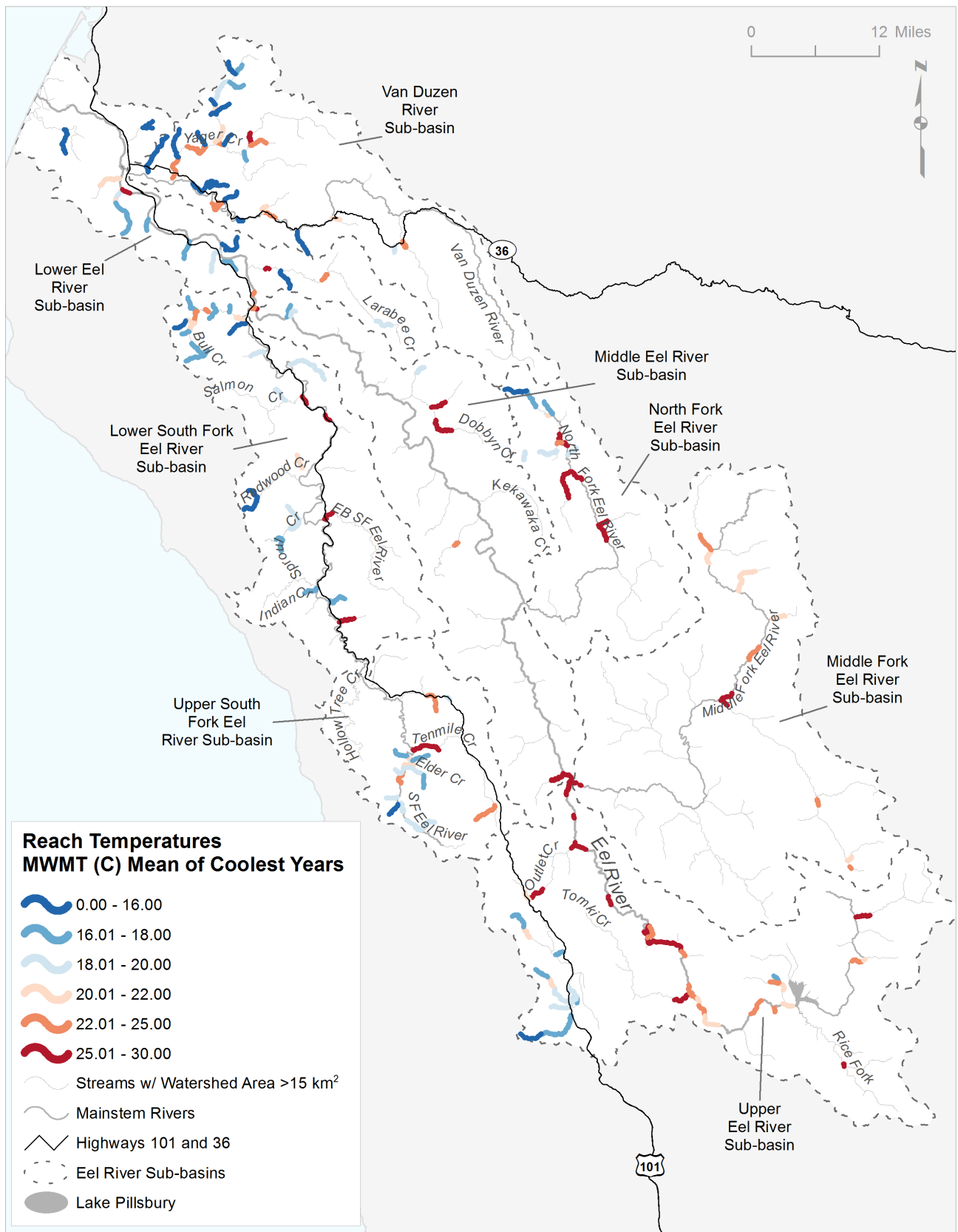


Figure 16. Map with cool-year reach-level summary of MWMT stream temperatures within the Eel River basin. Mean reach MWMT values were calculated as the mean MWMT from all sites within a reach but for the four coolest years only (2002, 2010, 2011, and 2012). Reaches are color-coded according to the MWMT salmonid suitability categories in Table 2 and labeled by stream name.

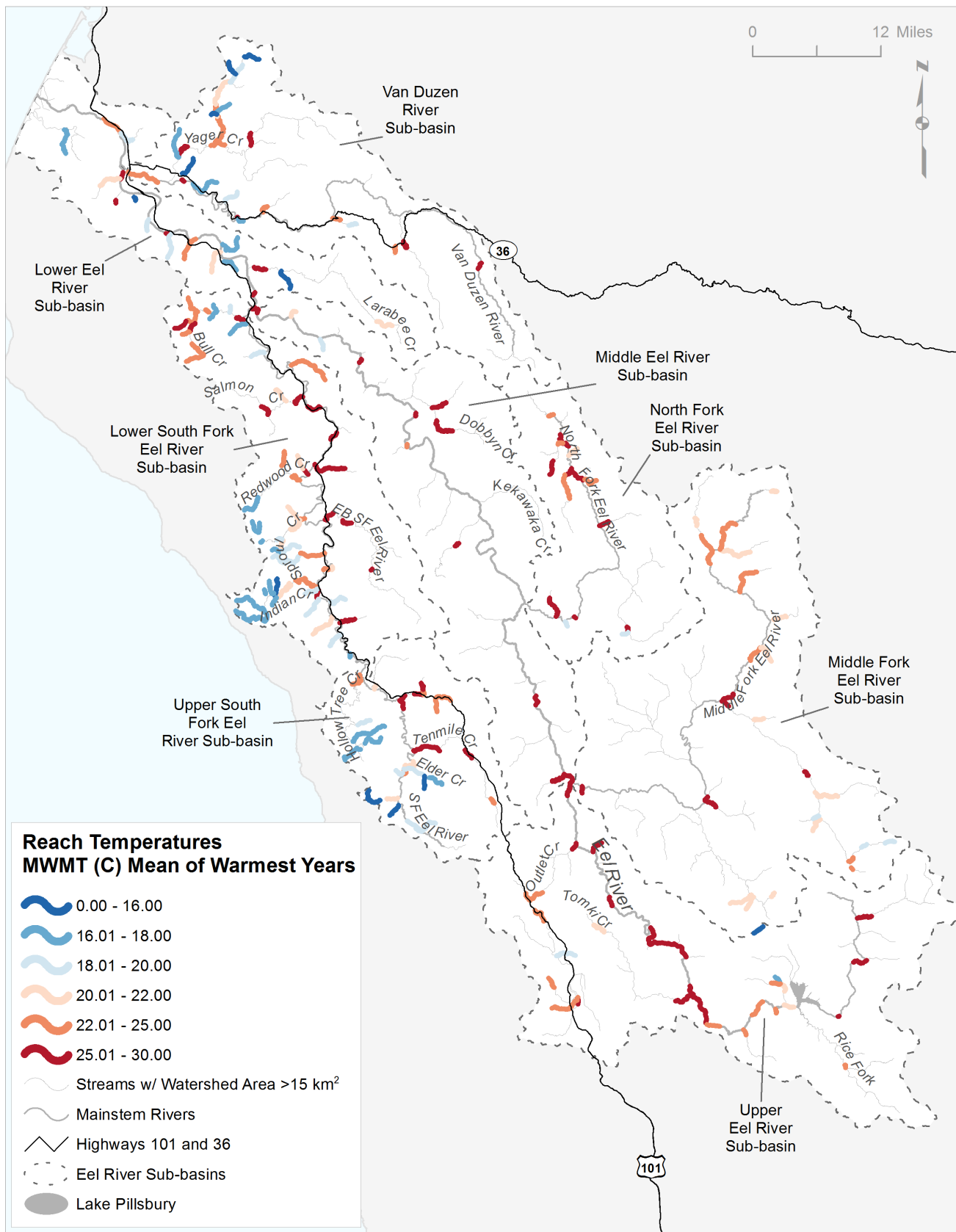


Figure 17. Map with warm-year reach-level summary of MWMT stream temperatures within the Eel River basin. Mean reach MWMT values were calculated as the mean MWMT from all sites within a reach for the four warmest years only (2006, 2004, 1996, and 1997). Reaches are color-coded according to the MWMT salmonid suitability categories in Table 2 and labeled by stream name.

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### 3.4 STREAM TEMPERATURE DETAILS BY SUB-BASIN

The following sections present stream temperature data for each of the Eel River's sub-basins (Figure 1), including a map showing site locations, a graph grouped into reaches showing MWMT temperatures for each site and year, annual time series of MWMT temperatures at a subset of sites.

#### 3.4.1 LOWER EEL RIVER

There is some indication that temperatures were decreasing in recent years in some streams in the Lower Eel sub-basin, including Bear Creek (Figure 20), Howe Creek (Figure 21), and Price Creek (Figure 22) indicating recovery from the January 1, 1997 storm (Higgins 2013). However, large storm events in late November and early December 2012 may have slowed or reversed these trends (Higgins 2014). Temperatures in Francis Creek appear to show a decrease between 1997 and 2002 and increase after 2012 (Figure 23).

## Lower Eel River Sub-basin

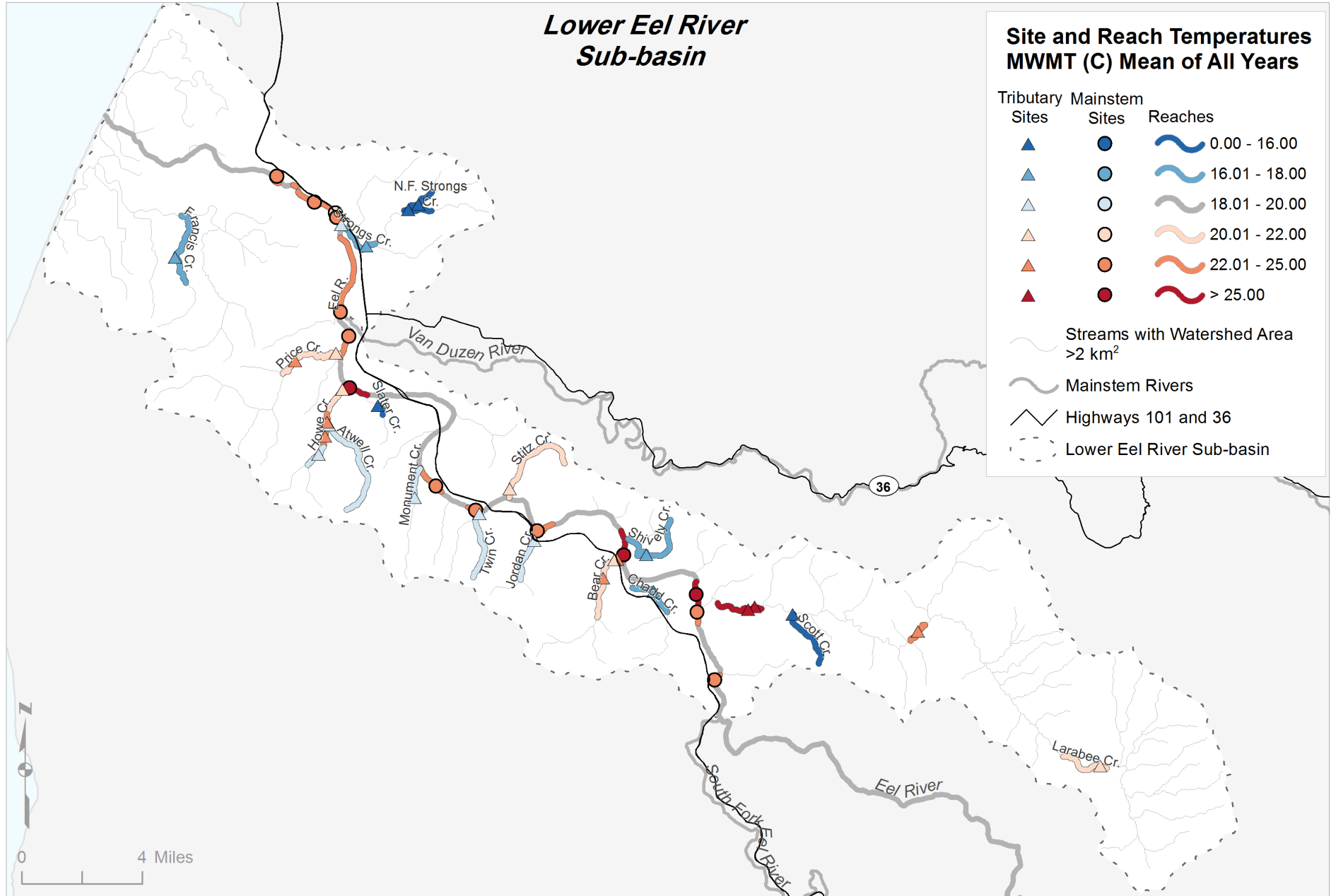


Figure 18. Map showing stream temperature monitoring sites in the Lower South Fork Eel River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

### MWMT Summary for Lower Eel R

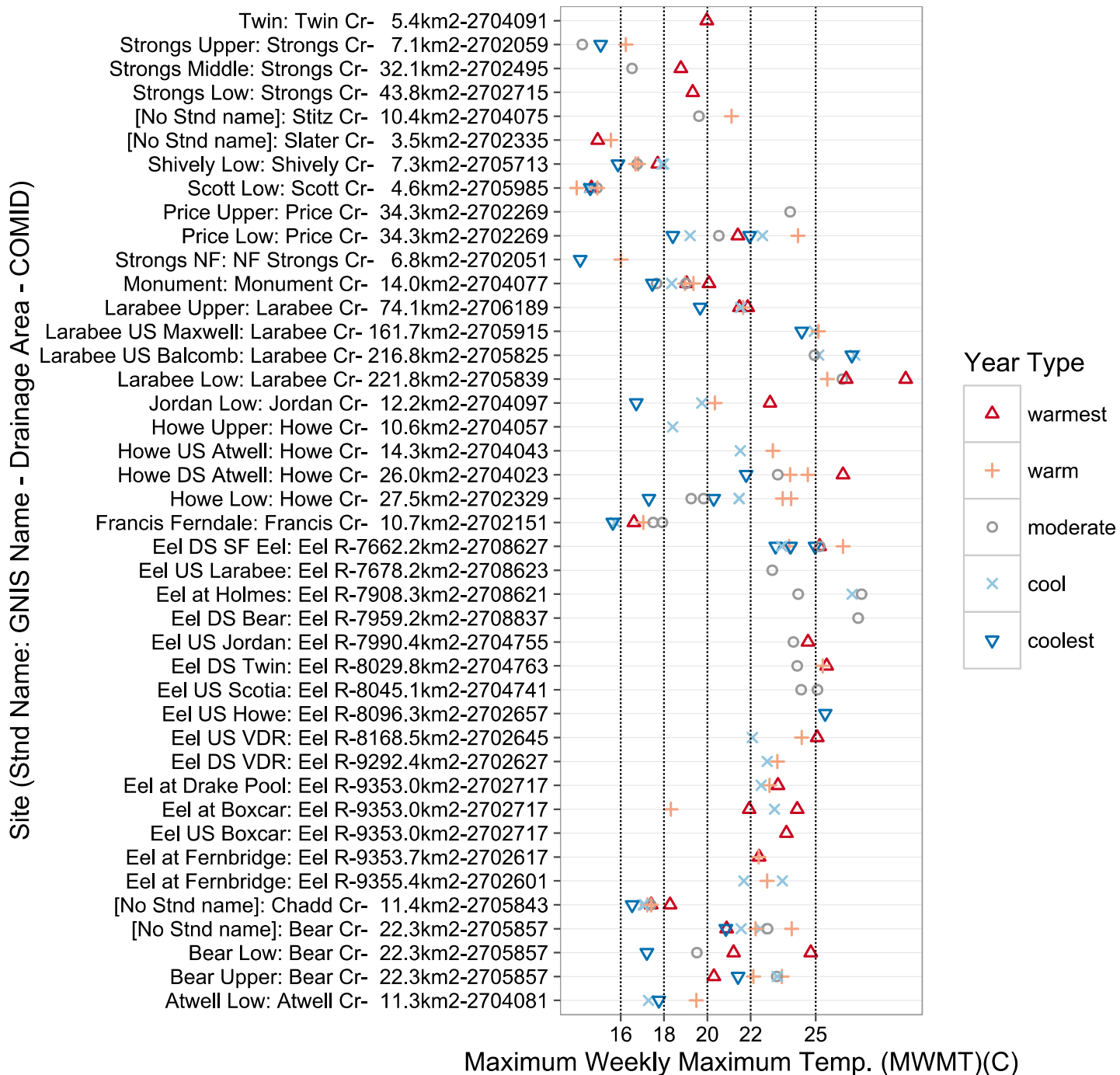


Figure 19. Site-level summary of stream temperatures measured within the Lower Eel River sub-basin. Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.



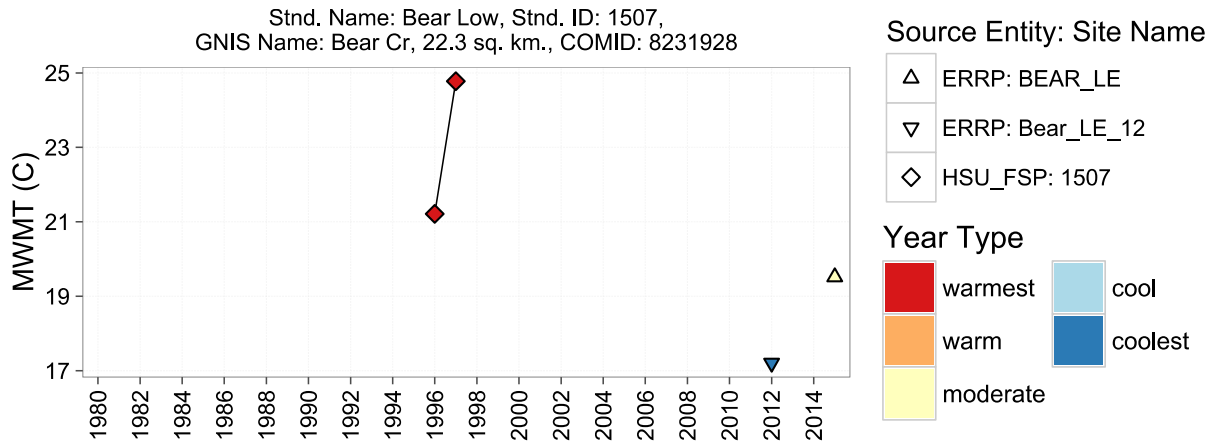


Figure 20. Time series of measured stream temperatures for standardized site 1507 at the mouth of Bear Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

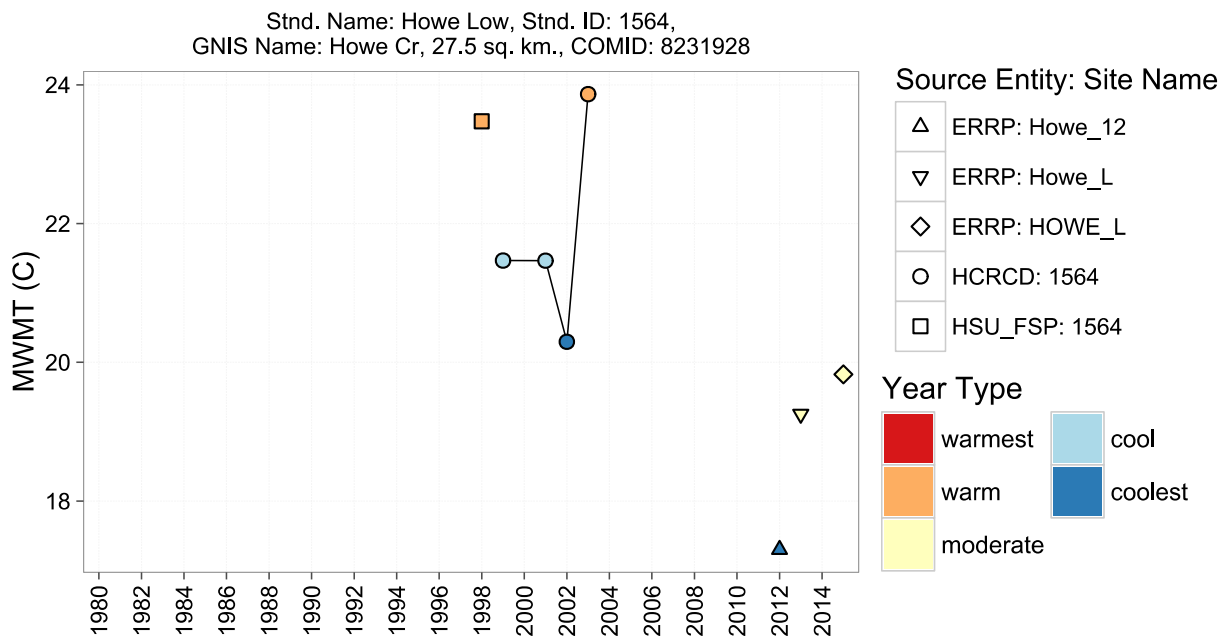


Figure 21. Time series of measured stream temperatures for standardized site 1564 at the mouth of Howe Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

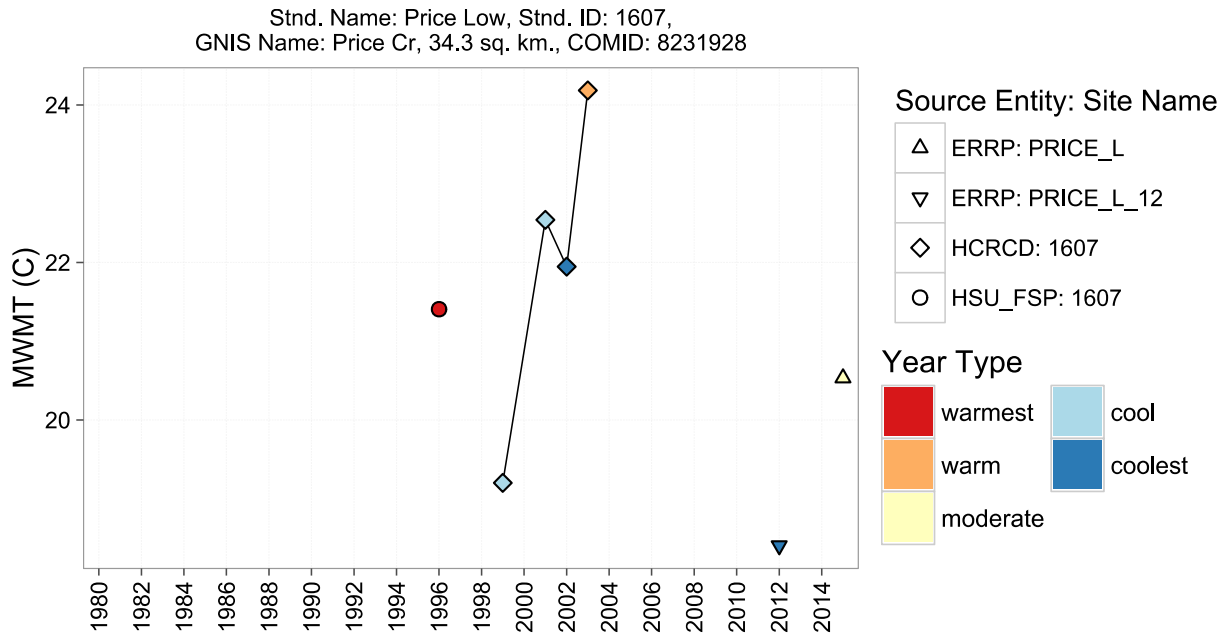


Figure 22. Time series of measured stream temperatures for standardized site 1607 at the mouth of Price Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

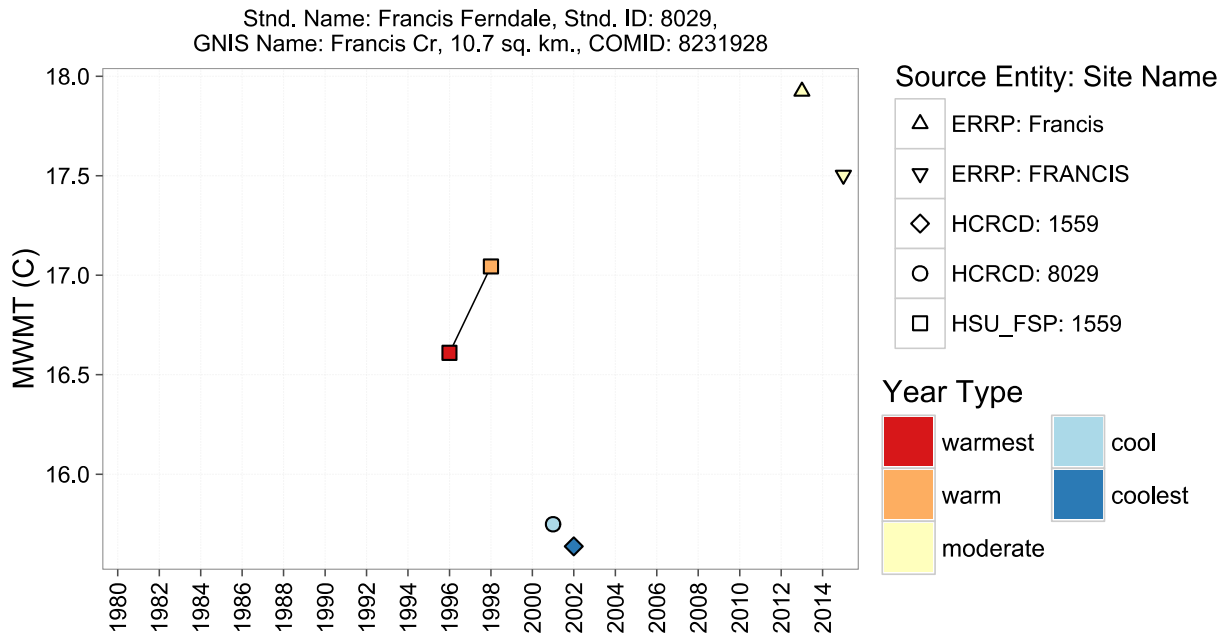


Figure 23. Time series of measured stream temperatures for standardized site 8029 at Francis Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

3.4.1 MIDDLE EEL RIVER

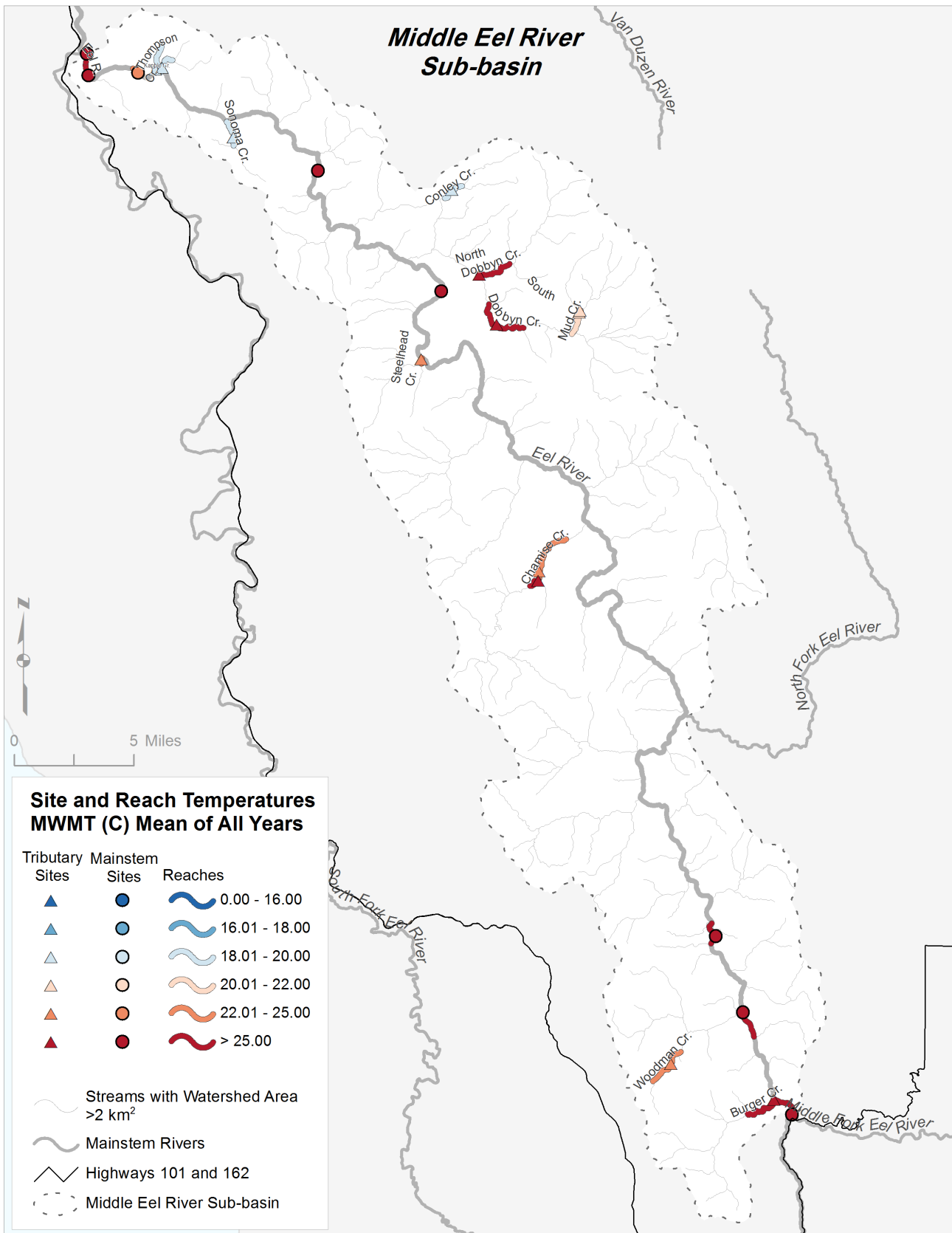


Figure 24. Map showing stream temperature monitoring sites in the Middle Eel River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

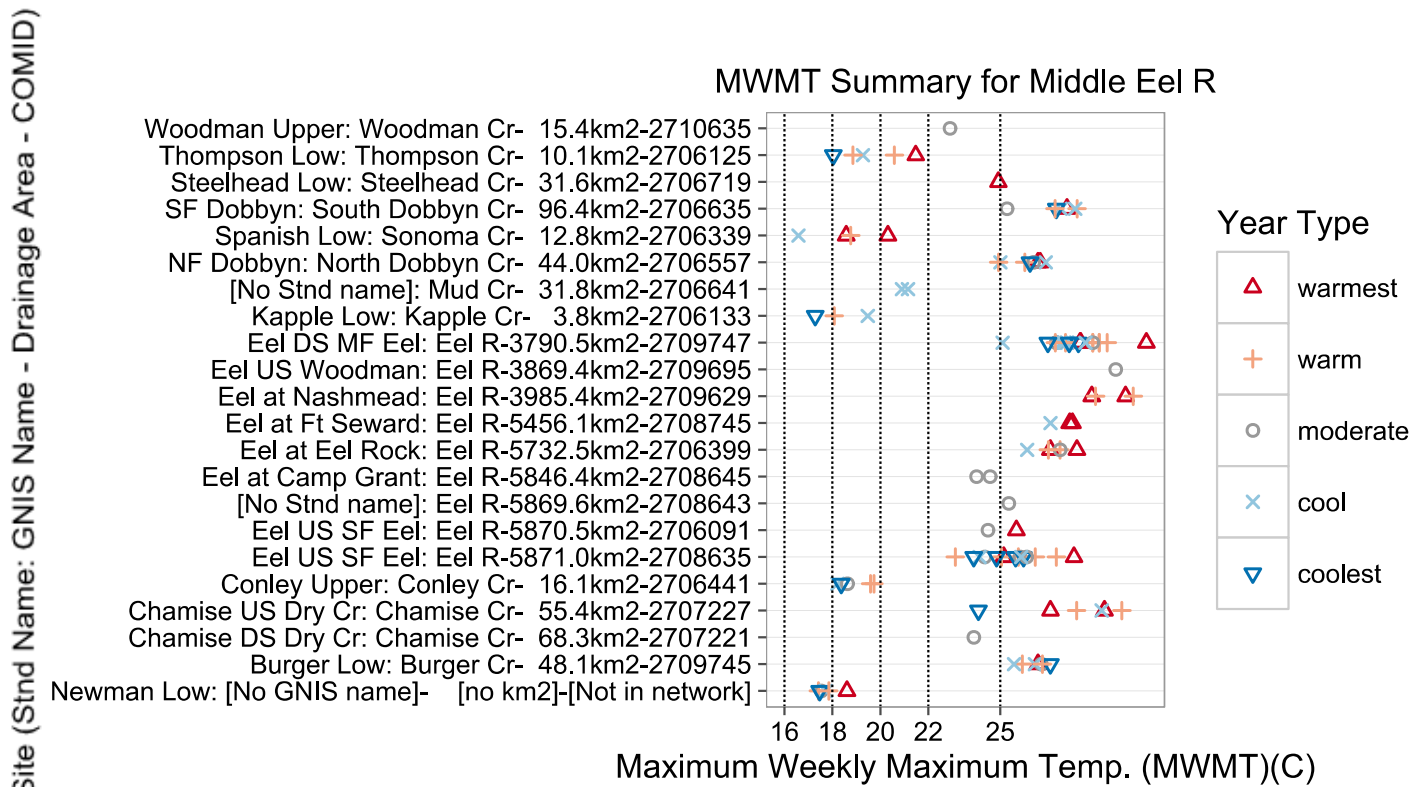


Figure 25. Site-level summary of stream temperatures measured within the Middle Eel River sub-basin. Each point is the MWMT for one year, site, and source entity (Part 1). Sites are grouped into rows by standardized name (Std Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

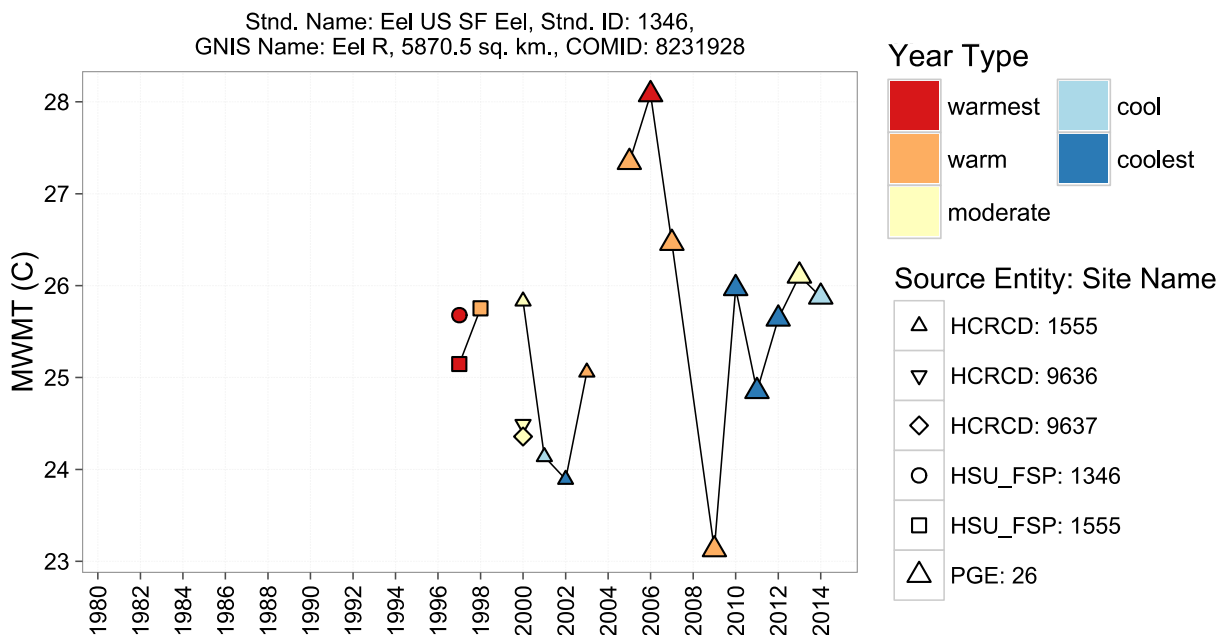


Figure 26. Time series of measured stream temperatures for standardized site 1346 at the Eel River upstream of the South Fork Eel River. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

Std. Name: Eel DS MF Eel, Std. ID: 1550,  
GNIS Name: Eel R, 3790.5 sq. km., COMID: 8231928

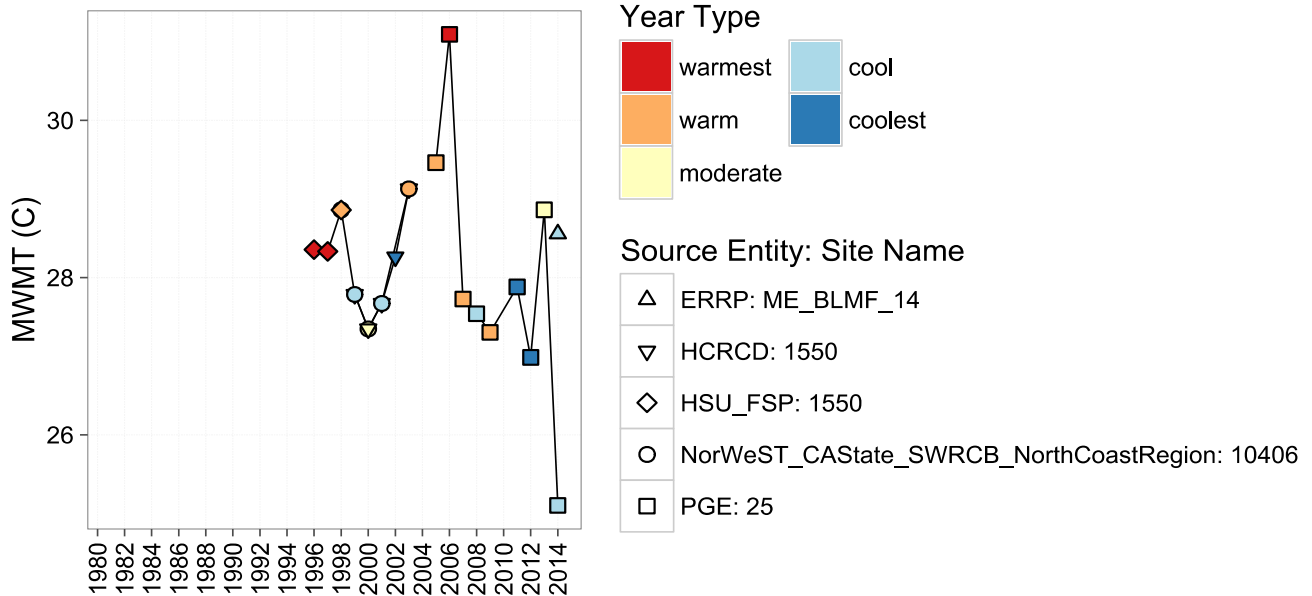


Figure 27. Time series of measured stream temperatures for standardized site 1550 at the Eel River downstream of the Middle Fork Eel River. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

### 3.4.1 UPPER EEL RIVER

The temperature regime of the upper mainstem Eel River is described above in section 3.3 of this report. Wide fluctuation and apparent increasing temperatures in lower Tomki Creek (Figure 38) and other sites within the basin show are likely reflective of decreasing flow, due in part to increasing water diversions. Streamflow accretions between the Van Arsdale and Fort Seward USGS gages<sup>31</sup> during summer had large declines for the period 1953-2014, as did most of the Eel River Basin (Asarian et al. 2015).

<sup>31</sup> Accretions were calculated as the streamflow of the downstream gage (e.g., Eel River at Fort Seward) minus to the streamflow of the upstream gage (e.g., Eel River at Van Arsdale) minus the streamflow at any other gaged tributaries (e.g., Middle Fork Eel River), which represents the net contributions of all tributaries, springs, and groundwater, minus any diversions.

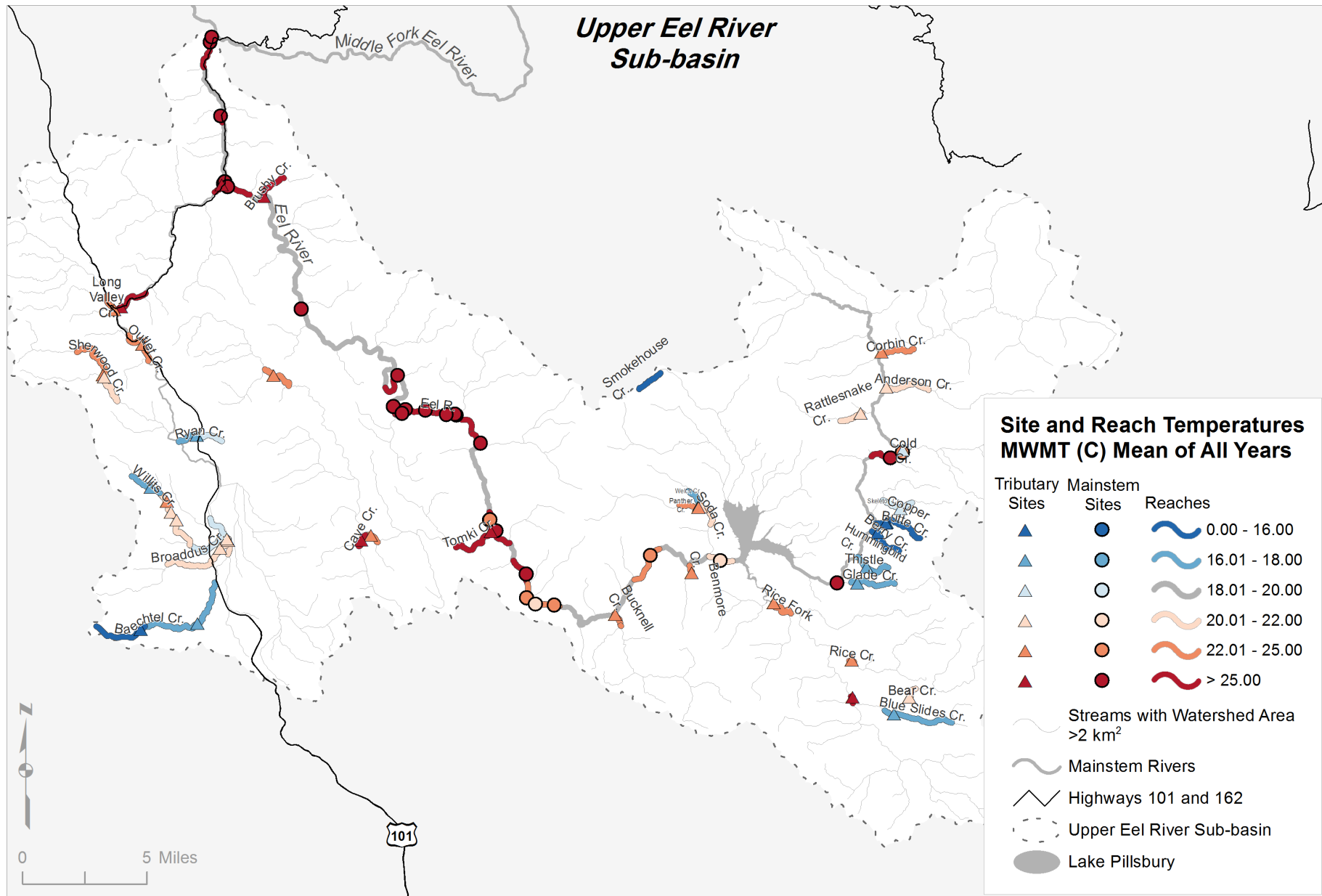


Figure 28. Map showing stream temperature monitoring sites in the Upper Eel River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).



## MWMT Summary for Upper Eel R (Mainstem Only)

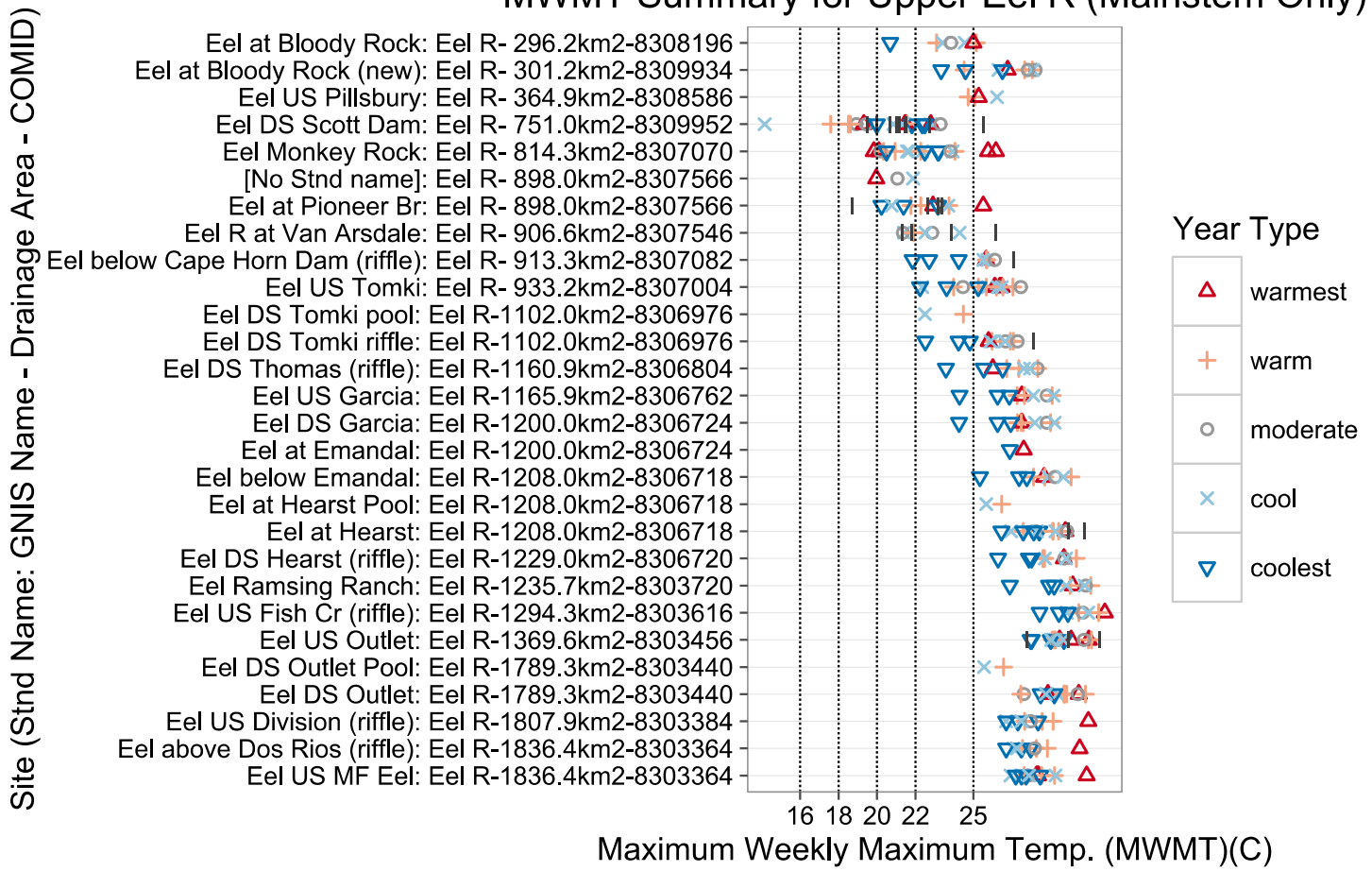


Figure 29. Site-level summary of stream temperatures measured at mainstem Eel River sites within the Upper Eel River sub-basin. Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Std Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details)(black is not shown in legend but indicates data from 1980-1993 when there were too few sites to determine year type). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

## MWMT Summary for Upper Eel R (Tributaries Only)

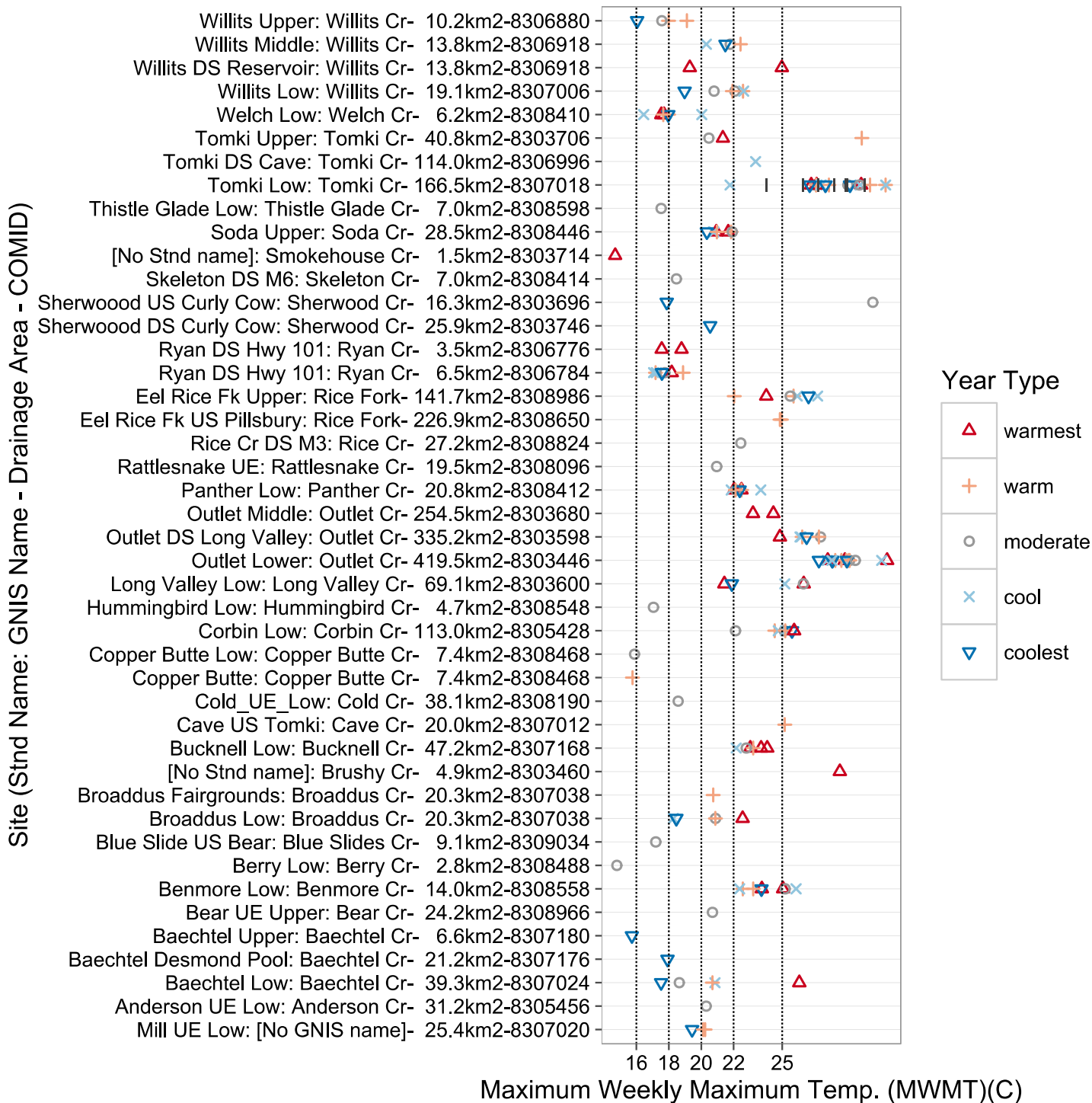


Figure 30. Site-level summary of stream temperatures measured at tributaries within the Upper Eel River sub-basin. Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details)(black is not shown in legend but indicates data from 1980-1993 when there was insufficient data to determine year type). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

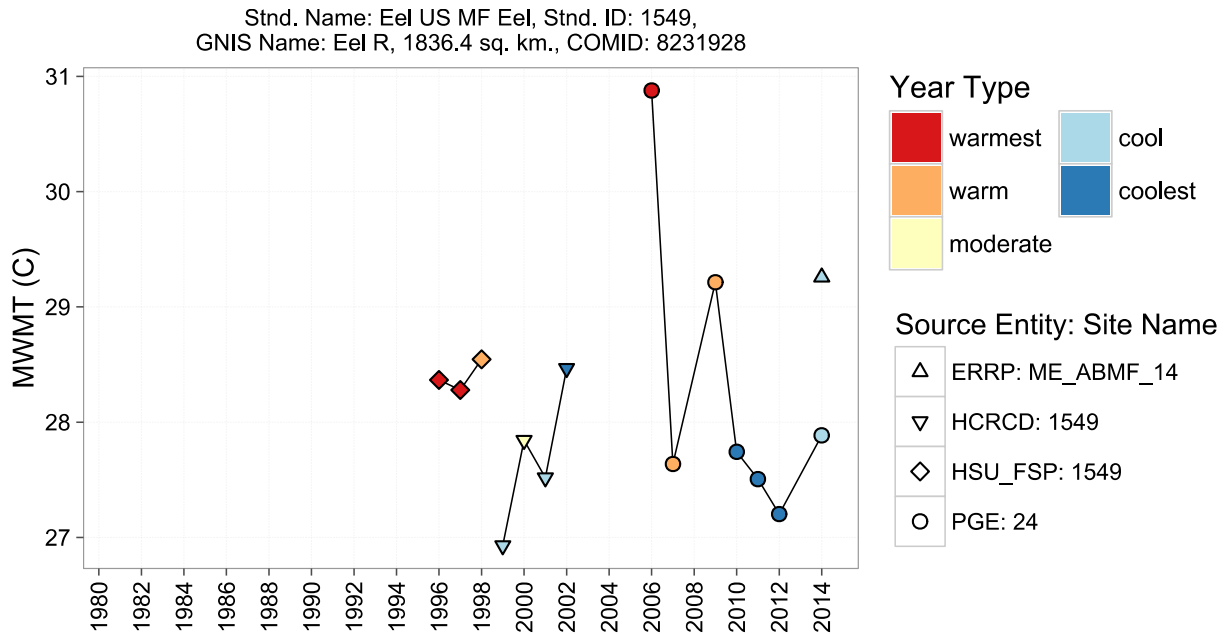


Figure 31. Time series of measured stream temperatures for standardized site 1549 at the Eel River upstream of the Middle Fork Eel River. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

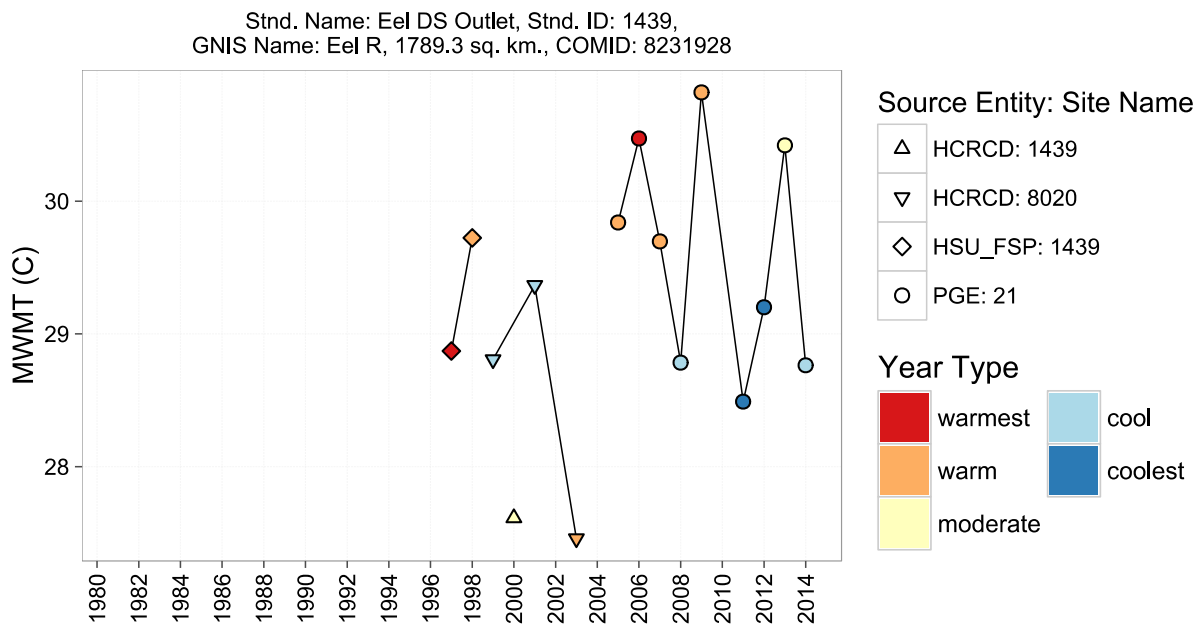


Figure 32. Time series of measured stream temperatures for standardized site 1439 at the Eel River downstream of the Outlet Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

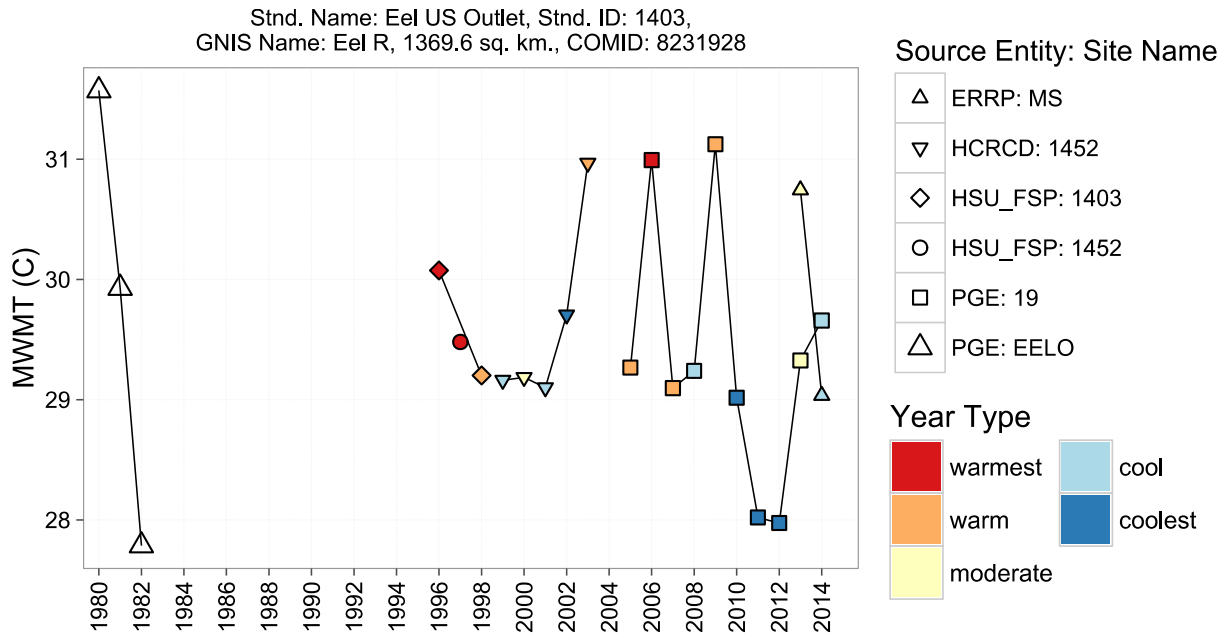


Figure 33. Time series of measured stream temperatures for standardized site 1403 at the Eel River upstream of the Outlet Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details) (prior to 1994 there were too few sites to determine year type).

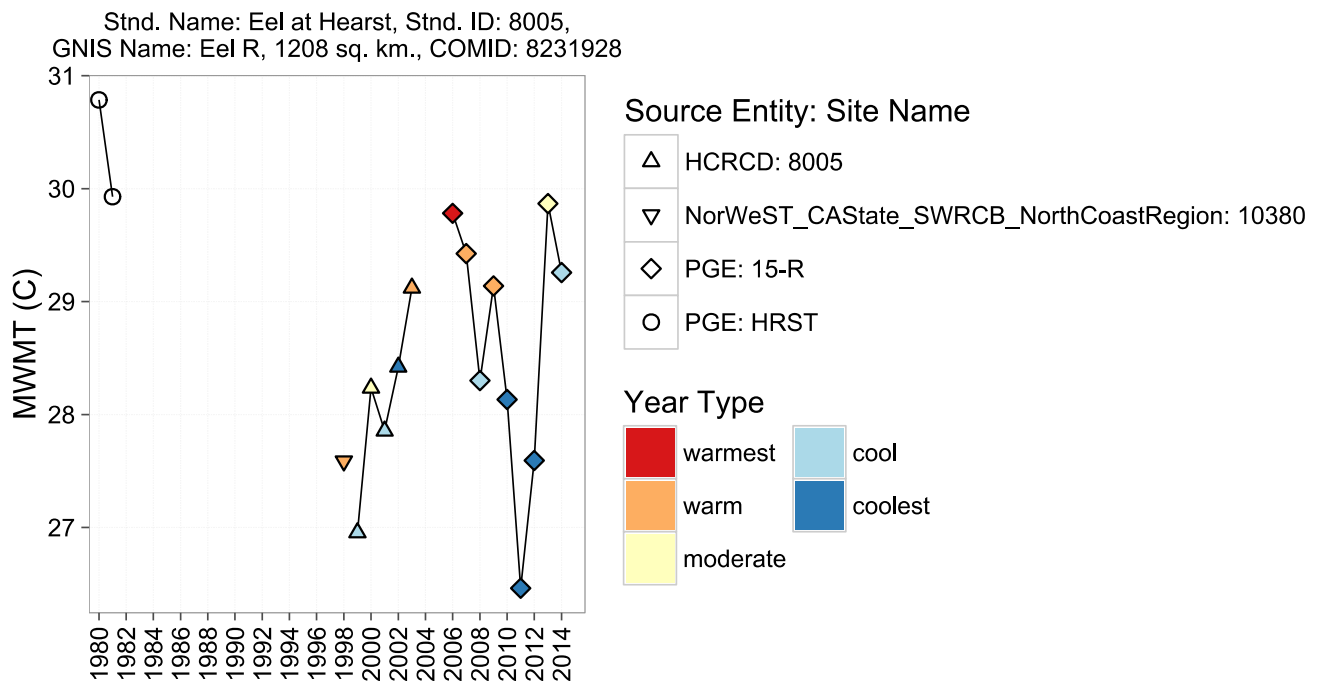


Figure 34. Time series of measured stream temperatures for standardized site 8005 at the Eel River at Hearst. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details) (prior to 1994 there were too few sites to determine year type).

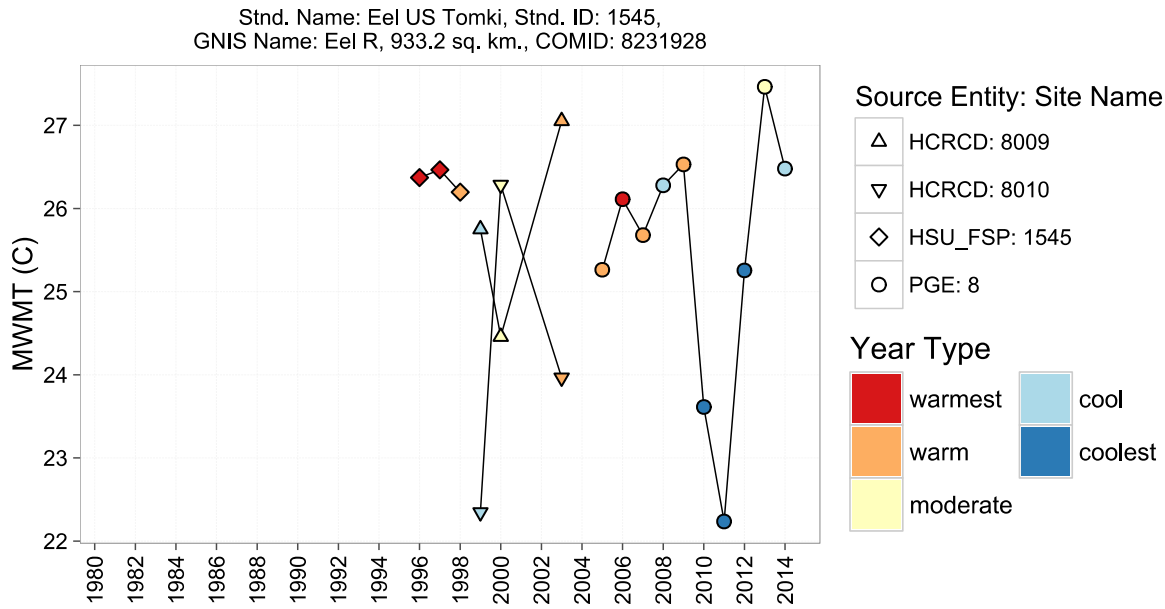


Figure 35. Time series of measured stream temperatures for standardized site 1545 at the Eel River upstream of Tomki Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

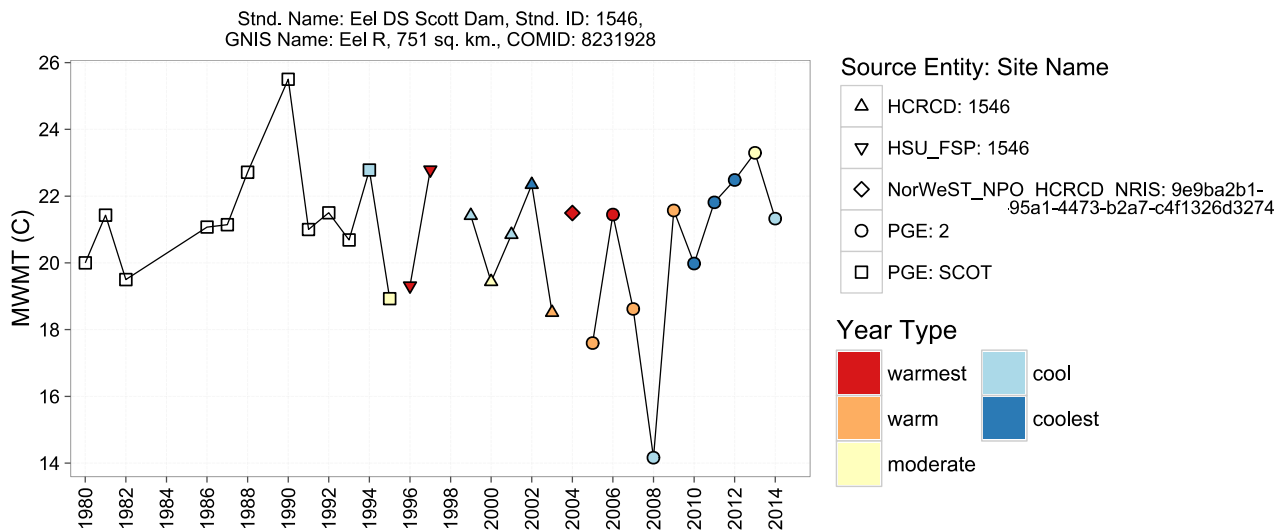


Figure 36. Time series of measured stream temperatures for standardized site 1546 at the Eel River below Scott Dam. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details) (prior to 1994 there were too few sites to determine year type).

Std. Name: Outlet Lower, Std. ID: 1602,  
GNIS Name: Outlet Cr, 419.5 sq. km., COMID: 8231928

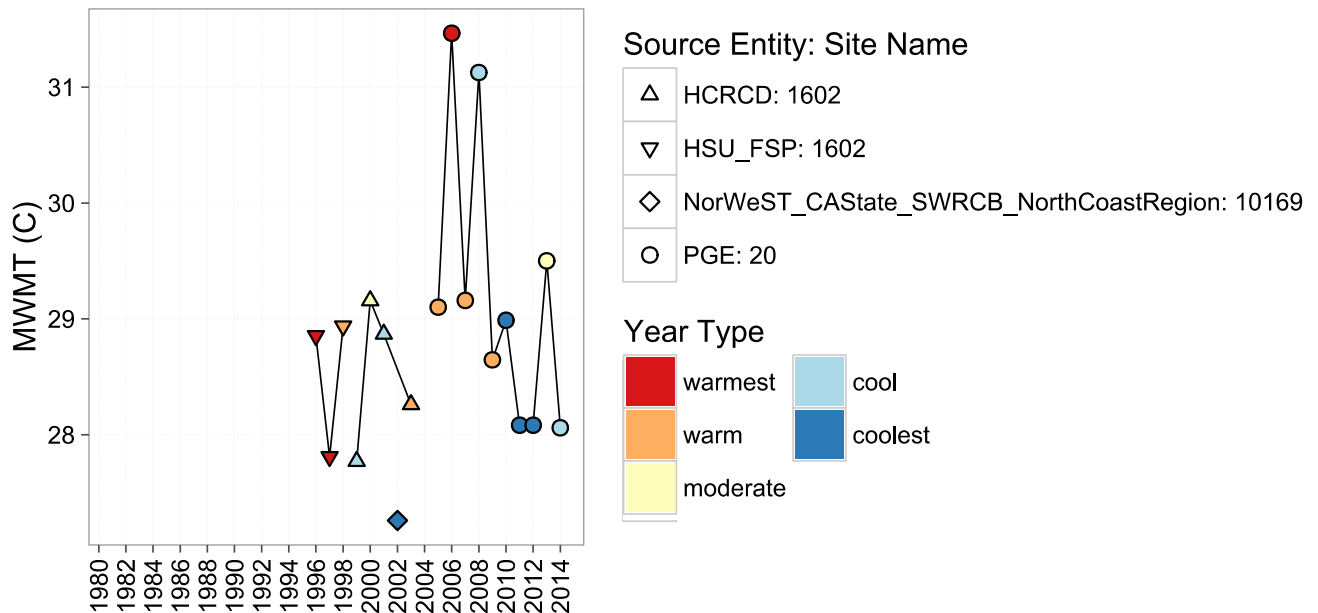


Figure 37. Time series of measured stream temperatures for standardized site 1602 at the mouth of Outlet Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWT according to year type (see section 3.2 for details).

Std. Name: Tomki Low, Std. ID: 1648,  
GNIS Name: Tomki Cr, 166.5 sq. km., COMID: 8231928

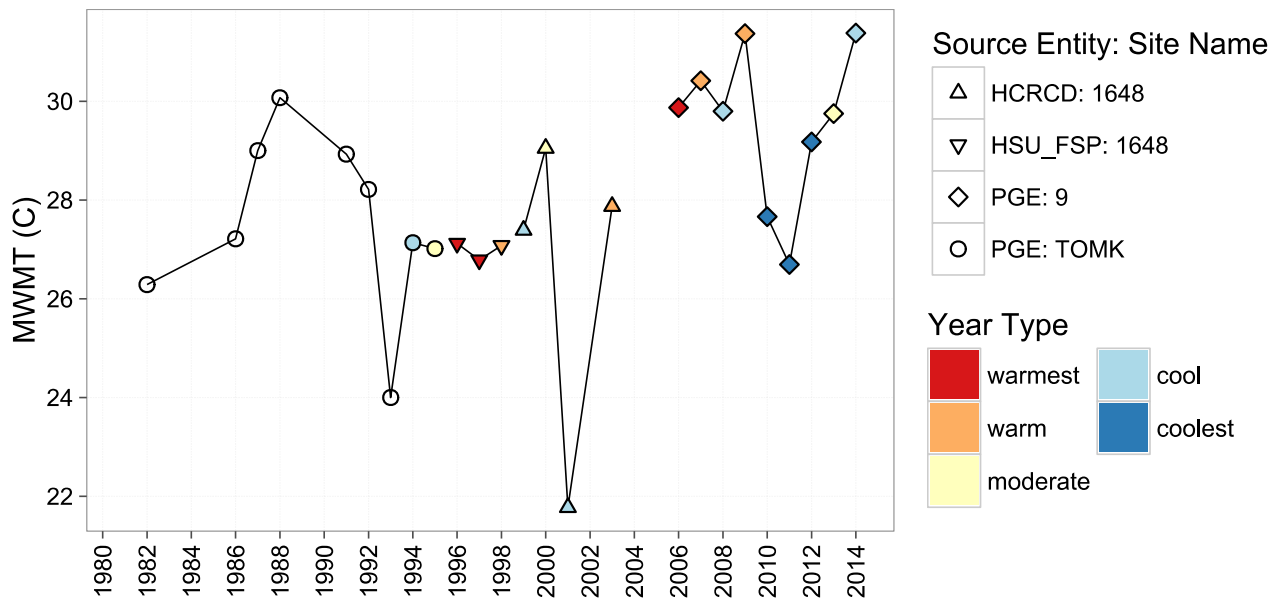


Figure 38. Time series of measured stream temperatures for standardized site 1648 at the mouth of Tomki Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWT according to year type (see section 3.2 for details) (prior to 1994 there were too few sites to determine year type).



3.4.1 VAN DUZEN RIVER

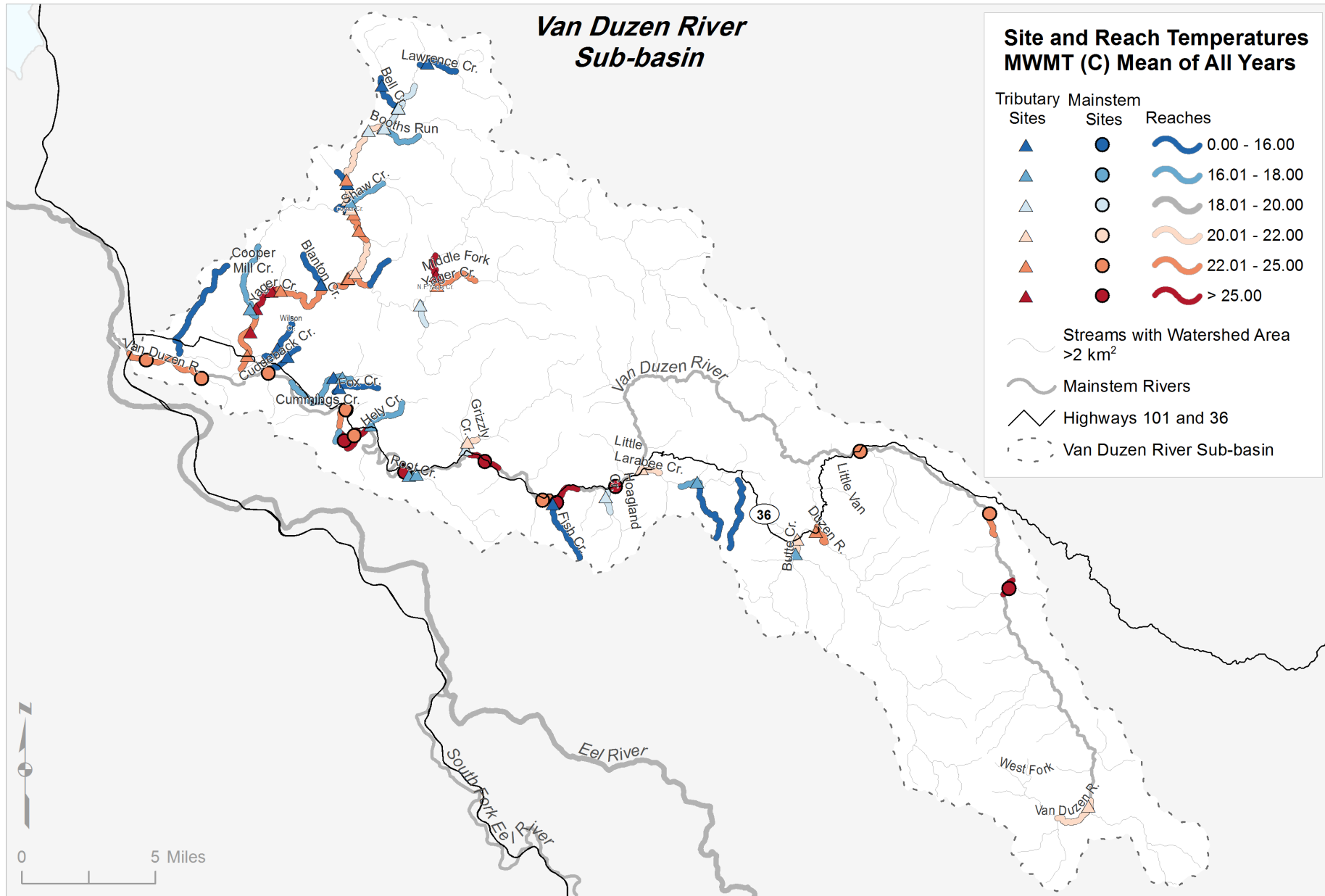


Figure 39. Map showing stream temperature monitoring sites in within the Van Duzen River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

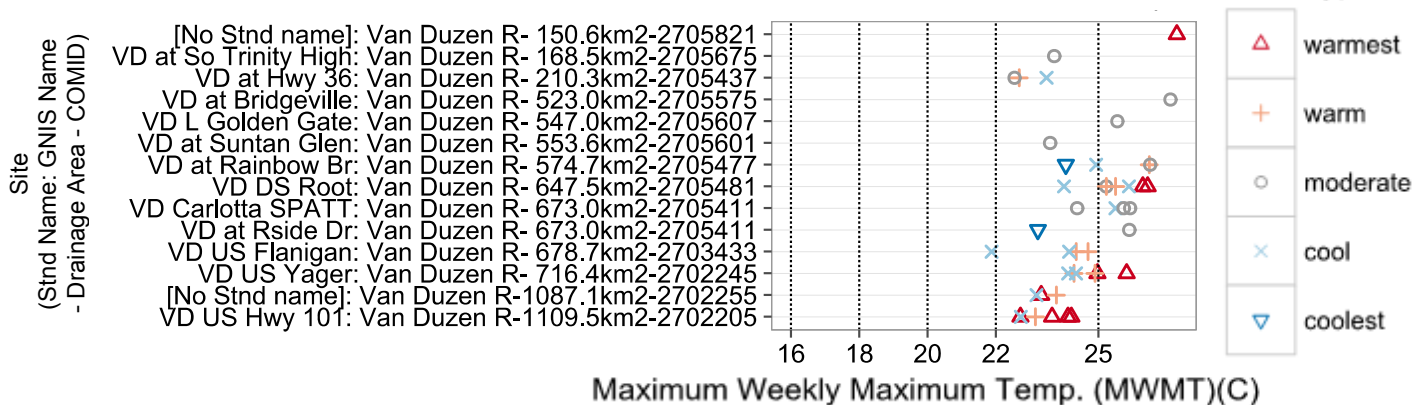


Figure 40. Site-level summary of stream temperatures measured at mainstem Van Duzen River sites within the Van Duzen River sub-basin. Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

## MWMT Summary for Van Duzen R (Tributaries Only)

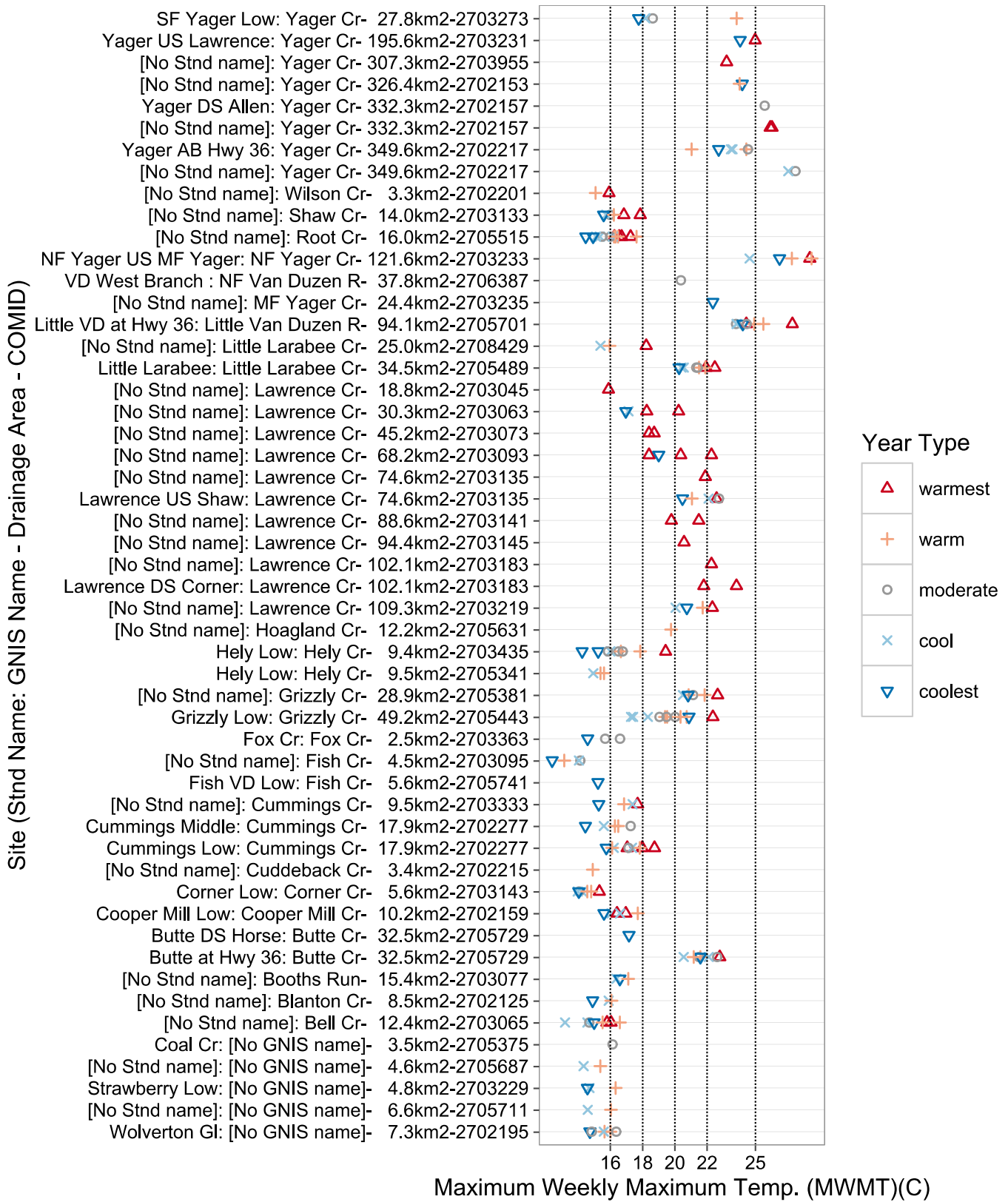


Figure 41. Site-level summary of stream temperatures measured at tributaries within the Van Duzen River sub-basin. Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

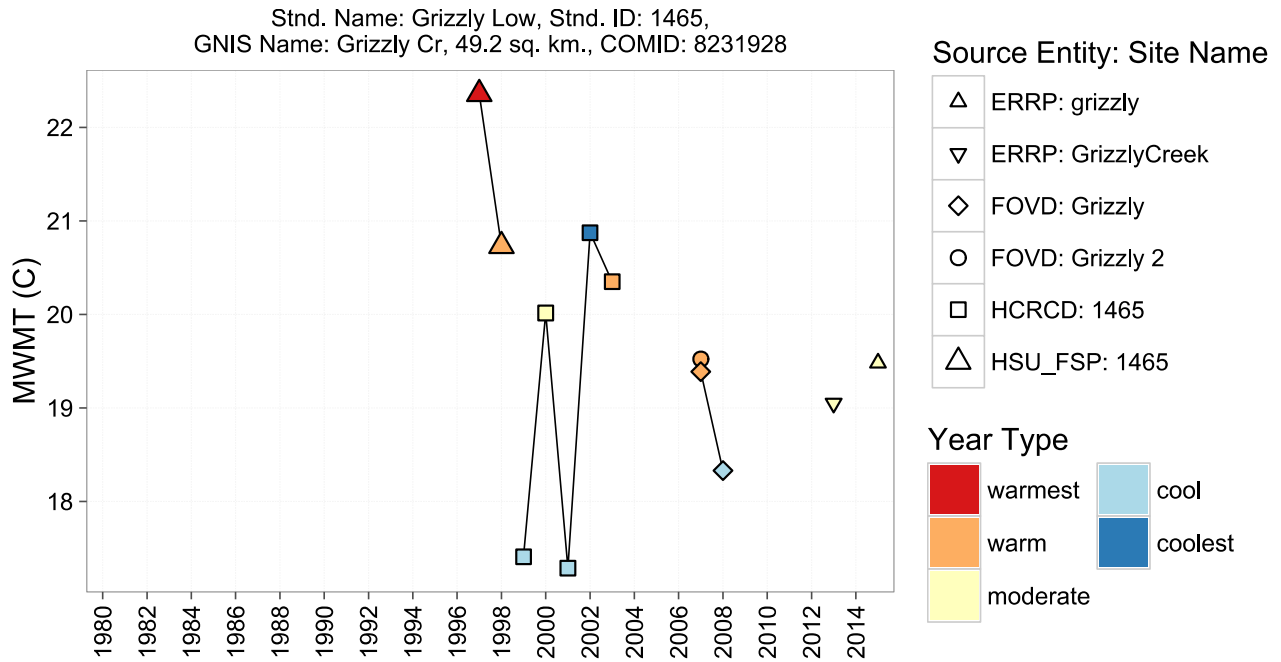


Figure 42. Time series of measured stream temperatures for standardized site 1465 at the mouth of Grizzly Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

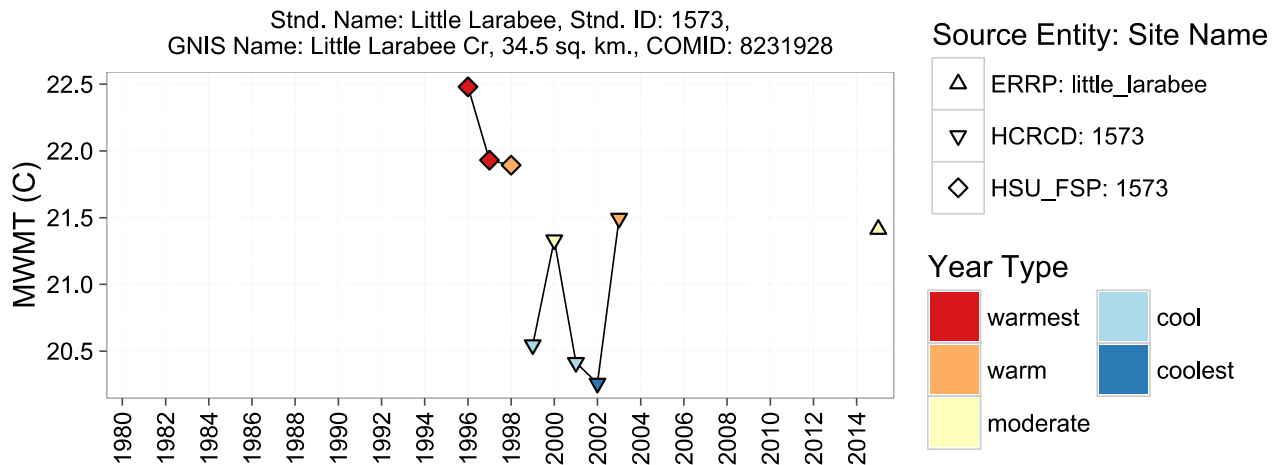


Figure 43. Time series of measured stream temperatures for standardized site 1573 at the mouth of Little Larabee Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

### 3.4.2 LOWER SOUTH FORK EEL RIVER

Temperatures in some streams in the Bull Creek watershed within Humboldt Redwoods State Park appear to have decreased in the past decade, including Cuneo Creek (Figure 47), North Fork Panther Creek (Figure 50), and the uppermost site on Bull Creek (Figure 51), presumably due to riparian vegetation recovering from prior disturbance.

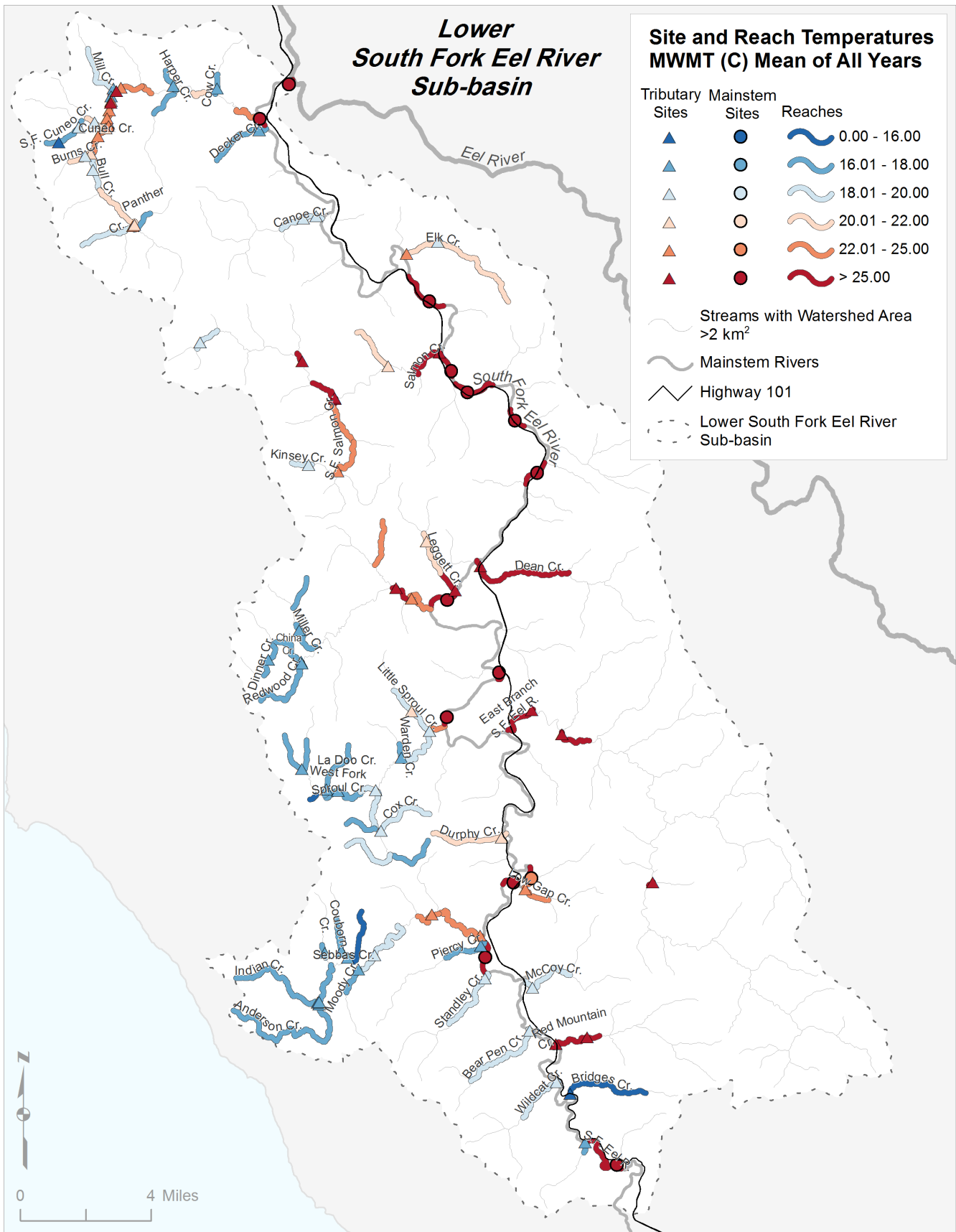


Figure 44. Map showing stream temperature monitoring sites in the Lower South Fork Eel River sub-basin. Sites and reaches are color-coded by mean MWT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

### MWMT Summary for Lower SF Eel R (Part 1)

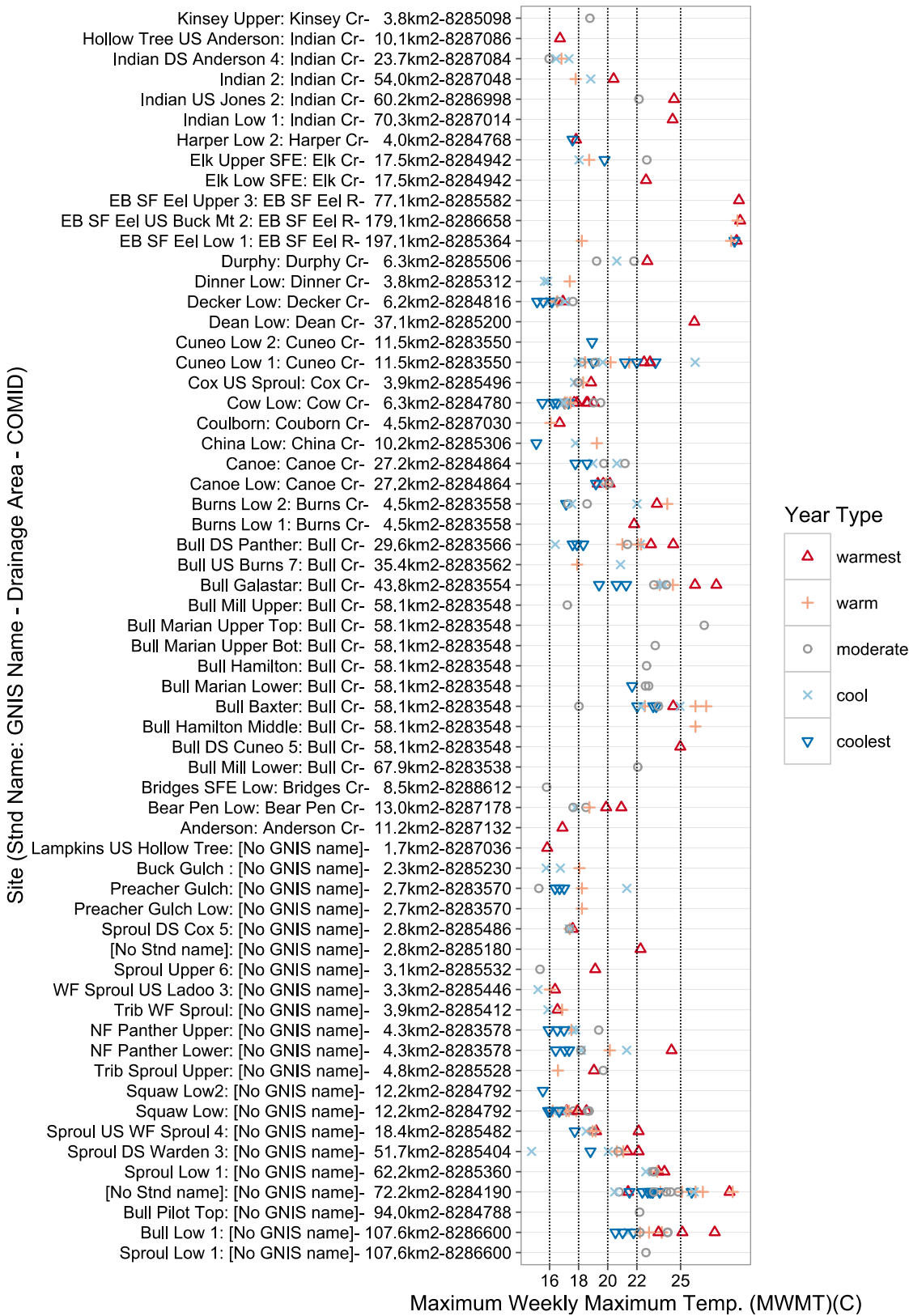


Figure 45. Site-level summary of stream temperatures measured within the Lower South Fork Eel River sub-basin (Part 1). Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Std Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.



## MWMT Summary for Lower SF Eel R (Part 2)

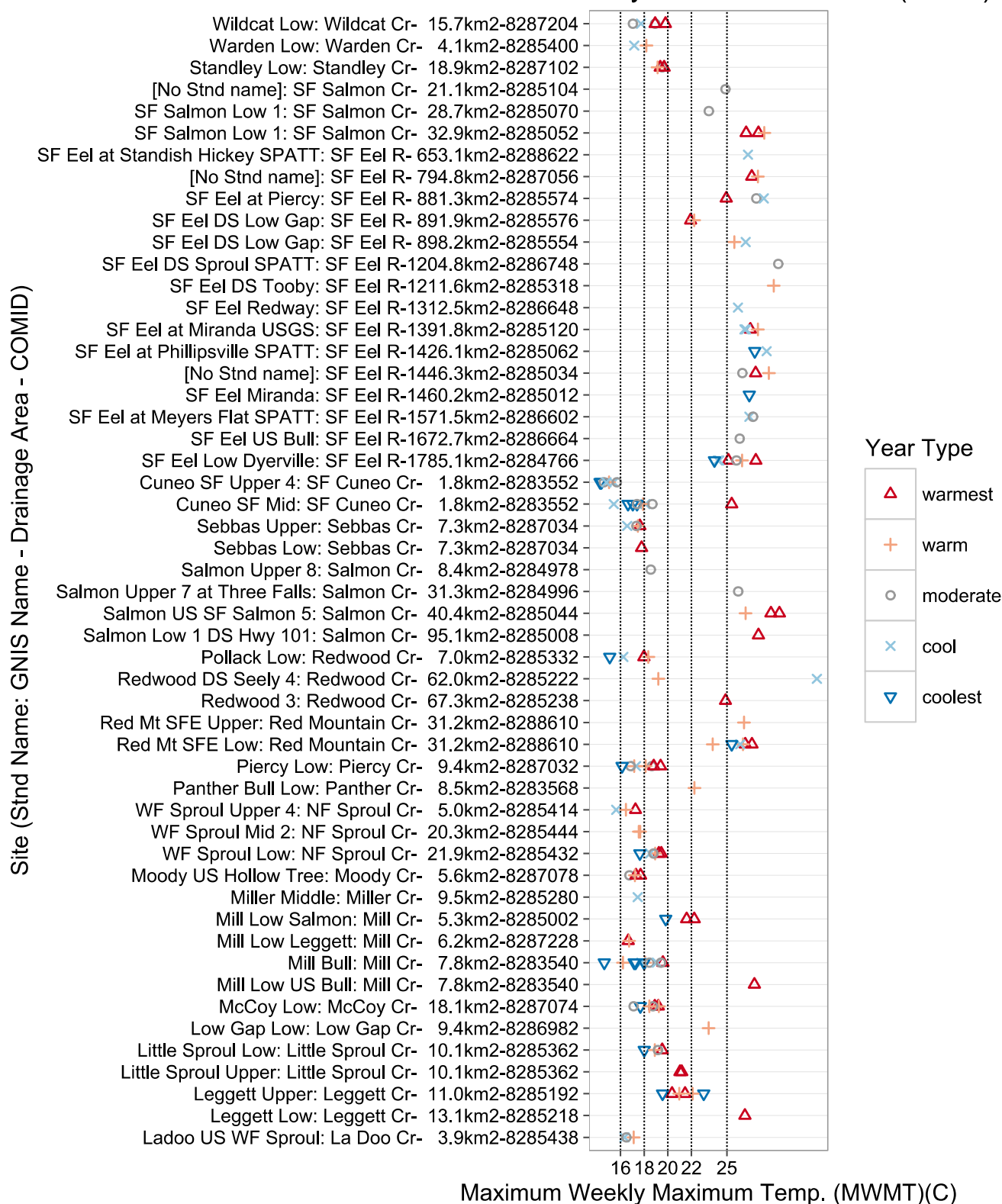


Figure 46. Site-level summary of stream temperatures measured within the Lower South Fork Eel River sub-basin (Part 2). Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

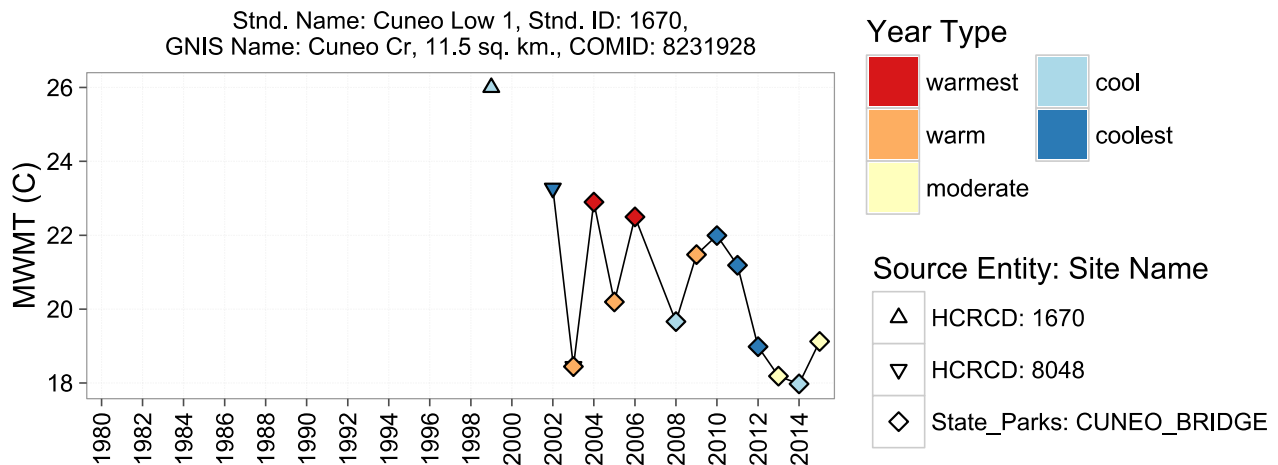


Figure 47. Time series of measured stream temperatures for standardized site 1670 at the mouth of Cuneo Creek (tributary to Bull Creek). Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWWMT according to year type (see section 3.2 for details).

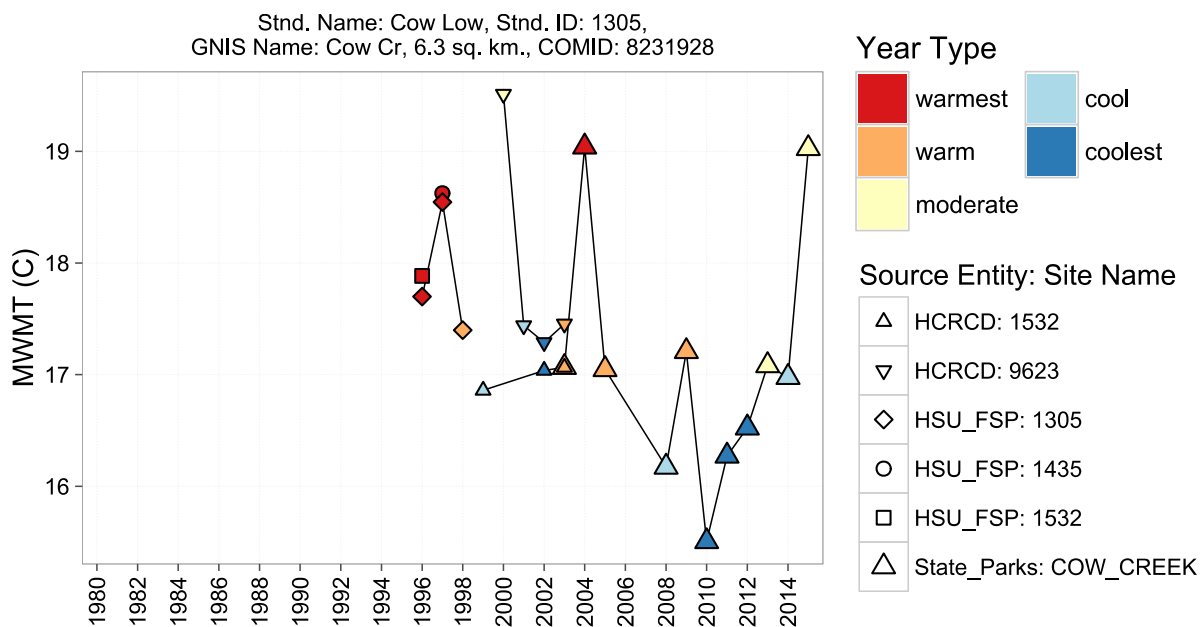


Figure 48. Time series of measured stream temperatures for standardized site 1305 at the lower Cow Creek (tributary to Bull Creek). Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWWMT according to year type (see section 3.2 for details).

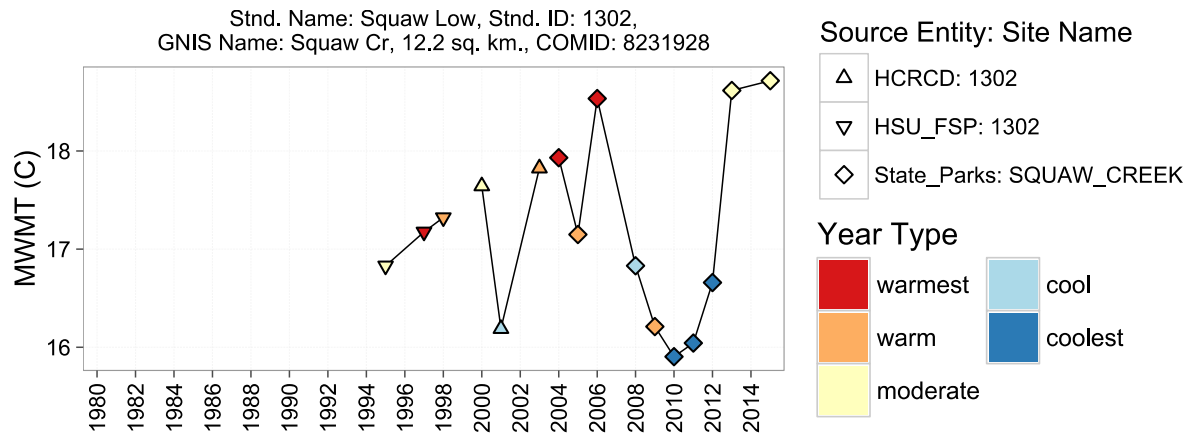


Figure 49. Time series of measured stream temperatures for standardized site 1302 at the lower Squaw Creek (tributary to Bull Creek). Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

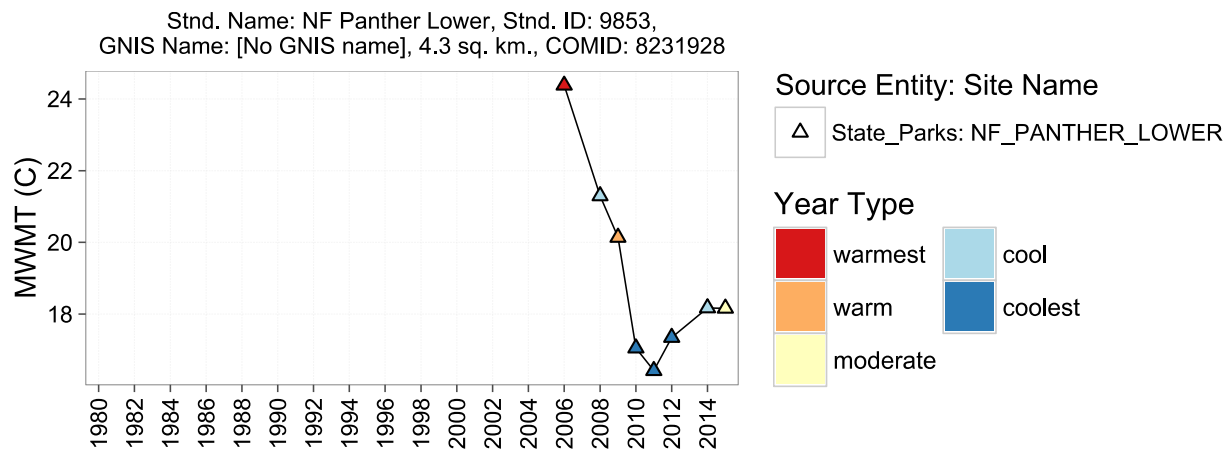


Figure 50. Time series of measured stream temperatures for standardized site 9853 at the lower North Fork Panther Creek (tributary to Bull Creek). Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

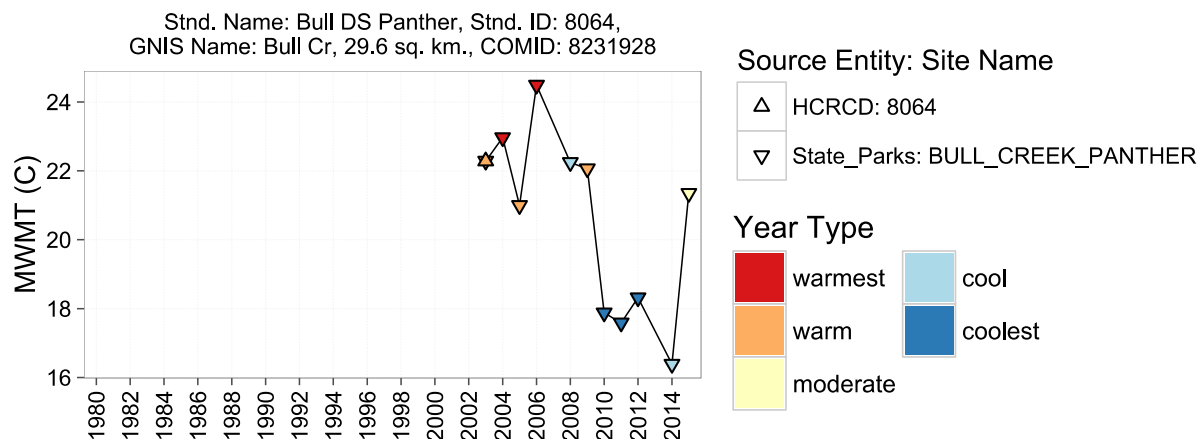


Figure 51. Time series of measured stream temperatures for standardized site 8064 at Bull Creek downstream of Panther Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

Std. Name: [No Std name], Std. ID: 1512,  
 GNIS Name: Bull Cr, 72.2 sq. km., COMID: 8231928

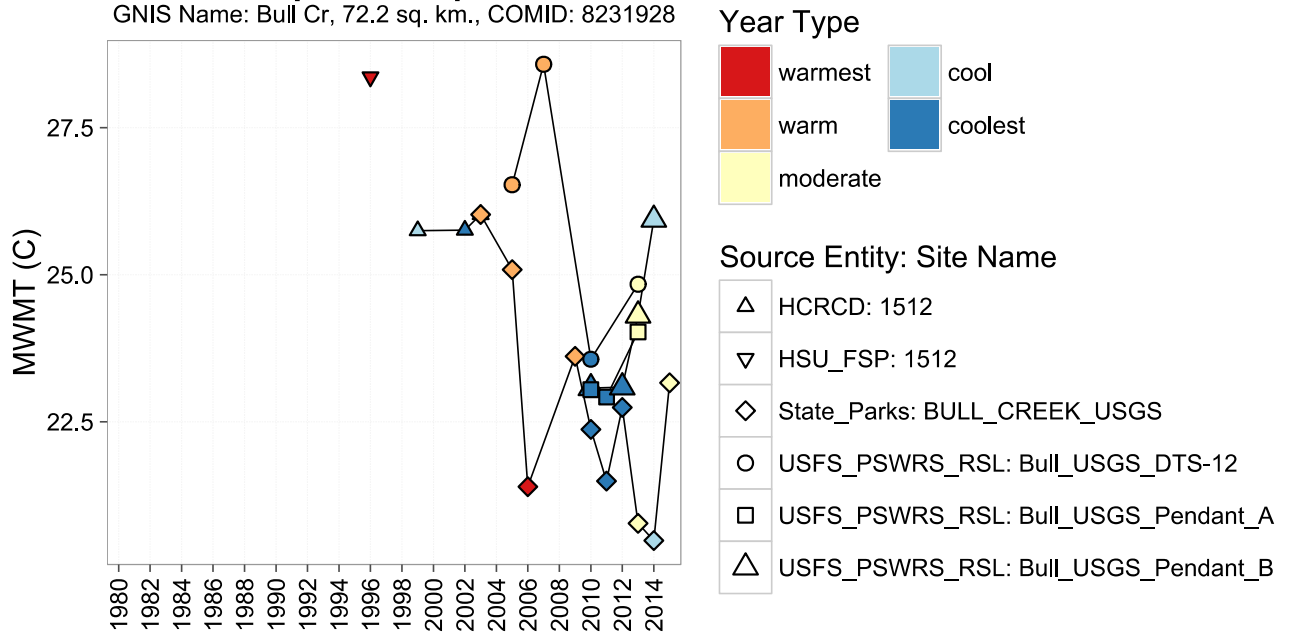


Figure 52. Time series of measured stream temperatures for standardized site 1512 at Bull Creek at the USGS gage. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWWMT according to year type (see section 3.2 for details).

3.4.1 UPPER SOUTH FORK EEL RIVER

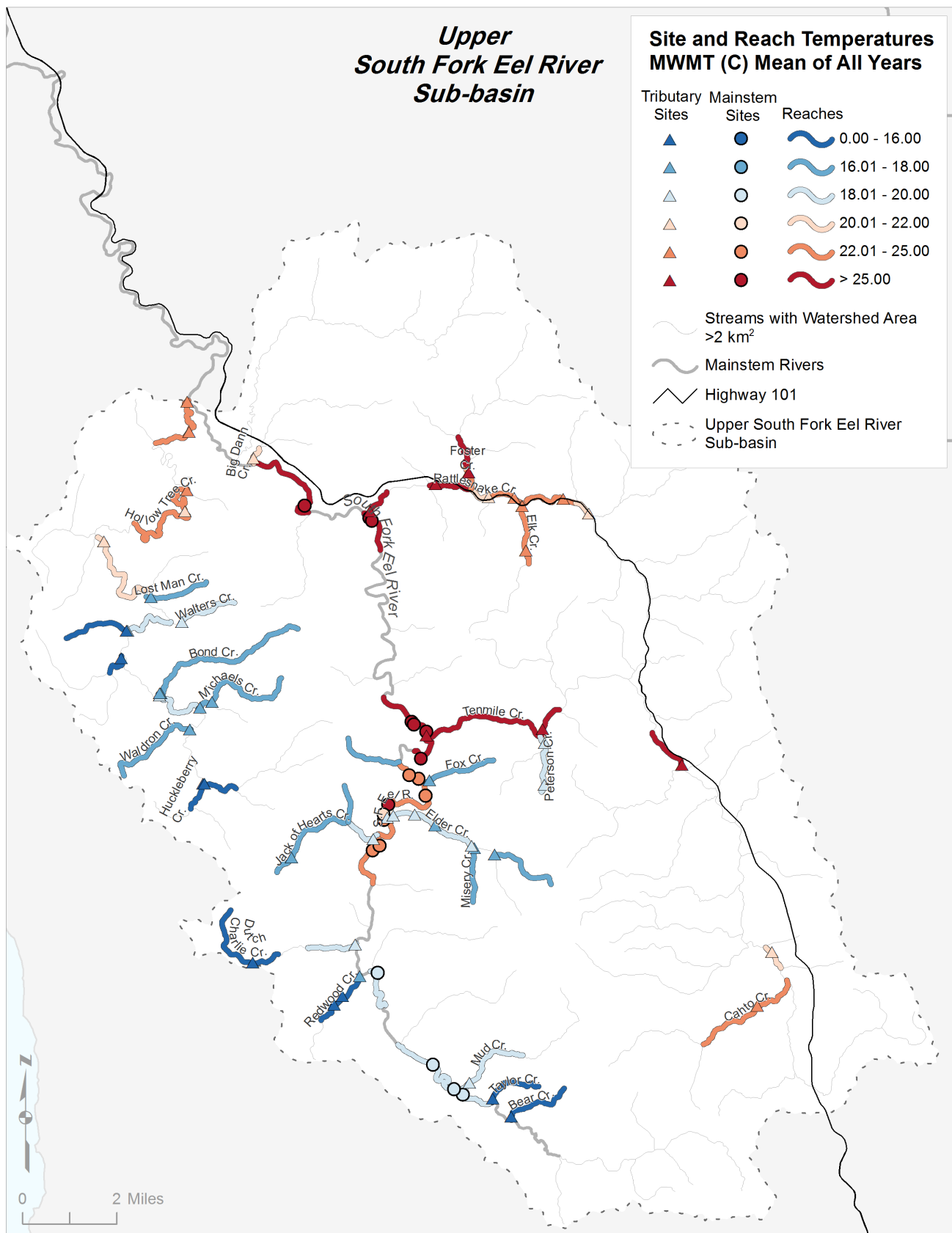


Figure 53. Map showing stream temperature monitoring sites in the Upper South Fork Eel River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

## MWMT Summary for Upper SF Eel R (Part 1)

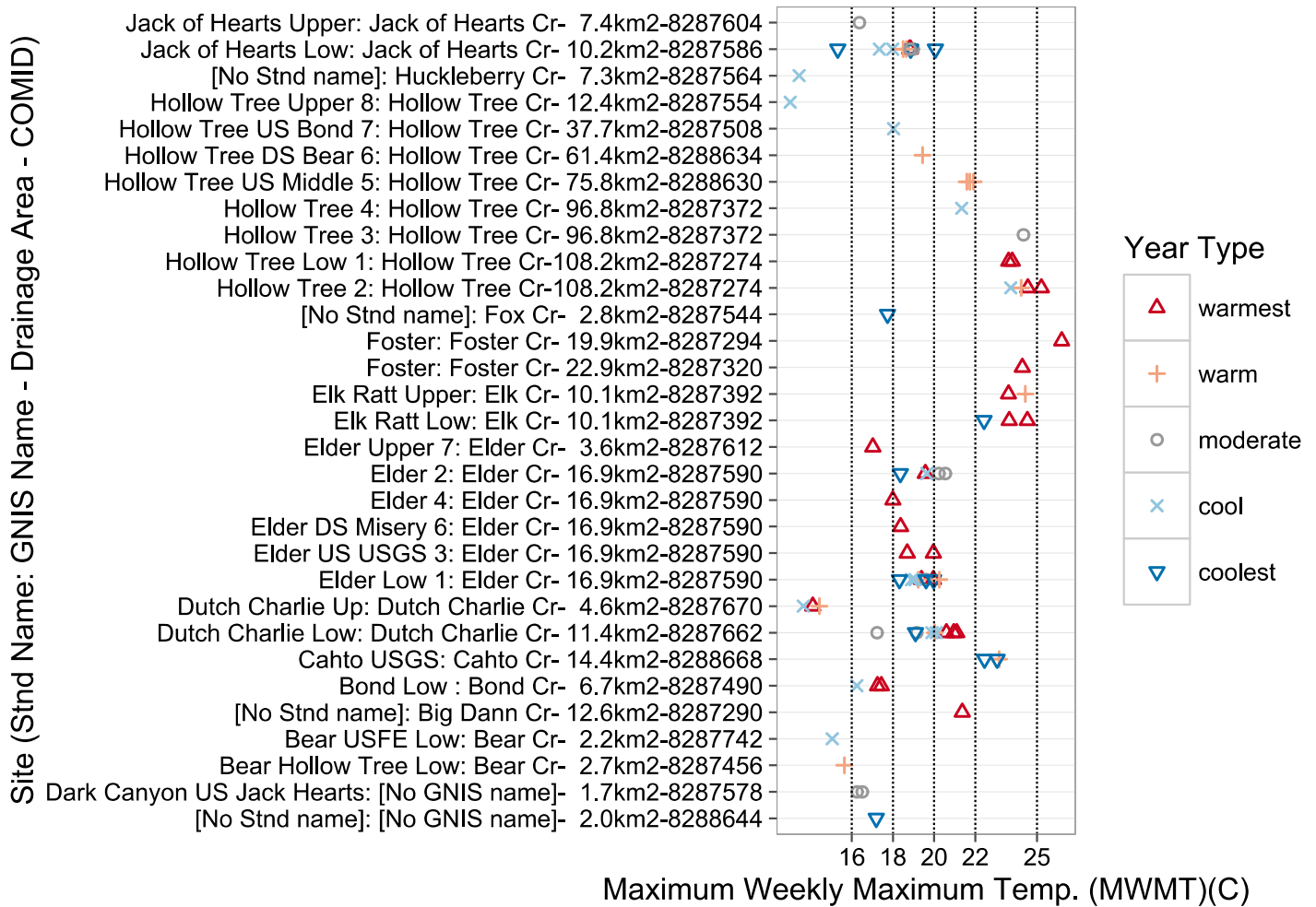


Figure 54. Site-level summary of stream temperatures measured within the Lower South Fork Eel River sub-basin (Part 1). Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.



## MWMT Summary for Upper SF Eel R (Part 2)

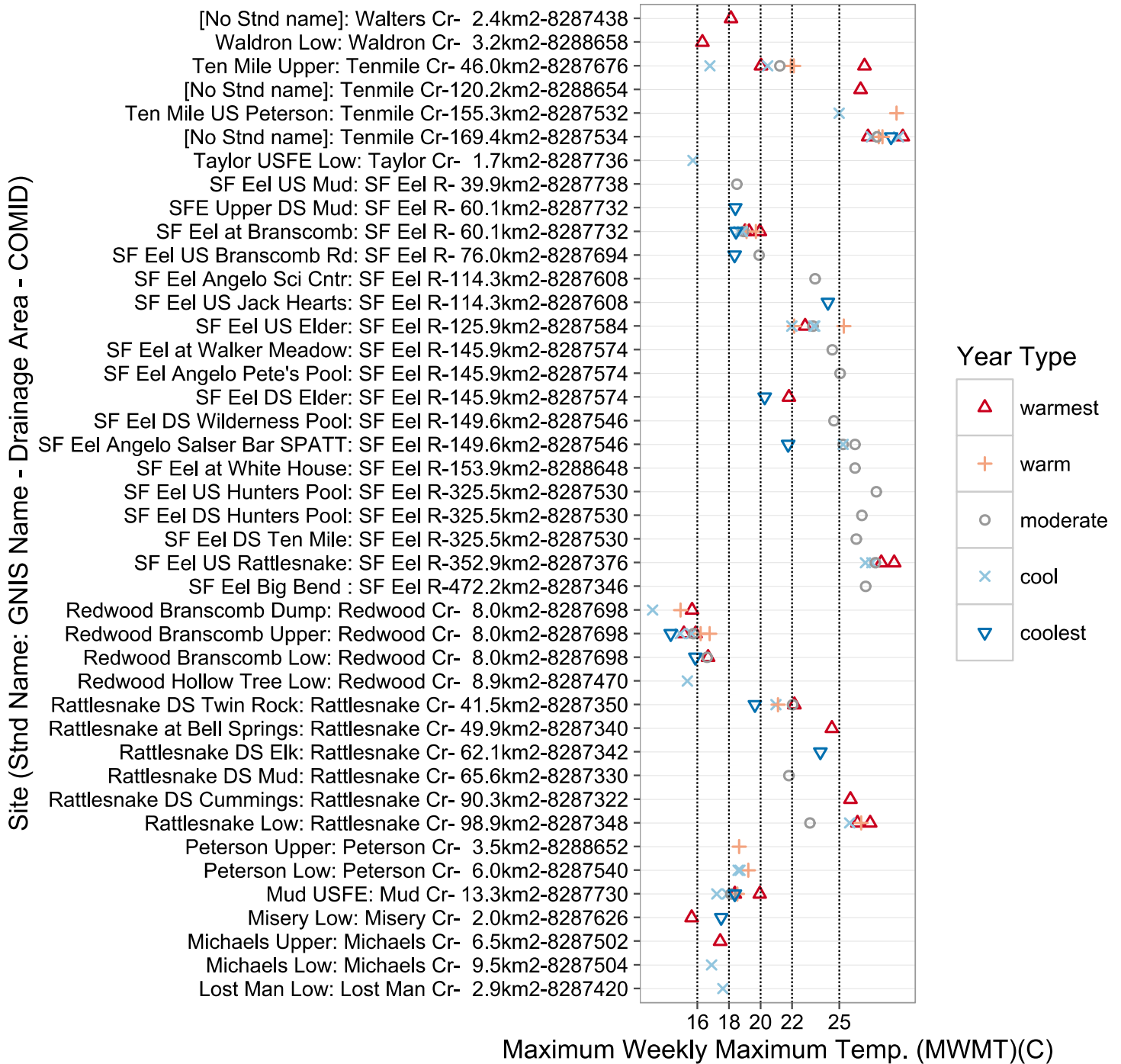


Figure 55. Site-level summary of stream temperatures measured within the Upper South Fork Eel River sub-basin (Part 2). Each point is the MWMT for one year, site, and source entity. Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

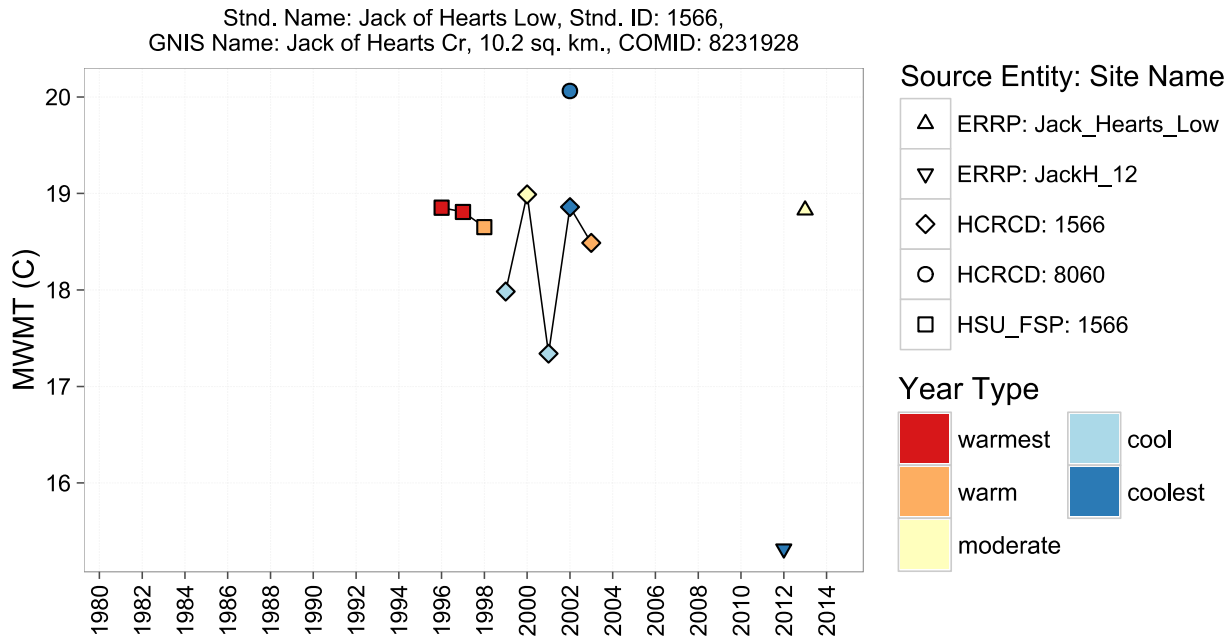


Figure 56. Time series of measured stream temperatures for standardized site 1566 at the mouth of Jack of Hearts Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

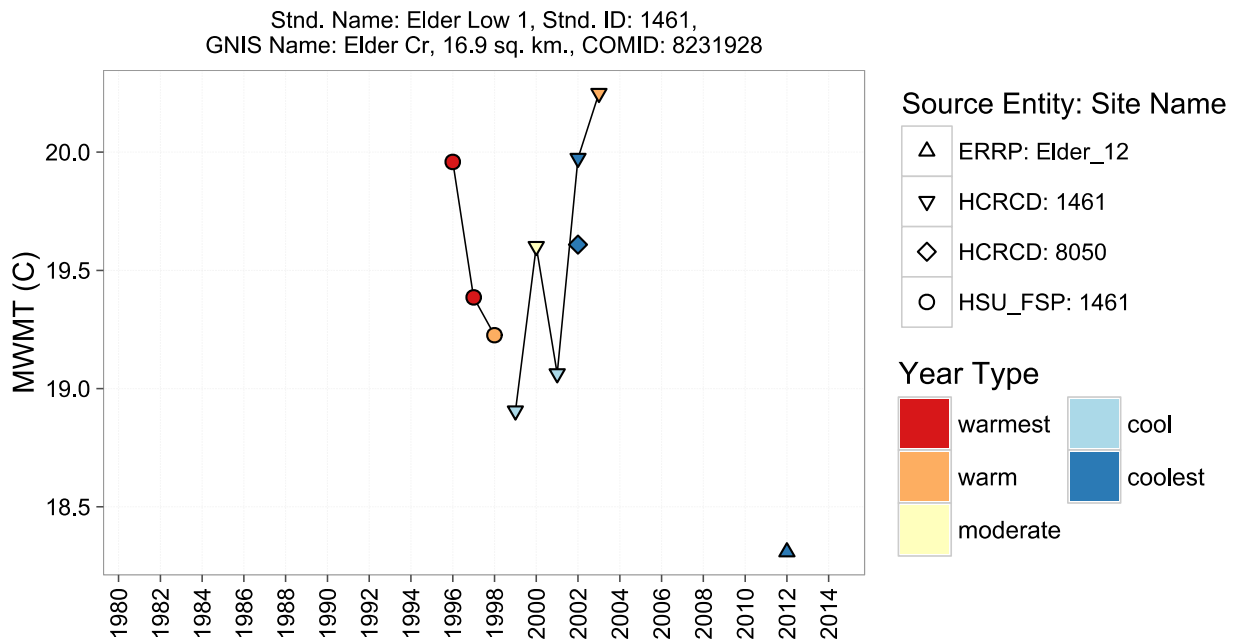


Figure 57. Time series of measured stream temperatures for standardized site 1461 at the mouth of Elder Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

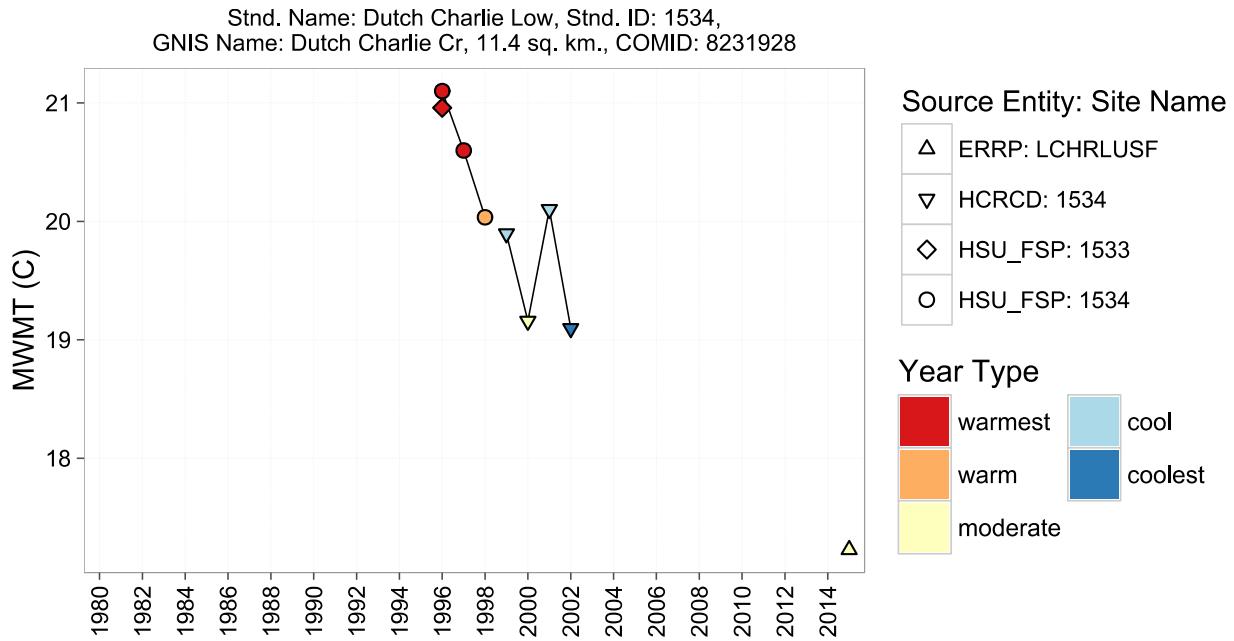


Figure 58. Time series of measured stream temperatures for standardized site 1534 at the mouth of Dutch Charlie Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWWMT according to year type (see section 3.2 for details).

3.4.1 MIDDLE FORK EEL RIVER

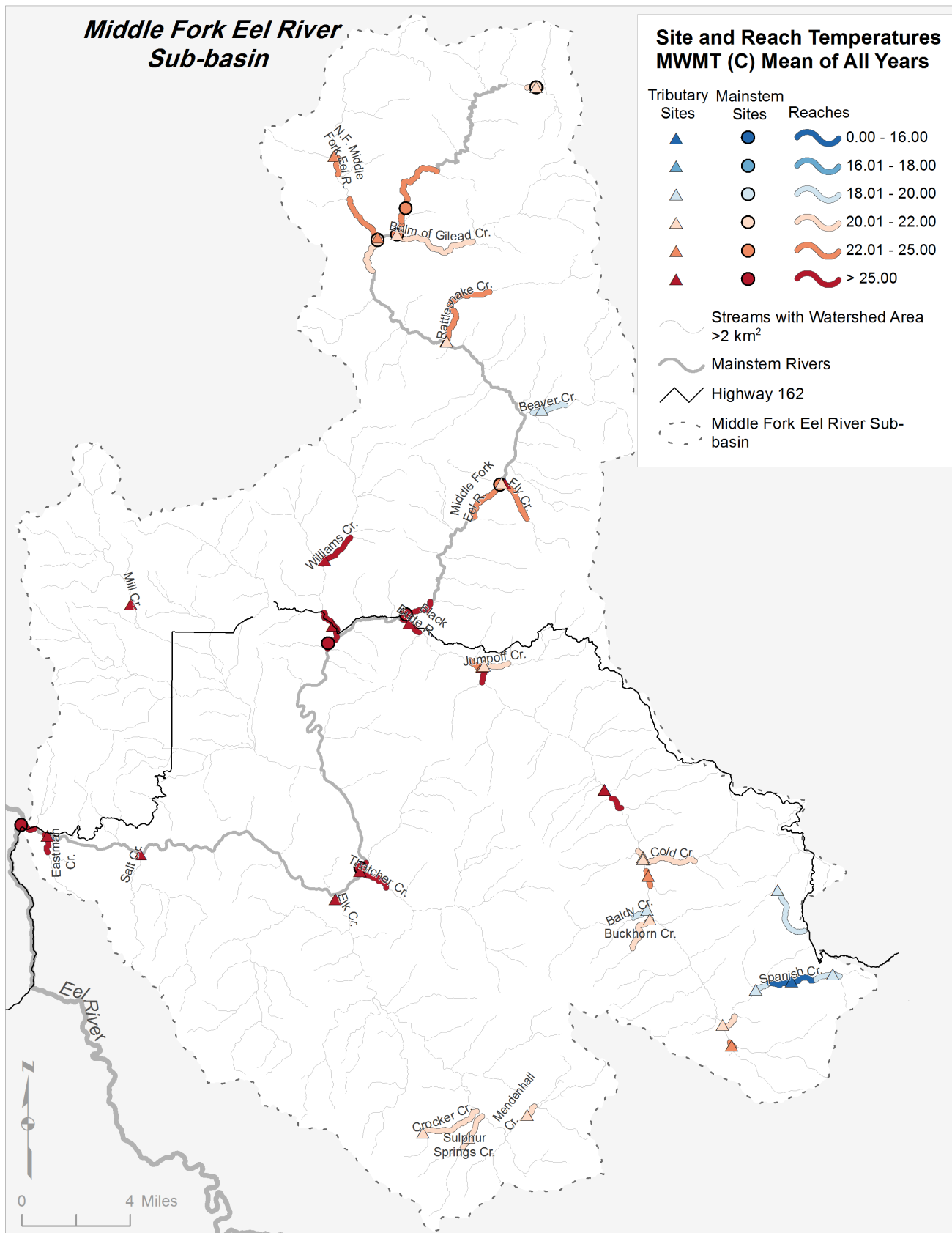


Figure 59. Map showing stream temperature monitoring sites in the Lower South Fork Eel River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

### MWMT Summary for Middle Fork Eel R

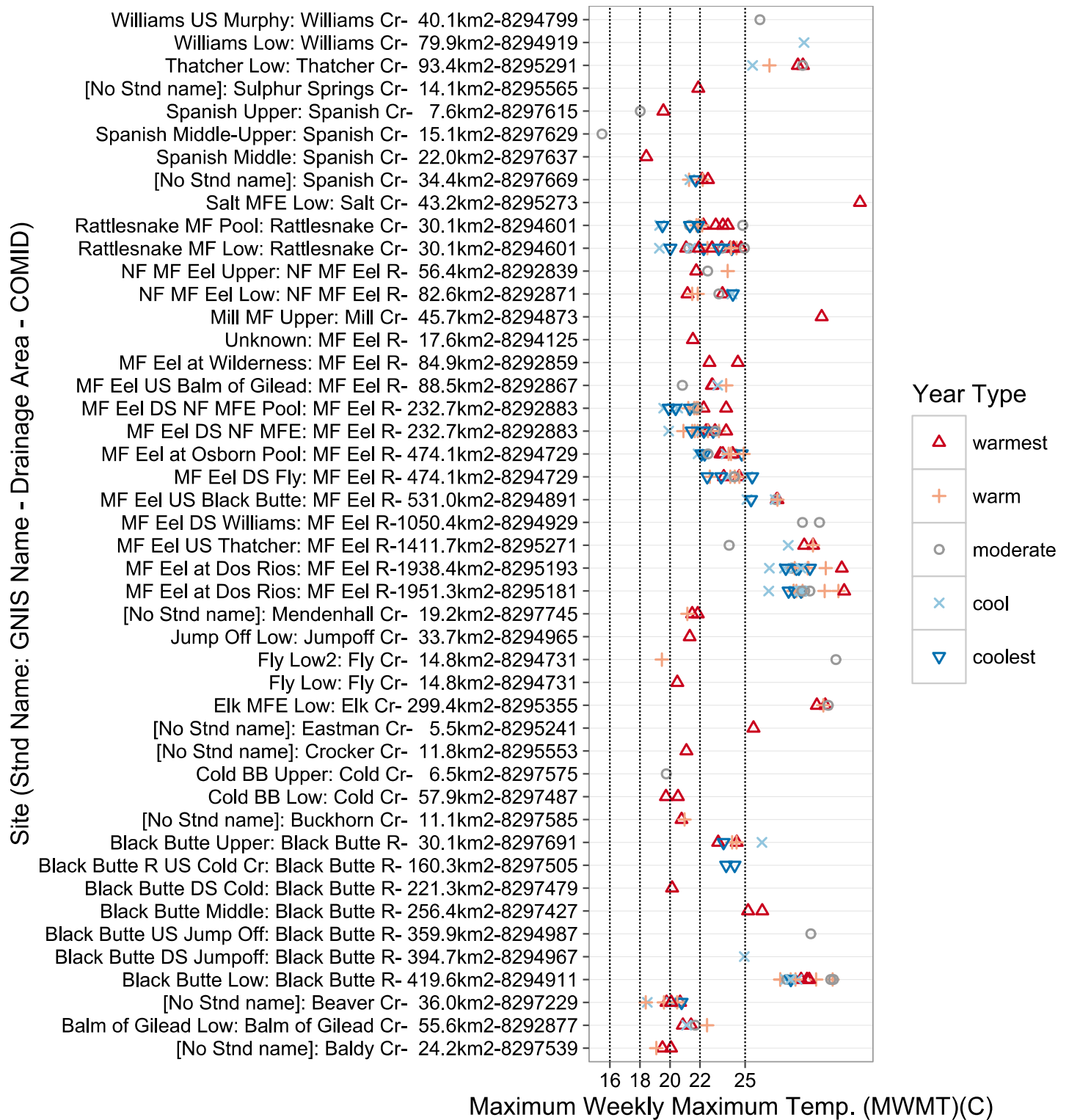


Figure 60. Site-level summary of stream temperatures measured within the Middle Fork Eel River sub-basin. Each point is the MWMT for one year, site, and source entity (Part 1). Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

Std. Name: MF Eel at Dos Rios, Std. ID: 1678,  
GNIS Name: MF Eel R, 1951.3 sq. km., COMID: 8231928

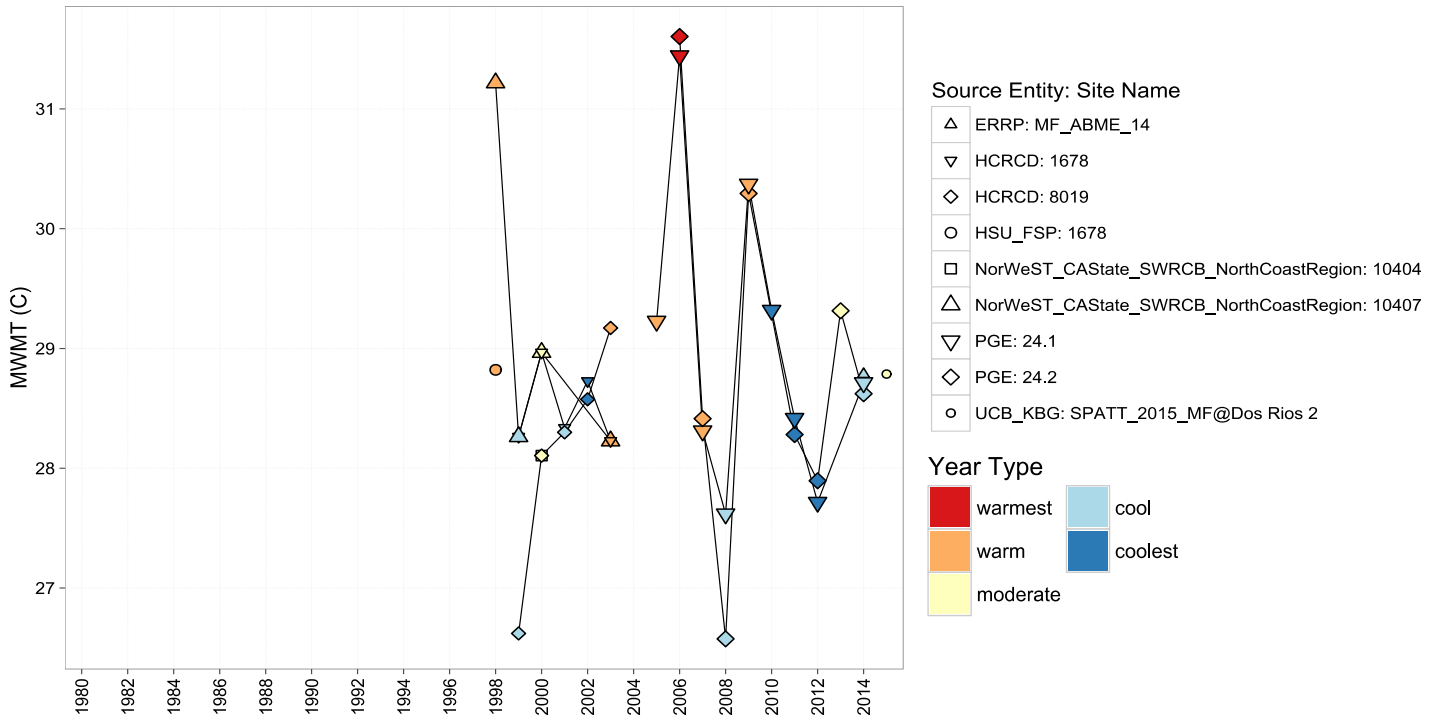


Figure 61. Time series of measured stream temperatures for standardized site 1678 at the mouth of the Middle Fork Eel River. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMt according to year type (see section 3.2 for details).

Std. Name: MF Eel DS NF MFE, Std. ID: 1582,  
GNIS Name: MF Eel R, 232.7 sq. km., COMID: 8231928

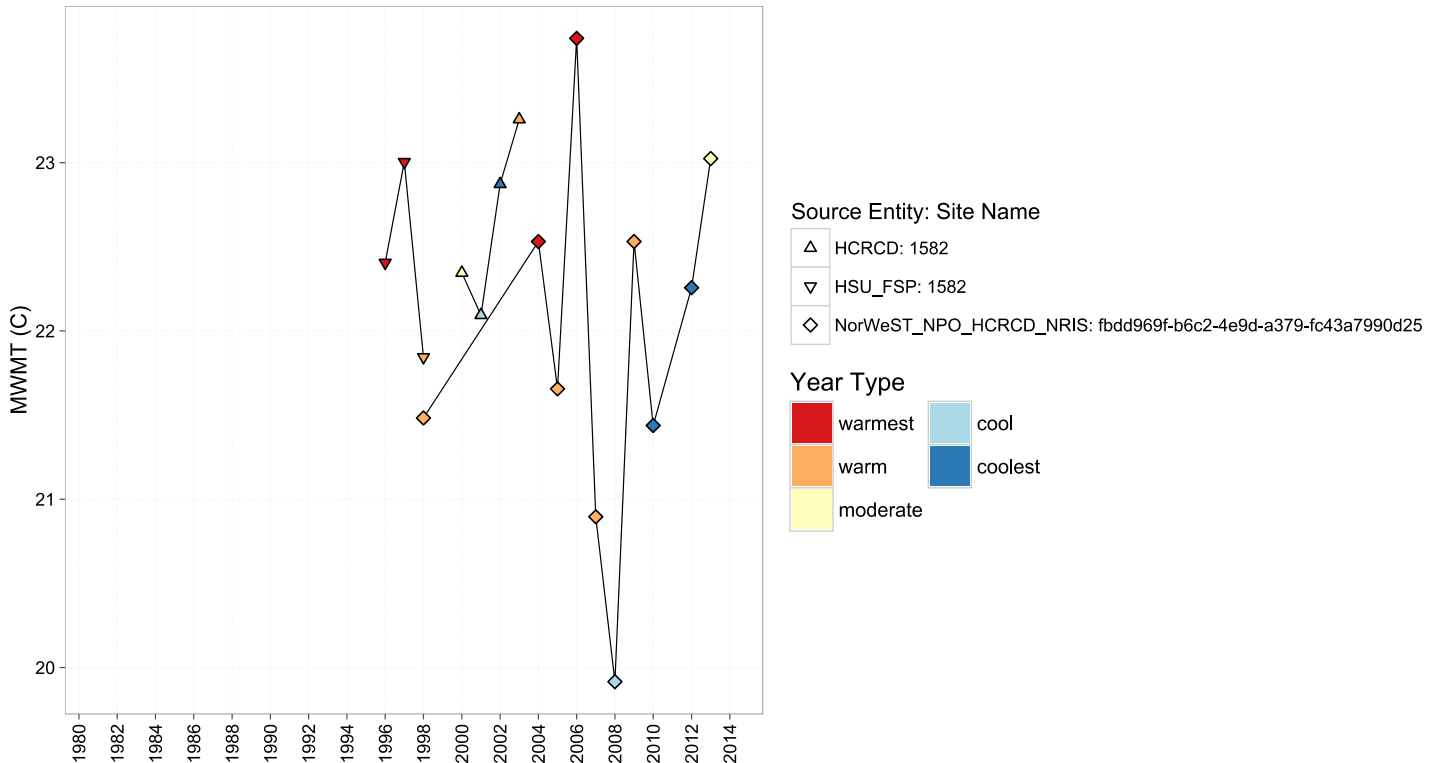


Figure 62. Time series of measured stream temperatures for standardized site 1582 on Middle Fork of the Eel River downstream of the confluence of with the North Fork of Middle Eel River. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMt according to year type (see section 3.2 for details).



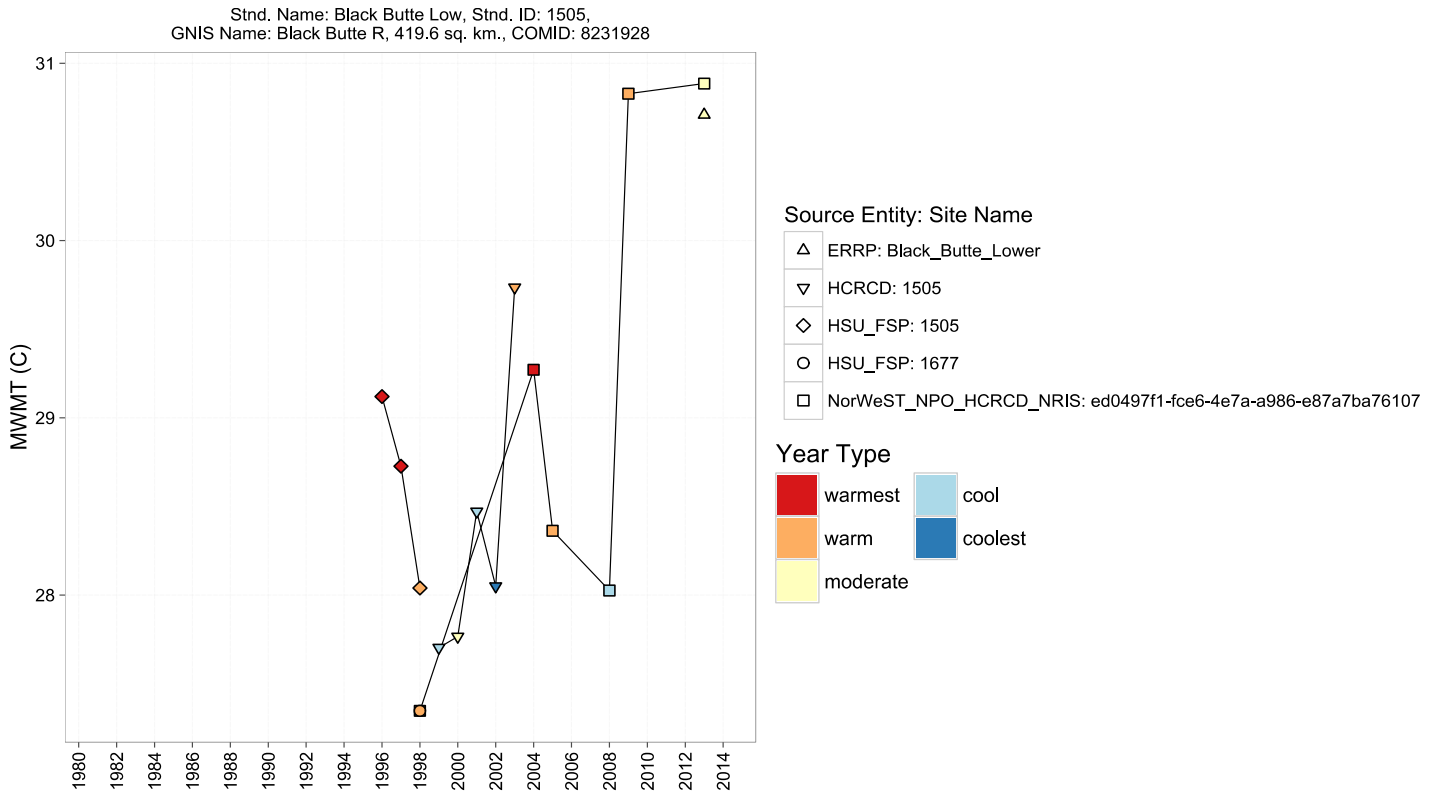


Figure 63. Time series of measured stream temperatures for standardized site 1505 at the mouth of the Black Butte River. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

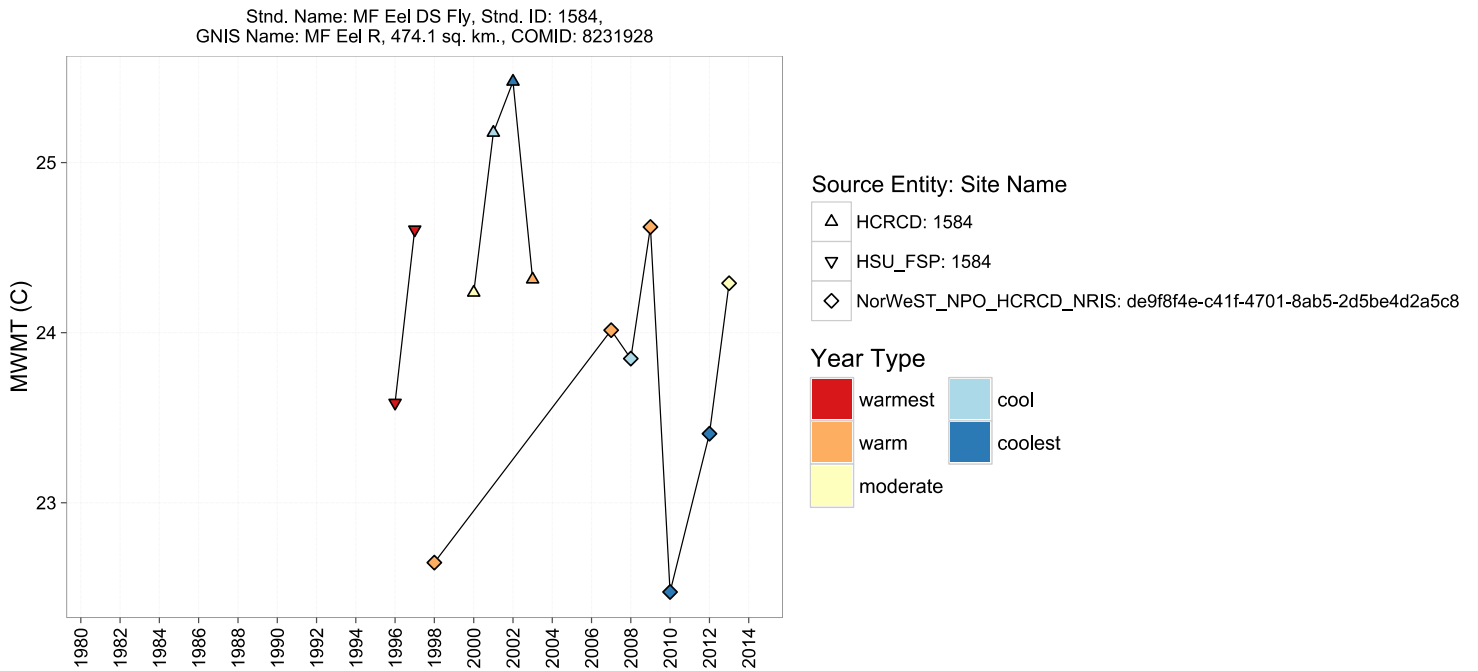


Figure 64. Time series of measured stream temperatures for standardized site 1584 at the Middle Fork of the Eel River downstream of Fly Creek. Standardized sites combine data from multiple comparable sites to facilitate long-term comparisons. Each point is one year, site, and source entity. Each original site is shown as a unique symbol shape, which is then colored by MWMT according to year type (see section 3.2 for details).

3.4.1 NORTH FORK EEL RIVER

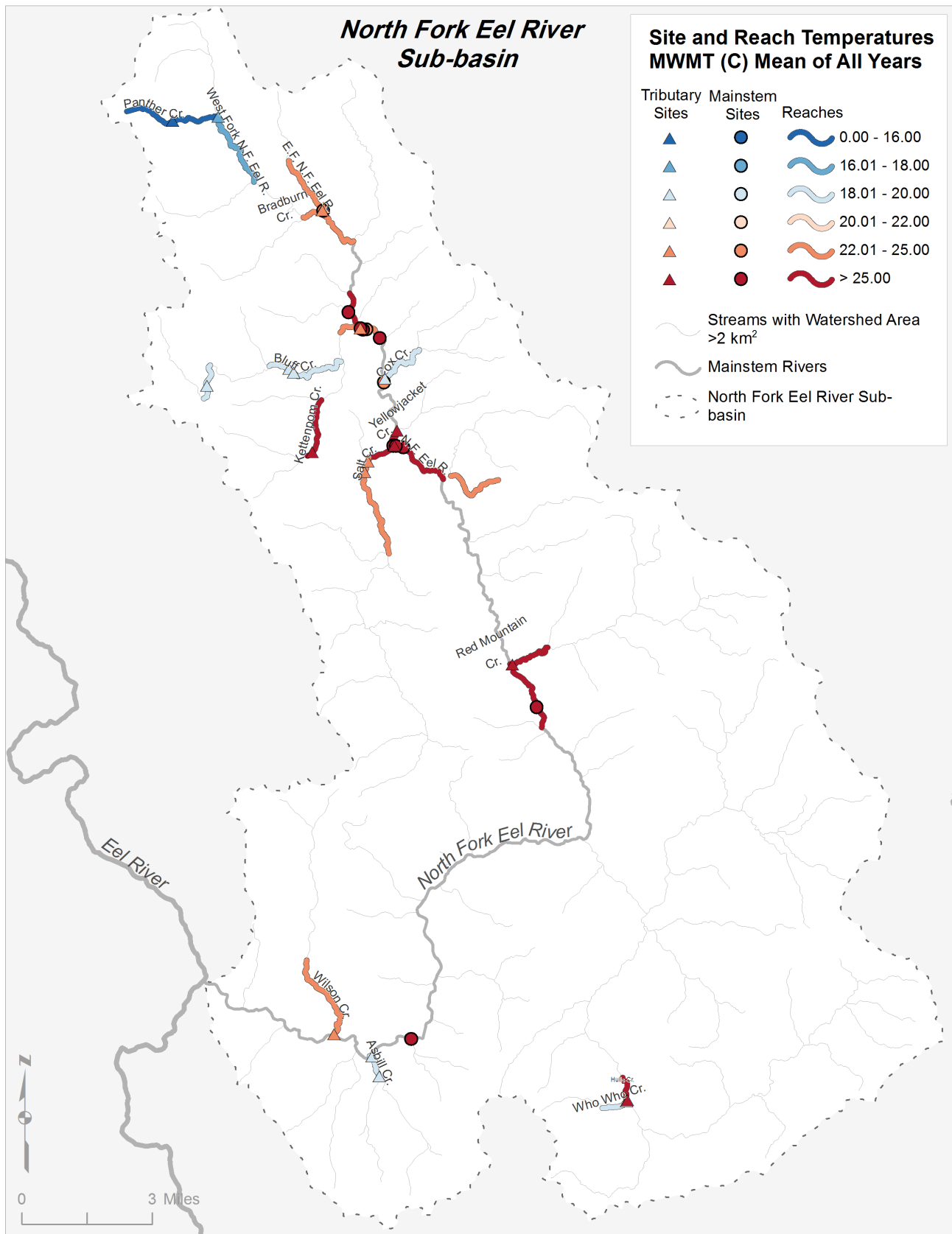


Figure 65. Map showing stream temperature monitoring sites in the Lower South Fork Eel River sub-basin. Sites and reaches are color-coded by mean MWMT values according to the salmonid suitability categories in Table 2, with values calculated as the mean MWMT across all years (1980-2015). “Special” sites such as isolated pools and vertical profiles in pools are excluded from this map and were not used to calculate reach averages. Reaches are labeled by abbreviated version of official stream name (U.S. Geological Survey Geographic Names Information System, GNIS).

### MWMT Summary for North Fork Eel R

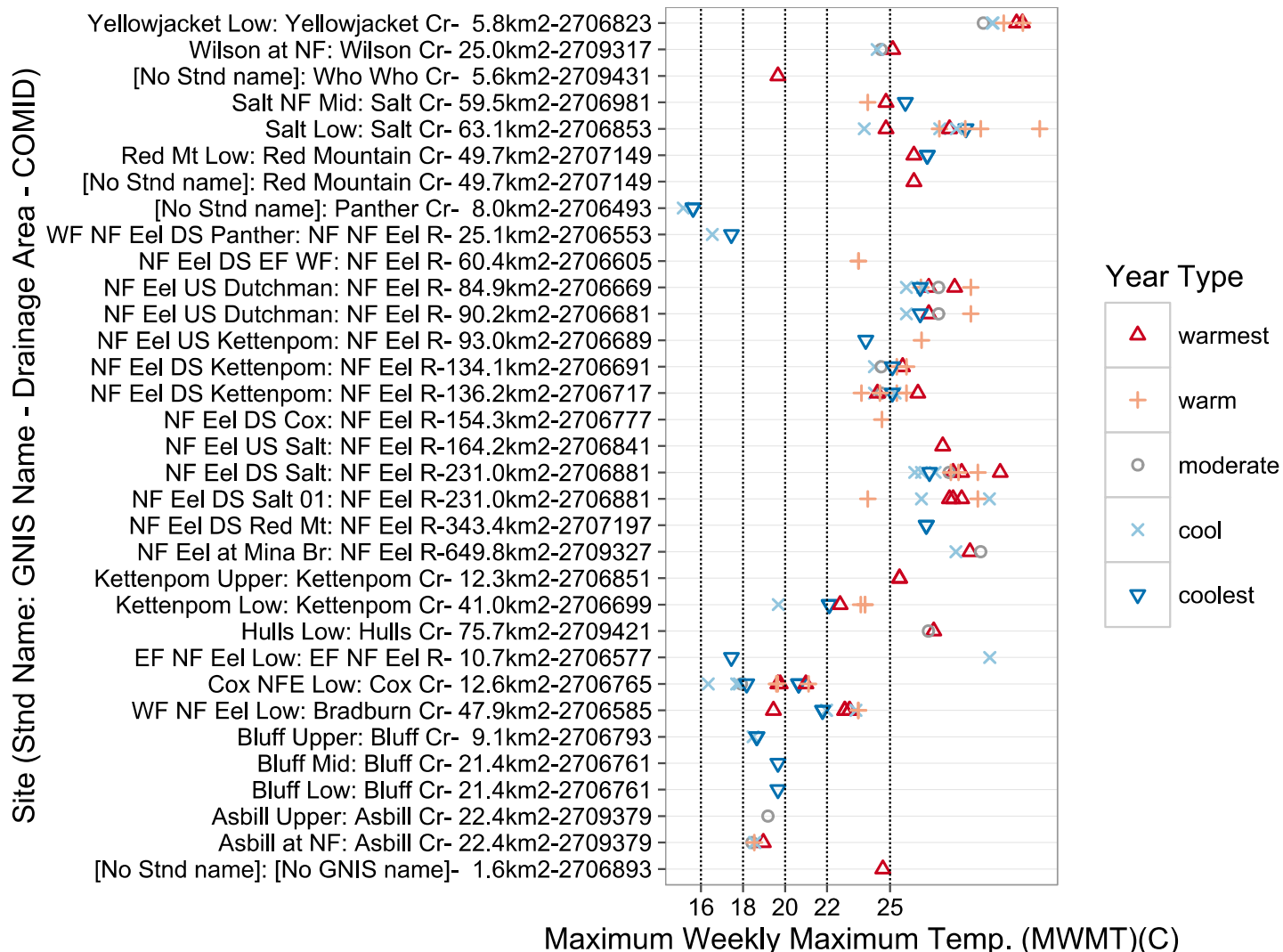


Figure 66. Site-level summary of stream temperatures measured within the North Fork Eel River sub-basin. Each point is the MWMT for one year, site, and source entity (Part 1). Sites are grouped into rows by standardized name (Stnd Name). Rows are sorted first by abbreviated official stream name (U.S. Geological Survey Geographic Names Information System, GNIS), then by drainage area at downstream end of reach (in units of km<sup>2</sup>). Symbols for MWMT values are colored according to year type (see section 3.2 for details). Dotted vertical gridlines correspond to the MWMT salmonid suitability categories in Table 2.

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### **3.5 NORWEST MODEL RESULTS**

As discussed in Section 1.2 above, the U.S. Forest Service's Rocky Mountain Research Lab's (RMRL) NorWeST project completed a spatial stream network temperature model for Northwest California in 2015. Model scenarios included current conditions (1993-2013) as well as several climate change scenarios. The model results indicate that climate change will warm streams in the Eel River basin and reduce the area of coldwater refuge (Figure 7). As noted in Section 1.2 above, the RMRL will be re-running the NorWeST model in fall 2016 using a more complete dataset of stream temperature data for calibration.

NorWeST Modeled Mean August Stream Temperature

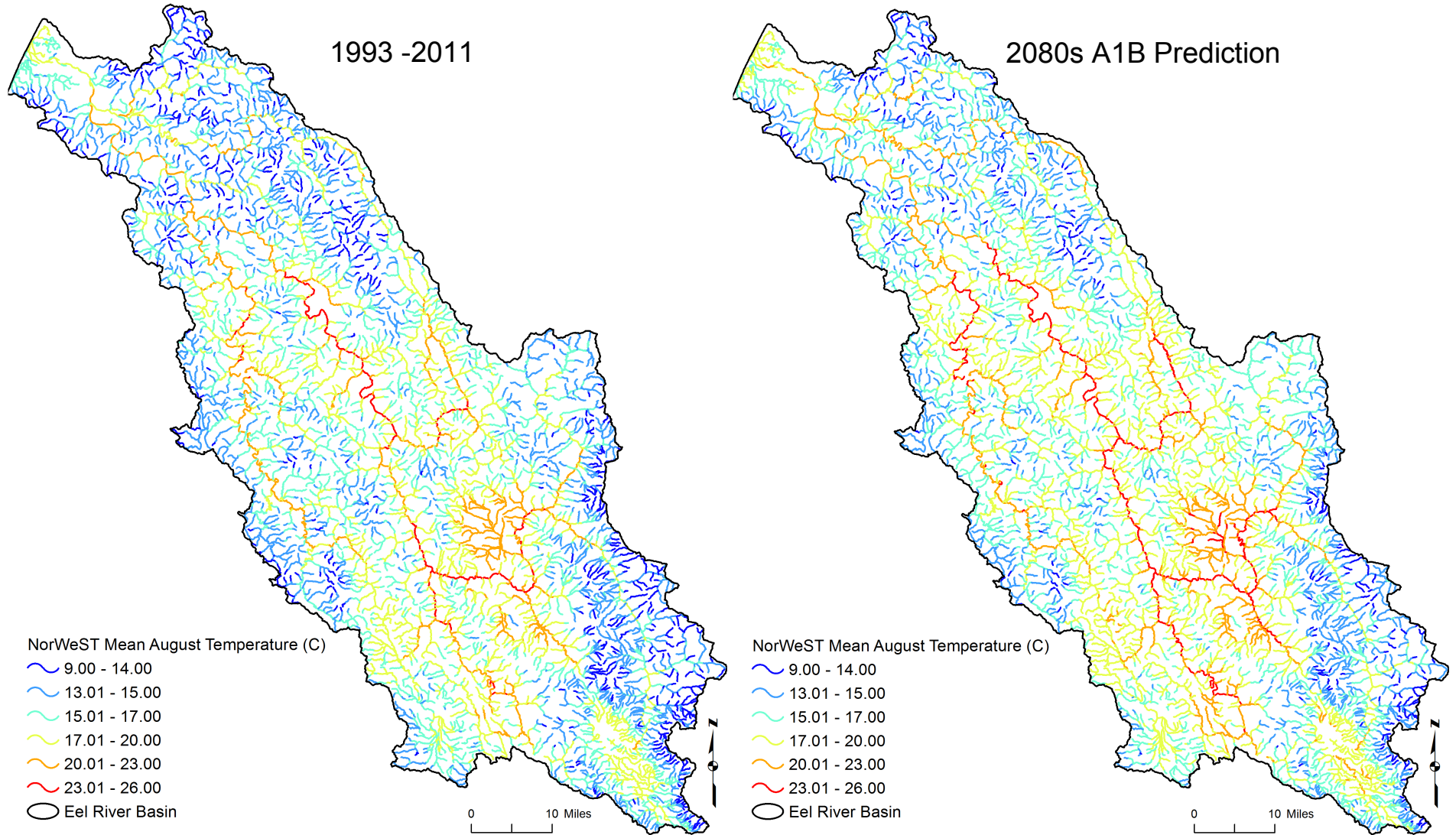


Figure 67. Comparison of NorWeST spatial stream network model predictions for mean August stream temperature in the Eel River basin for 1993-2013 and a future scenario based on global climate model ensemble averages that represents the A1B warming trajectory for 2080s (2070-2099).

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## 5 ACKNOWLEDGMENTS

Countless people from many different entities have contributed to collection and compilation of the stream temperature data included in this report; we refer readers to the reports cited in the methods section for details. As part of the North Coast Regional Water Quality Control Board's efforts to develop a regional stream temperature database, Nicholas Cusick and Emily McClintock of the AmeriCorps Watershed Stewards Program conducted the initial compilation of portions of many of the datasets used in this report, including California State Parks, PG&E, U.S. BLM, and USFS RSL, and ERRP. Diane Higgins edited a draft of this report. Callie McConnell of the U.S. Forest Service (USFS) provided data from the USFS AqS database. Patrick Vaughan, Susannah Manning, and Shannon Dempsey provided answers to our questions regarding California State Parks data from recent years. Rich Fadness at North Coast Regional Water Quality Control Board assisted by archiving and retrieving the ERRP's data, and loaning temperature probes for 2012-2015. Mark Sherwood, Bruce Hilbach Barger, Dane Downing, Bill Eastwood, and Rodney Nakamoto helped resolve questions about site locations. Daniel Isaak, Sherry Wollrab, Gwynne Chandler, and David Nagel of the USFS provided information on the NorWeST model and tips on snapping the temperature sites to the GIS streams network.

## APPENDIX A: METHODS USED FOR ASSIGNING STREAM TEMPERATURE MONITORING SITES TO THE NSI STREAM NETWORK

As noted in Section 2.3 of this report, each stream temperature monitoring station was assigned to a reach in the National Stream Internet (NSI) Hydrography Network GIS. This appendix describes the steps used:

- The location for each point was plotted on a base map (e.g., topographic map with labeled streams and roads) in ArcGIS and visually examined to make sure its location corresponded to available attributes such as site code and site name. If necessary, it was manually moved to be closer to the correct reach. Many monitoring sites are located near tributary junctions and thus minor inaccuracies in location (if not corrected) could result in a site being assigned to the wrong stream reach. In some cases, site locations were based on 1:24,000 scale streams GIS, but still required adjustment to correspond to the stream's location in the coarser 1:100,000 NSI/NHDplus streams GIS.
- Once the locations were adjusted as necessary, then we used the “snappoints” tool in the Geospatial Modeling Environment (GME)<sup>32</sup> platform to snap each point to the closest stream.
- Then we used a Spatial Join in ArcGIS ArcToolbox<sup>33</sup> to assign the stream reach's attributes to each point (i.e., extract the COMID and other relevant attributes).
- The newly assigned attributes of each point were then reviewed for accuracy, and if necessary corrected and re-snapped.
- The new coordinates for the snapped locations were then added to the attribute table of the temperature monitoring sites using the Calculate Geometry function in ArcGIS.

These steps are based on guidance provided by the NorWeST modelling team (Sherry Wollrab, pers. comm.). COMIDs and snapped coordinates for most of the sites in the USFS NRIS AqS database were already assigned by the NorWeST project in 2015, so we utilized that information where available<sup>34</sup>.

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<sup>32</sup> <http://www.spataleecology.com/gme/>

<sup>33</sup> The Spatial Join tool in ArcToolbox allows the user to specify a maximum distance. In contrast, the “Join data from another location based on spatial location” function in the Join Data dialogue box (accessed by right-clicking on the item in the ArcGIS Table of Contents and choosing Joins and Relates) will join points to the closest stream even if it is miles away, resulting in erroneous joins for sites located on streams that do not exist in the NSI/NHDplus stream network GIS.

<sup>34</sup> I acquired a Microsoft Access database of daily stream temperature data and deployment information for the "Northern California Coastal Klamath" unit of NorWeST which contained the database fields required to link NorWeST's COMID and snapped coordinates to an updated version of the USFS AqS database.



**APPENDIX B: SENSITIVITY ANALYSIS OF MWAT AND MWMT RELATIVE ANOMALIES**

This appendix shows a sensitivity analysis for the calculation of the relative anomaly for MWAT and MWMT. For additional information, see section 3.2 of the report.

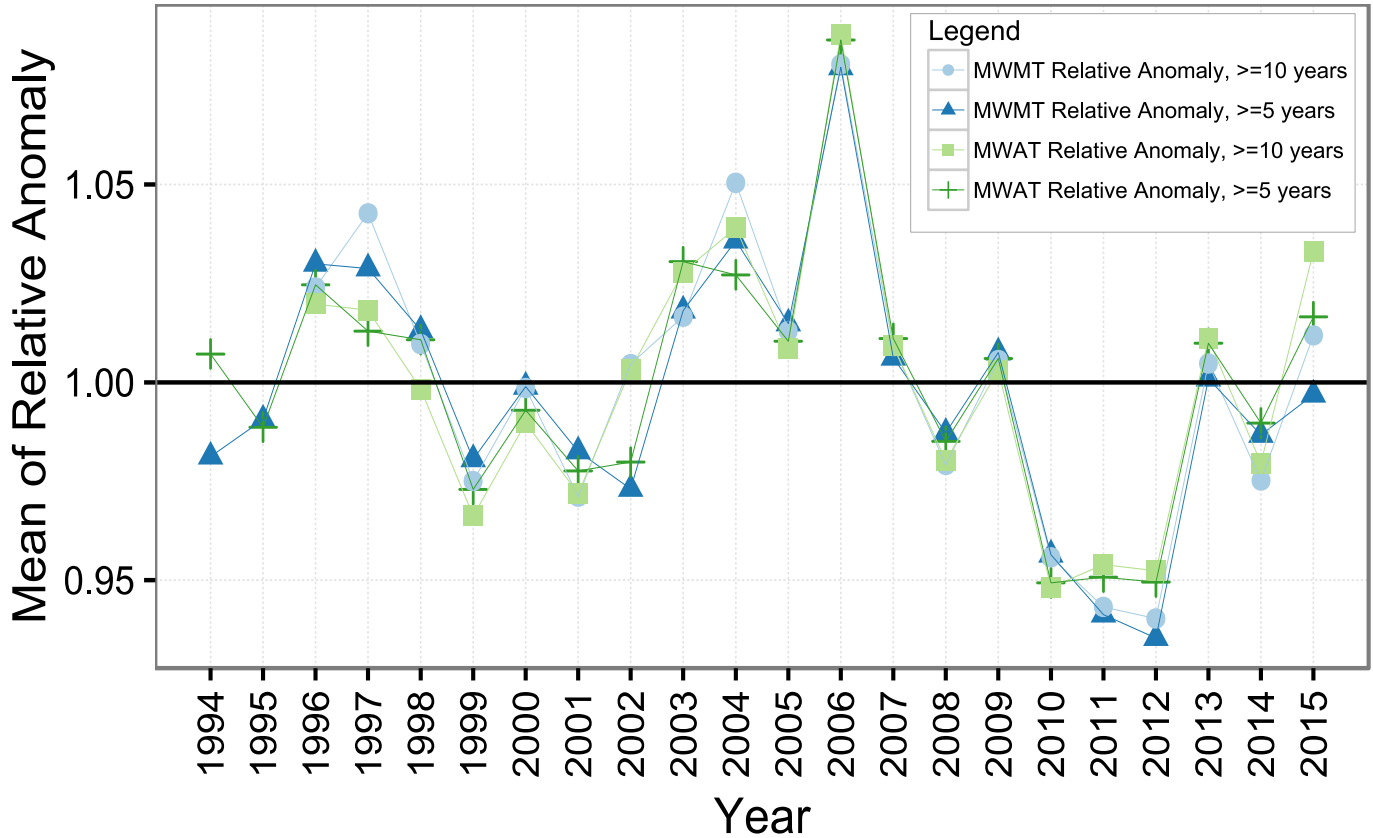


Figure C1. Inter-annual variation in the mean (i.e., averaged across all sites within a year) relative anomaly for MWAT and MWMT. Two scenarios are shown, one using five years as the minimum number of years of data for a site and another using 10 years as the minimum number of years of data for a site.

APPENDIX C: MAP WITH YEARS OF TEMPERATURE DATA FOR EACH REACH

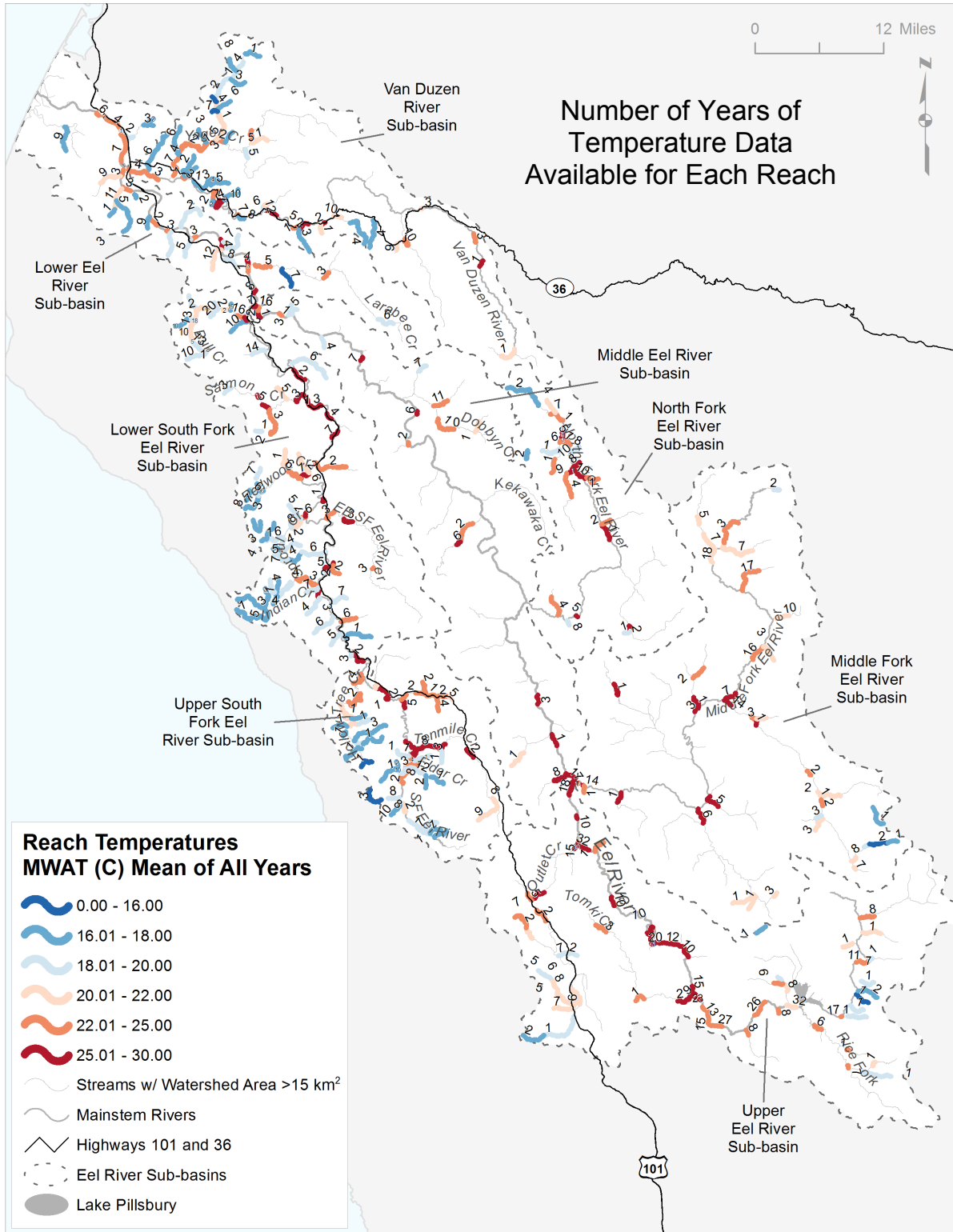


Figure D1. Reach-level summary of measured stream temperatures within the Eel River basin, labeled by the number of years of temperature data available. Mean reach MWAT values were calculated as the mean of all MWATs across all monitoring sites and years (1980-2015) within a reach. MWAT is shown in this graph rather than MWMT (which is the focus in most of this report) to maximize the amount of unique information in the figure.

## APPENDIX D: EXPLANATION OF ELECTRONIC APPENDIX 1

This appendix provides an overview of the contents of Electronic Appendix 1. All electronic appendices are available at <http://www.eelriverrecovery.org>.

Electronic Appendix 1 provides graphs of provisional site and reach temperatures. There are a total of approximately 17,500 graphs, all in Adobe Acrobat (PDF) format. There are two methods for reviewing the graphs: A) Google Earth Interface and B) File Browsing.

### A) Google Earth Interface

The Google Earth interface which provides a map view where you can click on a site or reach to see a pop-up window with annual summary data. Separate Google Earth files are available for sites (TemperatureSitesMWMT.kml), standardized sites (TemperatureSitesStdMWMT.kml), and reaches (TemperatureReachesMWMT.kml). To start Google Earth, double-click on the kml file. Temperature points or reaches are color-coded according to the MWMT salmonid suitability categories in Table 2 (e.g., Figure D1). The pop-up includes links to the PDF graphs which when clicked on will open a graph in your computer's default PDF viewer (e.g., Figure D2).

Note: the graphs that show only a single year of data (as opposed to multiple years of data) are not accessible with the Google Earth Interface, so you must use file browsing to see single panel graphs of raw stream temperature data for individual years). Also, TemperatureSitesStdMWMT.kml does not contain any graph links, so to view the trend graphs for the standardized sites, you must use file browsing.

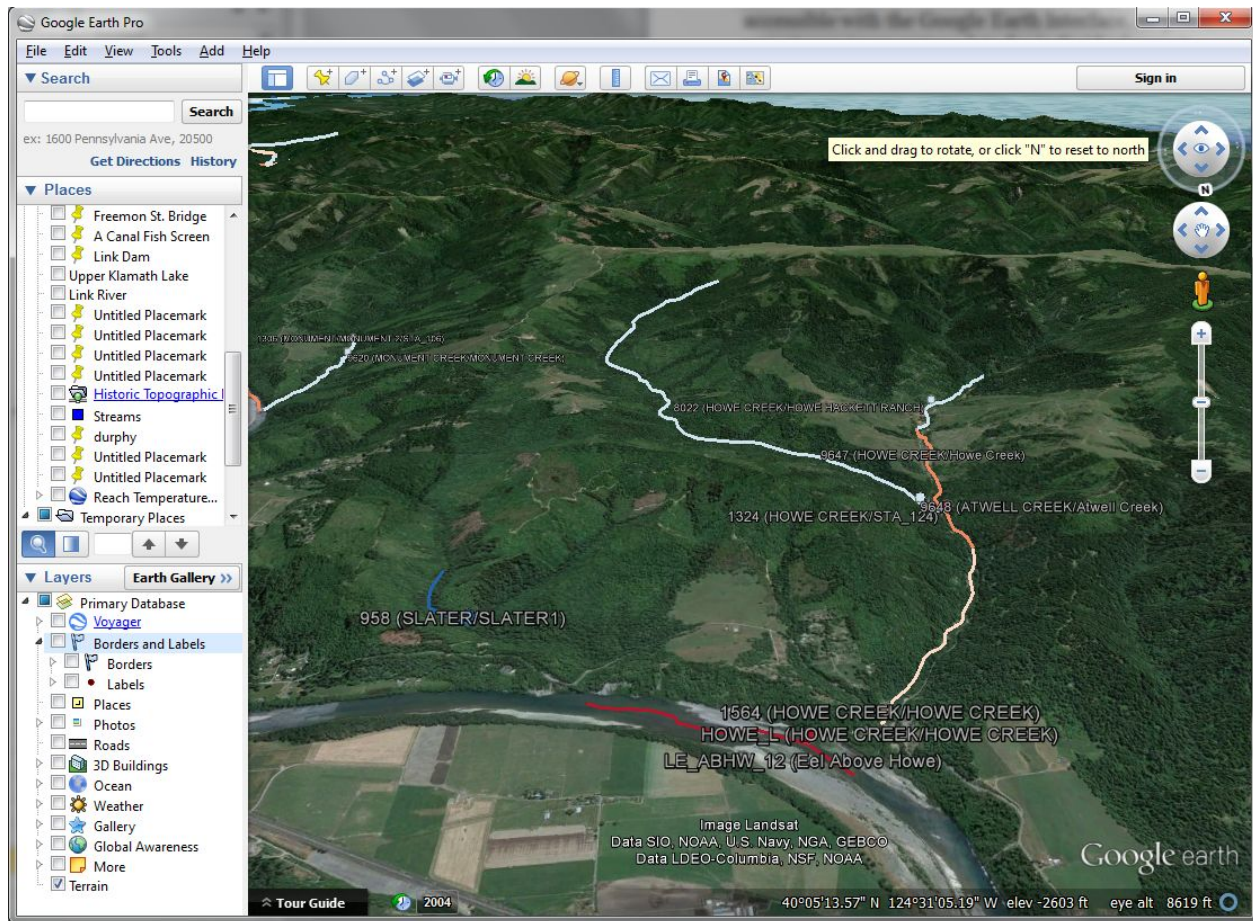


Figure D1. Screen shot of the Google Earth interface with temperature sites and reaches color-coded by MWMT. Names streams are provided as an additional base layer but are not shown here.



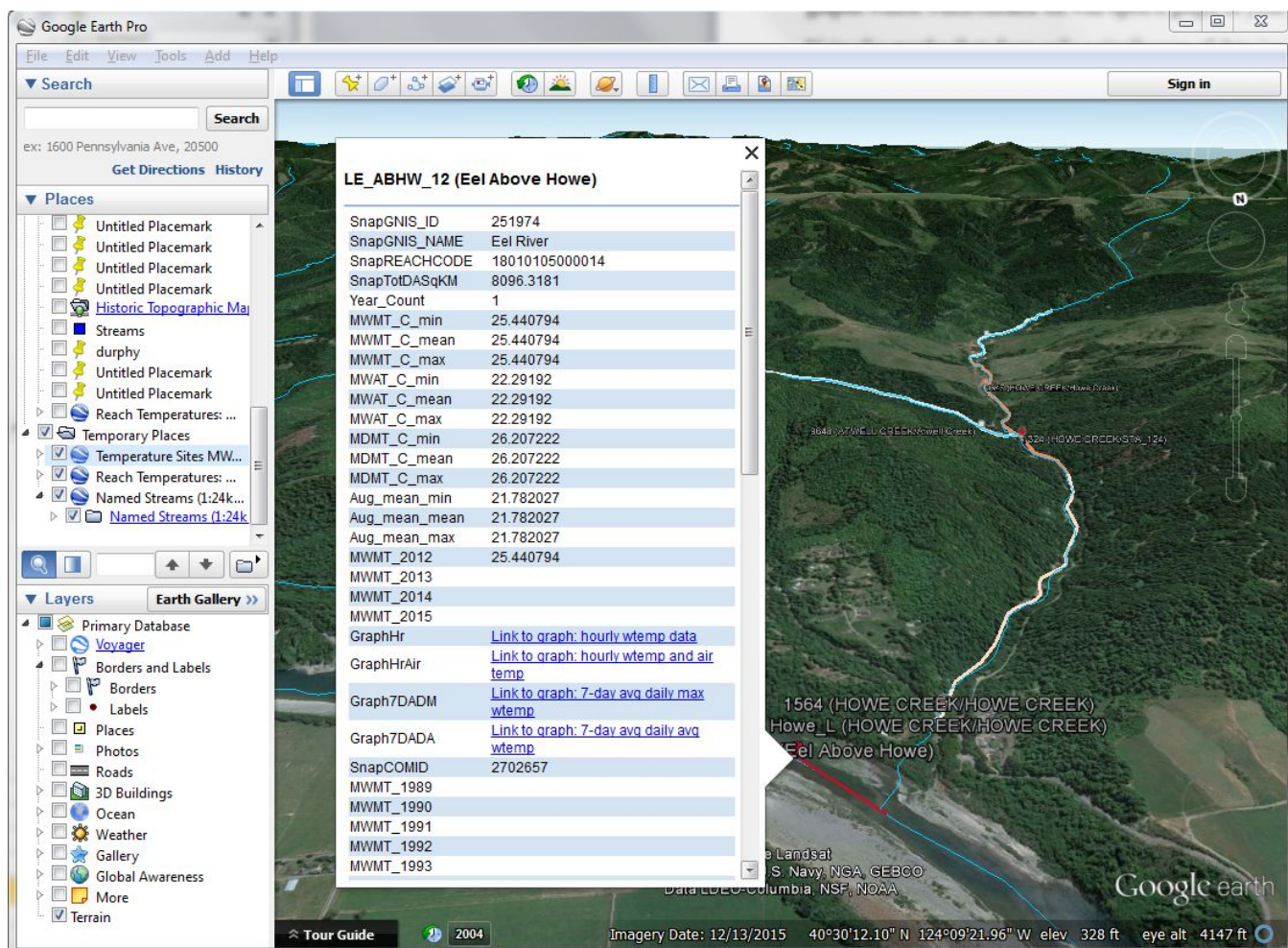


Figure D2. Screen shot of the Google Earth interface, showing a pop-up window that appears when the user clicks on a temperature site. Links to PDF graphs are shown in the blue highlighted text.

## B) File Browsing

Another method reviewing the graphs is to browse them by name using your computer's file explorer (e.g. Windows Explorer). Site graphs are organized into folders by Source Entity. Within each Source Entity folder, there are three folders:

1. *bysite\_C\_hourly\_and\_daily*. Files in this folder are named with a combination of Site Code, metric, and year. For example, "1203-raw-1997.pdf" is raw (hourly) data for Site Code 1203 for the year 1997. The three metrics are "raw" (hourly data) for a single year (e.g., single year Figure D3) or all years (e.g., Figure D4), "7DADA" (7-Day Average of the Daily Average) for all years (e.g., Figure D5), "7DADM" (7-Day Average of the Daily Maximum) for all years (e.g., Figure D6), "DailyMax" (daily maximum) for all years (e.g., Figure D7). If the same Site Code was used by multiple Source Entities, data for all Source Entities will be shown in the "allyr" files.
2. *bysite\_C\_hourly\_with\_air*. Files in this folder are named with a combination of Site Code, metric, and year. The only metric is "raw-with-air" (hourly stream temperature data with overlaid on air temperature data from the remote automated weather station at Alderpoint). There is one file for all years (Figure D8) as well as a separate files for each year (e.g., Figure D9). For example, "1203-raw-with-air-1997.pdf" is Site Code 1203 for the year 1997. If the same Site Code was used by multiple Source Entities, data for all Source Entities will be shown in the "allyr" files.
3. *compare\_sites*. Files in this folder are named with a combination of units (all are "C" = Celsius), metric ("7DADA" or "7DADM"), year, and arrangement ("facet" or "overlay"). "Facet" provides a separate panel for each site while "overlay" puts all sites on into a single graph panel. For example, "C-7DADA-overlay2012.pdf" is 7-Day Average of the Daily Average temperature for all sites monitored by the Eel River Recovery Project within 2012 overlaid into a single graph panel (e.g., Figure D10) while "C-7DADA-facet2012.pdf" is 7-Day Average of the Daily Average temperature for all sites monitored by the Eel River Recovery Project within 2012 in separate graph panels for each site (e.g., Figure D11).

In addition to the site graphs (described above) which are organized into folders by Source Entity, there are also three additional folders of graphs:

1. *compare\_sites*. There is one file per year. Identical to the contents of the "compare\_sites" directory described above, but with all Source Entities combined rather separated. Not accessible via Google Earth.
2. *ReachSummaries*. There is one file per reach. Files in this folder are named with a combination of metric ("7DADA", "7DADM", or "raw") and COMID (7-digit reach code from NSI hydrography network, see section 2.3).
3. *SiteStndTrends*. There is one file per standardized site. Files in this folder are named with a combination of metric (only "mwmt"), standardized Site ID (3 or 4 code, see section 2.4), and standardized site name. Not accessible via Google Earth.

1997 Raw (Hourly) Temperature at Site: 1203 (ROOT CR/ROOT 1/STA\_3)



Figure D3. Graph of hourly stream temperature data for Site Code 1203 (Root Creek) for 1997 in the file “1203-raw-1997.pdf”, which is located in the folder “graphs\HSU\_FSP\bysite\_C\_hourly\_and\_daily.”

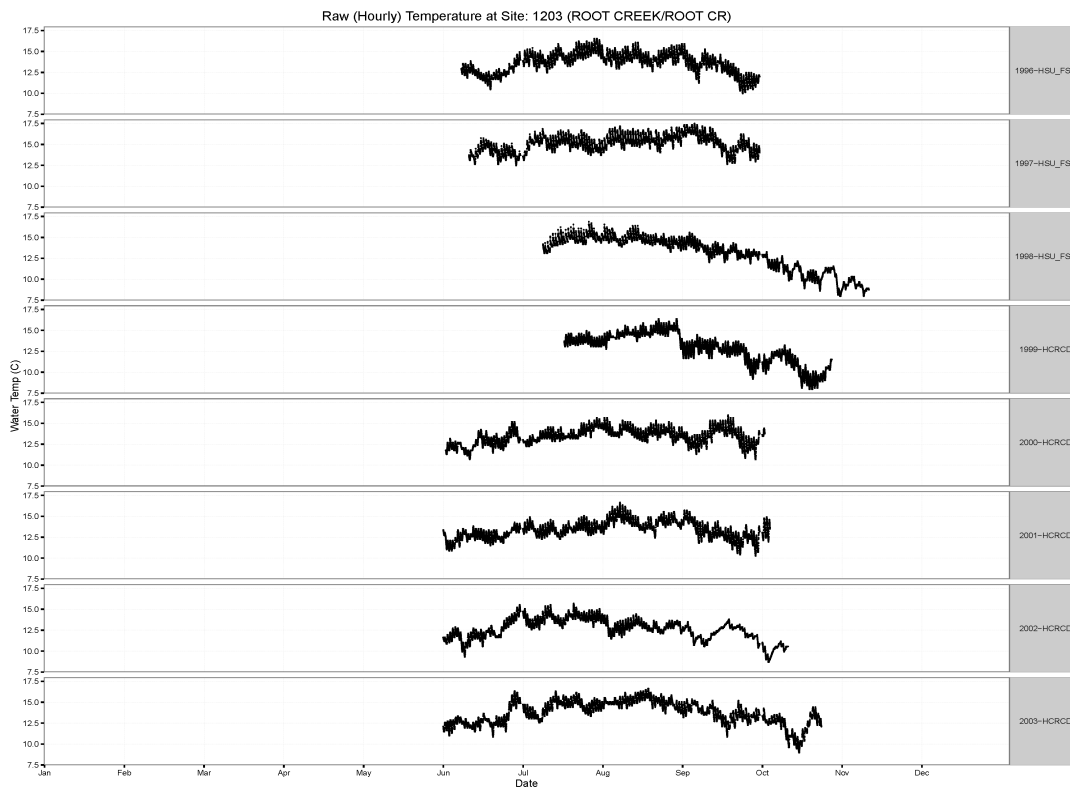


Figure D4. Graph of hourly stream temperature data for Site Code 1203 (Root Creek) for 1996-2003 in the file “1203-raw-allyr.pdf”, which is located in the folder “graphs\HSU\_FSP\bysite\_C\_hourly\_and\_daily.”



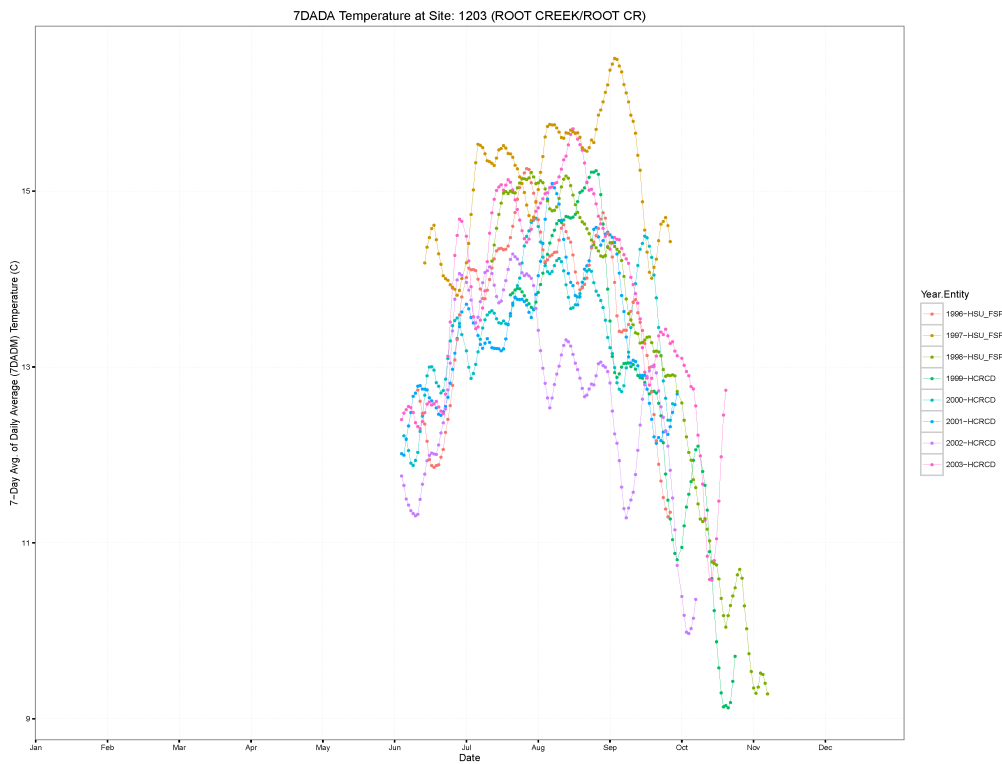


Figure D5. Graph of 7-Day Average of the Daily Average (7DADA) stream temperature data for Site Code 1203 (Root Creek) for 1996-1999 in the file “1203-7DADA-allyr.pdf”, which is located in the folder “graphs\HSU\_FSP\by site\_C\_hourly\_and\_daily.”

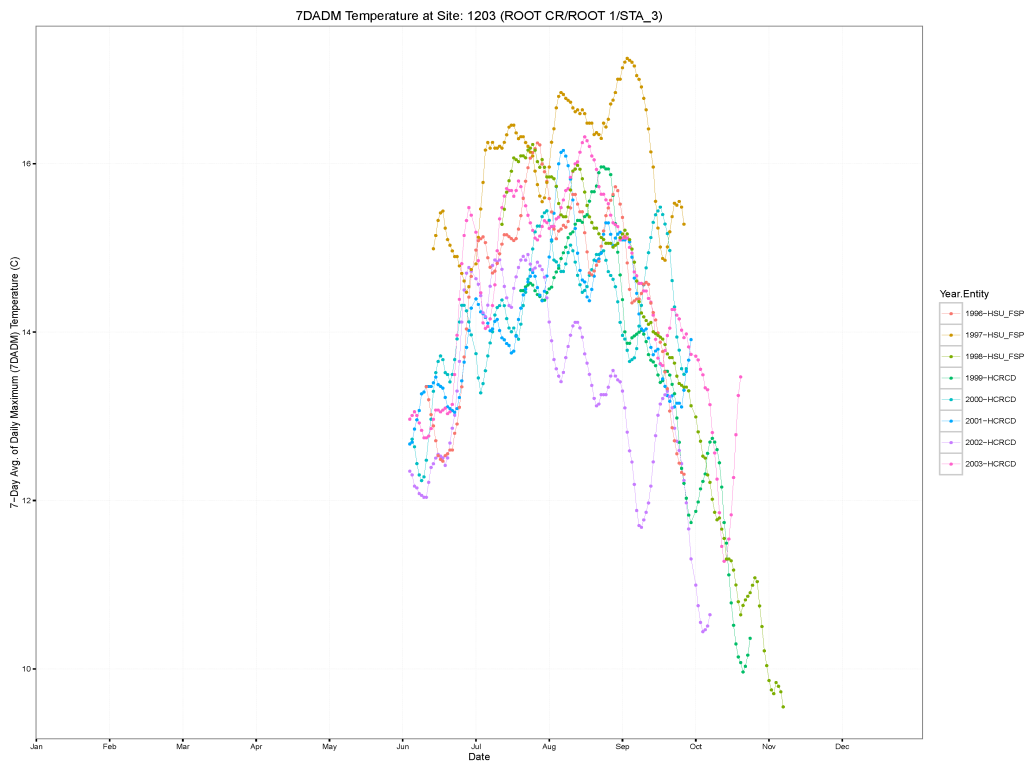


Figure D6. Graph of 7-Day Average of the Daily Maximum (7DADM) stream temperature data for Site Code 1203 (Root Creek) for 1996-2003 in the file “1203-7DADM-allyr.pdf”, which is located in the folder “graphs\HSU\_FSP\by site\_C\_hourly\_and\_daily.”

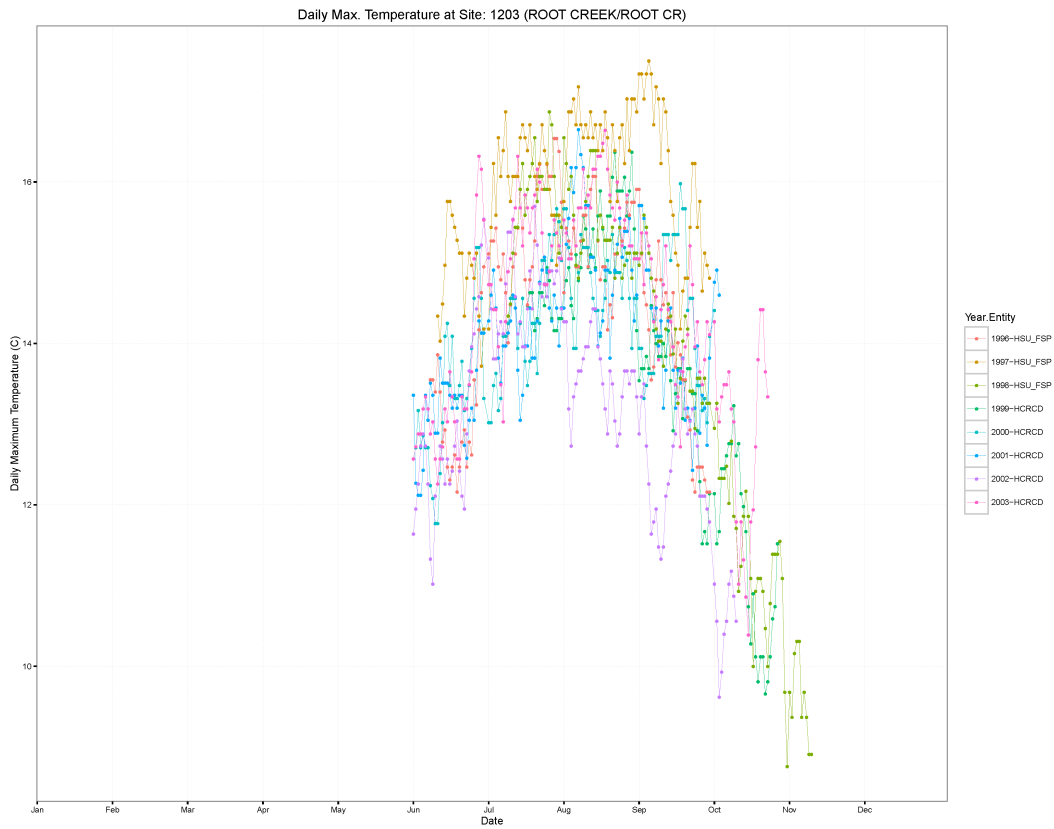


Figure D7. Graph of daily maximum stream temperature data for Site Code 1203 (Root Creek) for 1996-2003 in the file “1203-DailyMax-allyr.pdf”, which is located in the folder “graphs\HSU\_FSP\bsite\_C\_hourly\_and\_daily.”

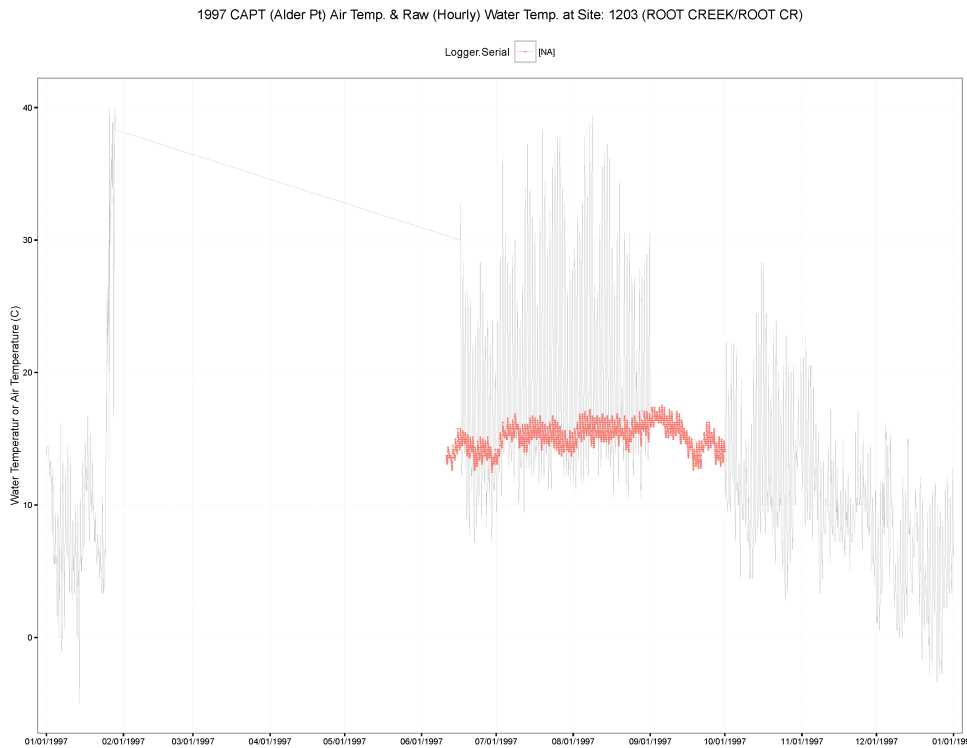


Figure D8. Graph of hourly stream temperature data (red line) and air temperatures for the Alderpoint remote automated weather station (light grey line) in the file “1203-raw-with-air-1997.pdf”, which is located in the folder “graphs\HSU\_FSP\bsite\_C\_hourly\_and\_daily.”

CAPT (Alder Pt) Air Temp. & Raw (Hourly) Water Temp. at Site: 1203 (ROOT CREEK/ROOT CR)

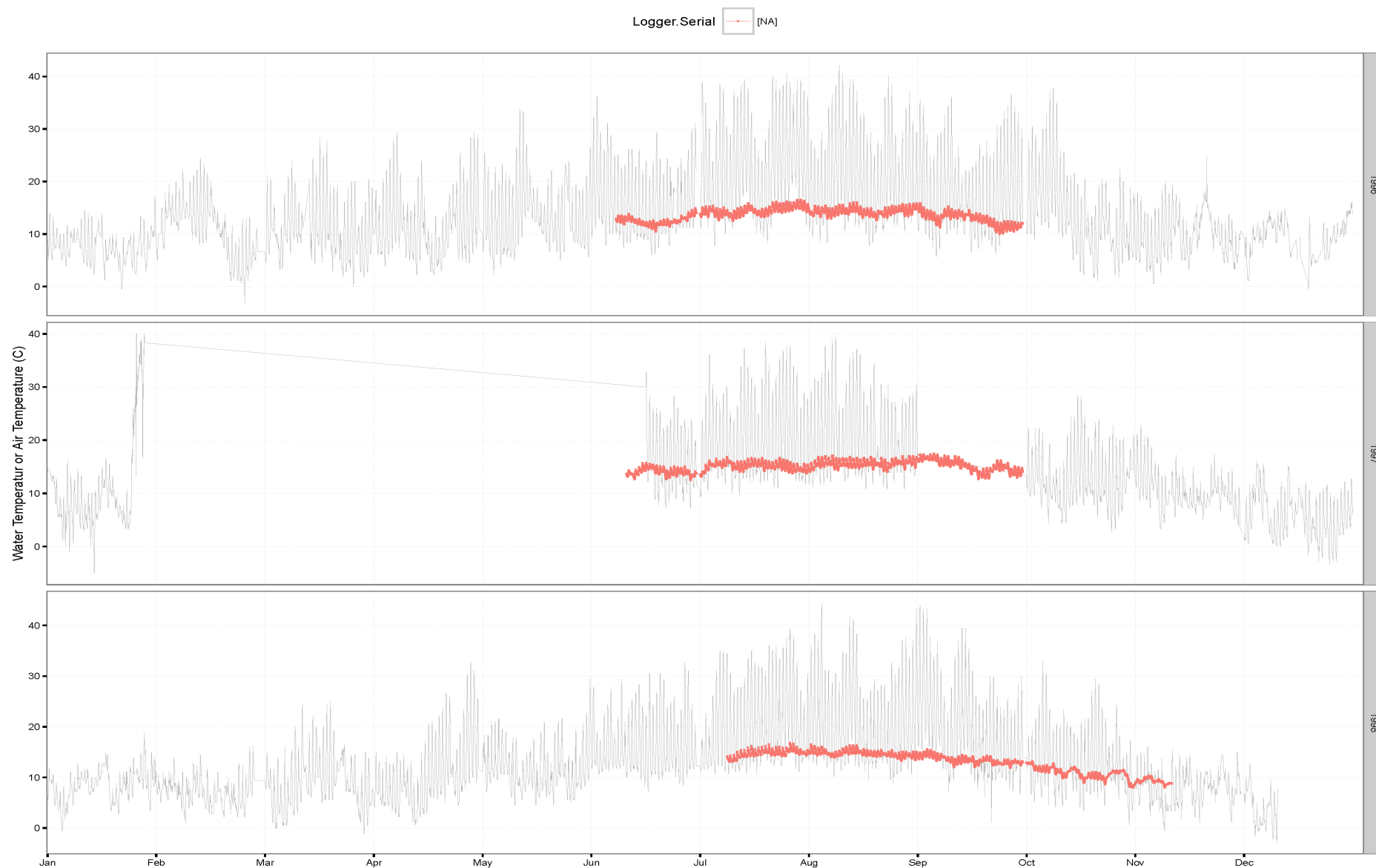


Figure D9. Graph of hourly stream temperature data (red line) and air temperatures for the Alderpoint remote automated weather station (light grey line) for Site Code 1203 (Root Creek) for 1997, 1998, and 1999 in the file “1203-raw-with-air-allyr.pdf”, which is located in the folder “graphs\HSU\_FSP\bysite\_C\_hourly\_and\_daily”.

ERRP 2012 Sites, Floating Weekly Average Water Temperature

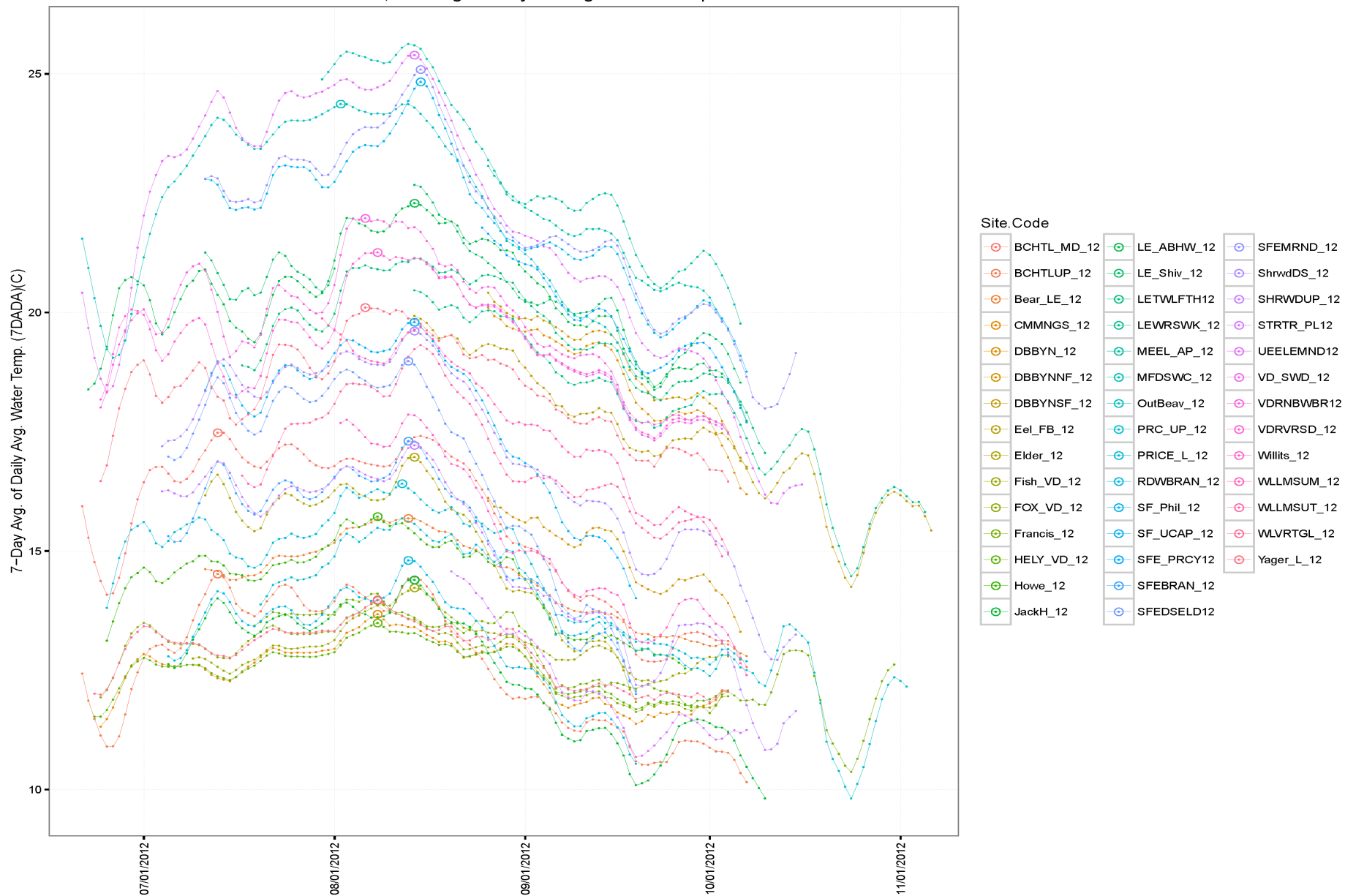


Figure D10. Graph of 7-Day Average of the Daily Average (7DADA) stream temperature data for Eel River Recovery Project (ERRP) sites in 2012 in the file “C-7DADA-overlay2012.pdf”, which is located in the folder “graphs\ERRP\compare\_sites”. The large circles indicate MWAT values.

### ERRP 2012 Sites, Floating Weekly Average Water Temperature

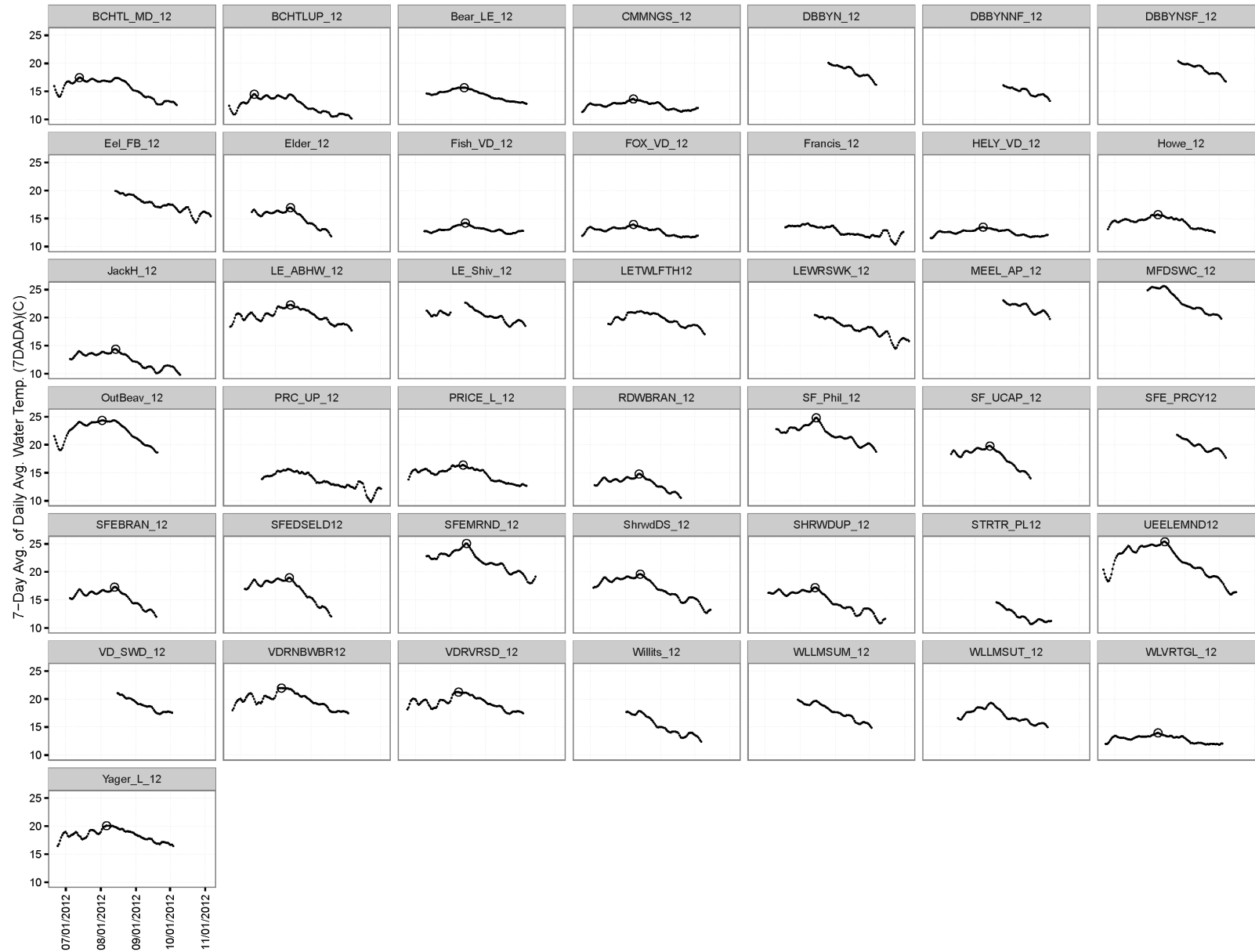


Figure D11. Graph of 7-Day Average of the Daily Average (7DADA) stream temperature data for Eel River Recovery Project (ERRP) sites in 2012 in the file “C-7DADA-facet2012.pdf”, which is located in the folder “graphs/ERRP\compare\_sites”. The large circles indicate MWAT values.

## APPENDIX E: LIST OF TEMPERATURE MONITORING SITES

Figure E1. Complete list of stream temperature sites in the Eel River basin. There is one row for each site. Key to abbreviations and other explanations: Source Entity = entity that provided temperature data, see Table 1 for key to abbreviations; Wat.shed = watershed corresponding to Figure 1; Source Entity = Data source; Site Code = Code assigned by original data source (note: the combination of Source Entity and Site Code is a unique identifier for the site); Site Description = supplemental information regarding site location, sometimes identical to the Site Name; Original Latitude/ Longitude NAD83 = original spatial coordinates (i.e., before snapping to NSI stream network) for the temperature site, in units of decimal degrees with the North American Datum of 1983; Drain Area (km<sup>2</sup>) = drainage area at downstream end of reach in NSI stream network, in units of km<sup>2</sup> as provided by NSI stream network; NSI Reach COMID = Common identifier code for the reach in National Stream Internet stream network that a temperature site was snapped to (if blank, reach does not exist in NSI stream network); NSI Reach GNIS ID/Name = official U.S. Geological Survey Geographic Names Information System name and identifier for stream in NSI stream network (if blank, stream has no GNIS name and/or reach does not exist in NSI stream network); Yrs = number of years with any (not necessarily enough to calculate annual statistics) stream temperature data; and.

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI Reach COMID	Site ID Std.	Special	Yrs
LE	ERRP	BEAR_L_14	BEAR CREEK/BEAR CREEK	40.431116	-123.986476	Bear Cr	22.3	2705857	1507		1
LE	ERRP	Bear_LE	BEAR CREEK/BEAR CREEK	40.431116	-123.986476	Bear Cr	22.3	2705857	1507		1
LE	ERRP	BEAR_LE	BEAR CREEK/BEAR CREEK	40.431116	-123.986476	Bear Cr	22.3	2705857	1507		1
LE	ERRP	Bear_LE_12	BEAR CREEK/BEAR CREEK	40.431116	-123.986476	Bear Cr	22.3	2705857	1507		1
LE	ERRP	Eel_12th_St	Eel at 12th Street	40.575183	-124.154033	Eel R	9292.4	2702627	9703		1
LE	ERRP	Eel_at_Howe	Eel Above Howe	40.512700	-124.155294	Eel R	8096.3	2702657	9702		1
LE	ERRP	Eel_FB_12	EEL RIVER/EEL RIVER	40.614310	-124.202979	Eel R	9355.4	2702601	229		1
LE	ERRP	Eel_Shively	Eel Below Bear	40.433668	-123.980915	Eel R	7959.2	2708837	9706		1
LE	ERRP	FB	EEL RIVER/EEL RIVER	40.614310	-124.202979	Eel R	9355.4	2702601	229		2
LE	ERRP	Francis	FRANCIS CREEK/FRANCIS CREEK	40.574414	-124.266466	Francis Cr	10.7	2702151	8029		1
LE	ERRP	FRANCIS	FRANCIS CREEK/FRANCIS CREEK	40.574414	-124.266466	Francis Cr	10.7	2702151	8029		1
LE	ERRP	Francis_12	FRANCIS CREEK/FRANCIS CREEK	40.574414	-124.266466	Francis Cr	10.7	2702151	8029		1
LE	ERRP	HF	EEL RIVER/EEL RIVER	40.414928	-123.934812	Eel R	7908.3	2708621	9634		1
LE	ERRP	Howe_12	HOWE CREEK/HOWE CREEK	40.511737	-124.159631	Howe Cr	27.5	2702329	1564		1
LE	ERRP	Howe_14	HOWE CREEK/HOWE CREEK	40.511737	-124.159631	Howe Cr	27.5	2702329	1564		1
LE	ERRP	Howe_L	HOWE CREEK/HOWE CREEK	40.511737	-124.159631	Howe Cr	27.5	2702329	1564		1
LE	ERRP	HOWE_L	HOWE CREEK/HOWE CREEK	40.511737	-124.159631	Howe Cr	27.5	2702329	1564		1
LE	ERRP	LE_12WBP	Eel at Weymouth	40.519450	-124.161450	Eel R	8127.2	2702653	9704	Pool Array	1
LE	ERRP	LE_16WBP	Eel at Weymouth	40.519450	-124.161450	Eel R	8127.2	2702653	9704	Pool Array	1
LE	ERRP	LE_1WBP	Eel at Weymouth	40.519450	-124.161450	Eel R	8127.2	2702653	9704	Pool Array	1
LE	ERRP	LE_6WBP	Eel at Weymouth	40.519450	-124.161450	Eel R	8127.2	2702653	9704	Pool Array	1
LE	ERRP	LE_ABHW_12	Eel Above Howe	40.512700	-124.155294	Eel R	8096.3	2702657	9702		1
LE	ERRP	LE_DSTC	EEL RIVER/EEL RIVER	40.465979	-124.099828	Eel R	8045.1	2704741	9628		1
LE	ERRP	LE_Howe_14	Eel Above Howe	40.512700	-124.155294	Eel R	8096.3	2702657	9702		1
LE	ERRP	LE_Shiv_12	Eel Below Bear	40.433668	-123.980915	Eel R	7959.2	2708837	9706		1
LE	ERRP	LE12TSPL	Eel at 12th Street	40.575183	-124.154033	Eel R	9292.4	2702627	9703		1
LE	ERRP	LETWLFTH12	Eel at 12th Street	40.575183	-124.154033	Eel R	9292.4	2702627	9703		1
LE	ERRP	LEWRSWK_12	EEL RIVER/EEL RIVER	40.614310	-124.202979	Eel R	9355.4	2702601	229		1
LE	ERRP	ME_BEAR_14	Eel Below Bear	40.433668	-123.980915	Eel R	7959.2	2708837	9706		1
LE	ERRP	ME_DS_BC	Eel Below Bear	40.433668	-123.980915	Eel R	7959.2	2708837	9706		1
LE	ERRP	PRC_L_14	PRICE CREEK/PRICE CREEK	40.529202	-124.163887	Price Cr	34.3	2702269	1607		1
LE	ERRP	PRC_UP_12	Price Creek Upper	40.525217	-124.189639	Price Cr	34.3	2702269	9701		1
LE	ERRP	PRC_UP_14	Price Creek Upper	40.525217	-124.189639	Price Cr	34.3	2702269	9701		1
LE	ERRP	PRICE_L	PRICE CREEK/PRICE CREEK	40.529202	-124.163887	Price Cr	34.3	2702269	1607		1



Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID		
LE	ERRP	PRICE_L_12	PRICE CREEK/PRICE CREEK	40.529202	-124.163887	Price Cr	34.3	2702269	1607	1
LE	ERRP	PRICE_UP	Price Creek Upper	40.525217	-124.189639	Price Cr	34.3	2702269	9701	1
LE	HCRCD	201	EEL RIVER/EEL RIVER	40.596993	-124.165578	Eel R	9353.0	2702717	201	1
LE	HCRCD	202	EEL RIVER/EEL RIVER	40.602149	-124.179056	Eel R	9353.0	2702717	202	1
LE	HCRCD	221	EEL RIVER/EEL RIVER	40.537625	-124.156212	Eel R	8168.5	2702645	221	1
LE	HCRCD	225	EEL RIVER/EEL RIVER	40.549392	-124.161358	Eel R	9292.4	2702627	225	1
LE	HCRCD	229	EEL RIVER/EEL RIVER	40.614310	-124.202979	Eel R	9355.4	2702601	229	1
LE	HCRCD	1289	BEAR CREEK/BEAR CR	40.422358	-123.993561	Bear Cr	22.3	2705857	1289	2
LE	HCRCD	1299	SCOTT CREEK/SCOTT CR	40.405670	-123.873718	Scott Cr	4.6	2705985	1299	4
LE	HCRCD	1324	HOWE CREEK/HOWE CREEK	40.495839	-124.169037	Howe Cr	26.0	2704023	1324	3
LE	HCRCD	1508	BEAR CREEK/BEAR CREEK	40.431317	-123.984699	Bear Cr	22.3	2705857	1508	5
LE	HCRCD	1523	CHADD CREEK/CHADD CREEK	40.416129	-123.961647	Chadd Cr	11.4	2705843	1523	5
LE	HCRCD	1559	FRANCES CREEK/FRANCES CREEK	40.573498	-124.264969	Francis Cr	10.7	2702151	8029	2
LE	HCRCD	1564	HOWE CREEK/HOWE CREEK	40.511737	-124.159631	Howe Cr	27.5	2702329	1564	5
LE	HCRCD	1571	LARABEE CREEK/LARABEE CREEK (UPPER)	40.334063	-123.679243	Larabee Cr	74.1	2706189	1571	3
LE	HCRCD	1607	PRICE CREEK/PRICE CREEK	40.529202	-124.163887	Price Cr	34.3	2702269	1607	5
LE	HCRCD	8022	HOWE CREEK/HOWE HACKETT RANCH	40.480260	-124.173975	Howe Cr	10.6	2704057	8022	1
LE	HCRCD	8029	FRANCIS CREEK/FRANCIS CREEK	40.574414	-124.266466	Francis Cr	10.7	2702151	8029	1
LE	HCRCD	9605	LARABEE CREEK/LARABEE CREEK	40.409342	-123.897768	Larabee Cr	216.8	2705825	9605	1
LE	HCRCD	9611	MONUMENT CREEK/MONUMENT CREEK	40.460970	-124.113492	Monument Cr	14.0	2704077	1306	1
LE	HCRCD	9613	SHIVELY CREEK/SHIVELY CREEK	40.435427	-123.968608	Shively Cr	7.3	2705713	1330	1
LE	HCRCD	9614	HOWE CREEK/HOWE CREEK	40.489062	-124.170011	Howe Cr	14.3	2704043	9614	1
LE	HCRCD	9620	MONUMENT CREEK/MONUMENT CREEK	40.463607	-124.113762	Monument Cr	14.0	2704077	1306	4
LE	HCRCD	9621	LARABEE CREEK/LARABEE	40.408871	-123.899302	Larabee Cr	216.8	2705825	9605	4
LE	HCRCD	9624	SHIVELY CREEK/SHIVELY CRK	40.434052	-123.966761	Shively Cr	7.3	2705713	1330	4
LE	HCRCD	9626	STITZ CREEK/STITZ CRK	40.464797	-124.053026	Stitz Cr	10.4	2704075	9626	2
LE	HCRCD	9628	EEL RIVER/EEL RIVER	40.465979	-124.099828	Eel R	8045.1	2704741	9628	1
LE	HCRCD	9629	EEL RIVER/EEL RIVER	40.464067	-124.097361	Eel R	8045.1	2704741	9628	1
LE	HCRCD	9630	EEL RIVER/EEL RIVER	40.455532	-124.078439	Eel R	8029.8	2704763	1356	1
LE	HCRCD	9631	EEL RIVER/EEL RIVER	40.454369	-124.071667	Eel R	8029.8	2704763	1356	1
LE	HCRCD	9632	EEL RIVER/EEL RIVER	40.444326	-124.034938	Eel R	7990.4	2704755	1345	1
LE	HCRCD	9634	EEL RIVER/EEL RIVER	40.414928	-123.934812	Eel R	7908.3	2708621	9634	1
LE	HCRCD	9635	EEL RIVER/EEL RIVER	40.406692	-123.934127	Eel R	7678.2	2708623	9635	1
LE	HCRCD	9645	LARABEE CREEK/Upper Larabee Creek	40.398201	-123.794669	Larabee Cr	161.7	2705915	9645	3
LE	HCRCD	9646	JORDAN CREEK/Jordan Creek	40.435748	-124.040159	Jordan Cr	12.2	2704097	1567	3
LE	HCRCD	9647	HOWE CREEK/Howe Creek	40.488628	-124.170255	Howe Cr	14.3	2704043	9614	2
LE	HCRCD	9648	ATWELL CREEK/Atwell Creek	40.494580	-124.167567	Atwell Cr	11.3	2704081	9648	3
LE	HCRCD	9654	NA/NA	40.422162	-123.993551	Bear Cr	22.3	2705857	1289	2
LE	HCRCD	9657	STRONGS CREEK/NA	40.598858	-124.119324	Strongs Cr	7.1	2702059	1315	2
LE	HCRCD	9658	NORTH FORK STRONGS CREEK/NA	40.601431	-124.113140	NF Strongs Cr	6.8	2702051	9658	2
LE	HSU FSP	201	EEL RIVER/CANEVARI 1/M-F LOWER EEL	40.596993	-124.165578	Eel R	9353.0	2702717	201	3
LE	HSU FSP	202	EEL RIVER/DRAKE - EEL/DRAKE EEL	40.602149	-124.179056	Eel R	9353.0	2702717	202	3
LE	HSU FSP	205	EEL RIVER/ES&G/HANSEN HAUCK BAR	40.562886	-124.155067	Eel R	9292.4	2702627	205	1
LE	HSU FSP	206	EEL RIVER/HANSEN BAR	40.561227	-124.156785	Eel R	9292.4	2702627	205	1
LE	HSU FSP	210	EEL RIVER/MERCER FRASIER STN. A	40.594899	-124.164907	Eel R	9353.0	2702717	210	1
LE	HSU FSP	211	EEL RIVER/MERCER FRASIER STN. 2	40.597122	-124.165885	Eel R	9353.0	2702717	201	1
LE	HSU FSP	221	EEL RIVER/ES&G ABV VAN DUZEN	40.537625	-124.156212	Eel R	8168.5	2702645	221	2
LE	HSU FSP	225	EEL RIVER/ES&G/HANSEN - HAUCK BAR	40.549392	-124.161358	Eel R	9292.4	2702627	225	2

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. Area	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	(km <sup>2</sup> )	Reach COMID	ID Stnd.		
LE	HSU FSP	227	EEL RIVER/M-F LOWER EEL	40.591269	-124.161649	Strongs Cr	43.8	2702715	227		1
LE	HSU FSP	229	EEL RIVER/ARM - LOWER EEL	40.614310	-124.202979	Eel R	9355.4	2702601	229		2
LE	HSU FSP	234	EEL RIVER/COUNTY OF HUMBOLDT - WORS/COUNTY OF HUMBOLDT - WORSWICK	40.609939	-124.192072	Eel R	9353.7	2702617	229		2
LE	HSU FSP	958	SLATER/SLATER1	40.504231	-124.136867	Slater Cr	3.5	2702335	958		2
LE	HSU FSP	1202	LARABEE/LARABEE 1/STA_2	40.407948	-123.901848	Larabee Cr	221.8	2705839	1202		4
LE	HSU FSP	1289	BEAR CR/BEAR CR 1/STA_89	40.422358	-123.993561	Bear Cr	22.3	2705857	1289		2
LE	HSU FSP	1293	STRONGS CR/STA_93/STRONGS 1	40.581084	-124.145701	Strongs Cr	32.1	2702495	1293		2
LE	HSU FSP	1295	TWIN CR/TWIN 1	40.452585	-124.072189	Twin Cr	5.4	2704091	1295		1
LE	HSU FSP	1299	SCOTT CR/SCOTT 1/STA_99	40.405670	-123.873718	Scott Cr	4.6	2705985	1299		3
LE	HSU FSP	1306	MONUMENT/MONUMENT 2/STA_106	40.460045	-124.113005	Monument Cr	14.0	2704077	1306		4
LE	HSU FSP	1315	STRONGS CR/STRONGS 2	40.598851	-124.119299	Strongs Cr	7.1	2702059	1315		1
LE	HSU FSP	1324	HOWE CREEK/STA_124	40.495839	-124.169037	Howe Cr	26.0	2704023	1324		2
LE	HSU FSP	1330	SHIVELY CREEK/STA_130	40.433849	-123.966473	Shively Cr	7.3	2705713	1330		2
LE	HSU FSP	1345	EEL/STA_145	40.444933	-124.035764	Eel R	7990.4	2704755	1345		2
LE	HSU FSP	1356	EEL/STA_156	40.454601	-124.074740	Eel R	8029.8	2704763	1356		2
LE	HSU FSP	1484	EEL RIVER @ SALT RIV EST./HTEROOO2	40.622334	-124.312256	Salt R	105.7	2701993	1484		1
LE	HSU FSP	1507	BEAR CREEK/HTBE0091.961/HTBE91.971	40.431116	-123.986476	Bear Cr	22.3	2705857	1507		2
LE	HSU FSP	1508	BEAR CREEK/HTBE0090.961/HTBE90.971/HTBE90.981	40.431317	-123.984699	Bear Cr	22.3	2705857	1508		3
LE	HSU FSP	1523	CHADD CREEK/HTCC0220.961/HTCC220.971/HTCC220.981	40.416129	-123.961647	Chadd Cr	11.4	2705843	1523		3
LE	HSU FSP	1559	FRANCES CREEK/HTFR0060.961/HTFR60.971/HTFR60.981	40.573498	-124.264969	Francis Cr	10.7	2702151	8029		3
LE	HSU FSP	1564	HOWE CREEK/HTHW0070.961/HTHW70.981	40.511737	-124.159631	Howe Cr	27.5	2702329	1564		2
LE	HSU FSP	1567	JORDON CRK./HDJO92.971/HTJO0080.961	40.440122	-124.037082	Jordan Cr	12.2	2704097	1567		2
LE	HSU FSP	1571	LARABEE CREEK (UPPER)/HTLA1120.961/HTLA1120.971/HTLA1120.981	40.334063	-123.679243	Larabee Cr	74.1	2706189	1571		3
LE	HSU FSP	1607	PRICE CREEK/HTPR0070.962	40.529202	-124.163887	Price Cr	34.3	2702269	1607		1
LE	NorWeST CAState SWRCB NC Region	10009	Eel River - Middle Fork	40.596108	-124.166445	Eel R	9353.0	2702717	201		
LE	NorWeST CAState SWRCB NC Region	10010	Eel River	40.602361	-124.178956	Eel R	9353.0	2702717	202		
LE	NorWeST CAState SWRCB NC Region	10014	Eel River	40.537585	-124.156728	Eel R	8168.5	2702645	221		
LE	NorWeST CAState SWRCB NC Region	10015	Eel River	40.549398	-124.161428	Eel R	9292.4	2702627	225		
LE	NorWeST CAState SWRCB NC Region	10019	Eel River	40.610061	-124.191989	Eel R	9353.7	2702617	229		
LE	NorWeST CAState SWRCB NC Region	10042	Larabee Creek	40.407902	-123.901839	Larabee Cr	221.8	2705839	1202		
LE	NorWeST CAState SWRCB NC Region	10046	Bear Creek	40.422360	-123.993407	Bear Cr	22.3	2705857	1289		
LE	NorWeST CAState SWRCB NC Region	10047	Scott Creek	40.405600	-123.873464	Scott Cr	4.6	2705985	1299		
LE	NorWeST CAState SWRCB NC Region	10058	SHIVELY CREEK	40.433878	-123.966427	Shively Cr	7.3	2705713	1330		
LE	NorWeST CAState SWRCB NC Region	10060	Eel River	40.454489	-124.074799	Eel R	8029.8	2704763	1356		
LE	NorWeST CAState SWRCB NC Region	10255	Monument Creek	40.460017	-124.113108	Monument Cr	14.0	2704077	1306		
LE	NorWeST CAState SWRCB NC Region	10259	Howe Creek	40.495845	-124.169115	Howe Cr	26.0	2704023	1324		
LE	NorWeST CAState SWRCB NC Region	10608	Bear Creek	40.422162	-123.993401	Bear Cr	22.3	2705857	1289		
LE	NorWeST NPO HCRCD	HCRCD_1202	LARABEE CREEK	40.407902	-123.901839	Larabee Cr	221.8	2705839	1202		
LE	NorWeST NPO HCRCD	HCRCD_1289	BEAR CREEK	40.422360	-123.993407	Bear Cr	22.3	2705857	1289		
LE	NorWeST NPO HCRCD	HCRCD_1293	STRONGS CREEK	40.581253	-124.145935	Strongs Cr	32.1	2702495	1293		
LE	NorWeST NPO HCRCD	HCRCD_1299	SCOTT CREEK	40.405600	-123.873464	Scott Cr	4.6	2705985	1299		
LE	NorWeST NPO HCRCD	HCRCD_1306	MONUMENT CREEK	40.460017	-124.113108	Monument Cr	14.0	2704077	1306		
LE	NorWeST NPO HCRCD	HCRCD_1324	HOWE CREEK	40.495845	-124.169115	Howe Cr	26.0	2704023	1324		
LE	NorWeST NPO HCRCD	HCRCD_1330	SHIVELY CREEK	40.433878	-123.966427	Shively Cr	7.3	2705713	1330		
LE	NorWeST NPO HCRCD	HCRCD_1341	TRIB TO LARABEE CREEK	40.389141	-123.781798		1.0	2705957	1341		
LE	NorWeST NPO HCRCD	HCRCD_1345	EEL RIVER	40.444800	-124.035808	Eel R	7990.4	2704755	1345		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
LE	NorWeST NPO HCRCD	HCRCD_1508	BEAR CREEK	40.431156	-123.984721	Bear Cr	22.3	2705857	1508		
LE	NorWeST NPO HCRCD	HCRCD_1523	CHADD CREEK	40.416244	-123.961472	Chadd Cr	11.4	2705843	1523		
LE	NorWeST NPO HCRCD	HCRCD_1559	FRANCES CREEK	40.573541	-124.264905	Francis Cr	10.7	2702151	8029		
LE	NorWeST NPO HCRCD	HCRCD_1564	HOWE CREEK	40.511692	-124.159523	Howe Cr	27.5	2702329	1564		
LE	NorWeST NPO HCRCD	HCRCD_1567	JORDAN CREEK	40.440116	-124.037265	Jordan Cr	12.2	2704097	1567		
LE	NorWeST NPO HCRCD	HCRCD_1571	LARABEE CREEK	40.334085	-123.679254	Larabee Cr	74.1	2706189	1571		
LE	NorWeST NPO HCRCD	HCRCD_1607	PRICE CREEK	40.529244	-124.163883	Price Cr	34.3	2702269	1607		
LE	NorWeST NPO HCRCD	HCRCD_201	EEL RIVER	40.596108	-124.166445	Eel R	9353.0	2702717	201		
LE	NorWeST NPO HCRCD	HCRCD_202	EEL RIVER	40.602361	-124.178956	Eel R	9353.0	2702717	202		
LE	NorWeST NPO HCRCD	HCRCD_205	EEL RIVER	40.562927	-124.155164	Eel R	9292.4	2702627	205		
LE	NorWeST NPO HCRCD	HCRCD_206	EEL RIVER	40.561309	-124.156981	Eel R	9292.4	2702627	206		
LE	NorWeST NPO HCRCD	HCRCD_211	EEL RIVER	40.596831	-124.167312	Eel R	9353.0	2702717	211		
LE	NorWeST NPO HCRCD	HCRCD_221	EEL RIVER	40.537585	-124.156728	Eel R	8168.5	2702645	221		
LE	NorWeST NPO HCRCD	HCRCD_225	EEL RIVER	40.549398	-124.161429	Eel R	9292.4	2702627	225		
LE	NorWeST NPO HCRCD	HCRCD_234	EEL RIVER	40.610061	-124.191989	Eel R	9353.7	2702617	229		
LE	NorWeST NPO HCRCD	HCRCD_8022	HOWE CREEK	40.480134	-124.173859	Howe Cr	10.6	2704057	8022		
LE	NorWeST NPO HCRCD	HCRCD_8029	FRANCIS CREEK	40.574419	-124.266501	Francis Cr	10.7	2702151	8029		
LE	NorWeST NPO HCRCD	HCRCD_9611	MONUMENT CREEK	40.460970	-124.113486	Monument Cr	14.0	2704077	1306		
LE	NorWeST NPO HCRCD	HCRCD_9613	SHIVELY CREEK	40.435328	-123.968582	Shively Cr	7.3	2705713	1330		
LE	NorWeST NPO HCRCD	HCRCD_9614	HOWE CREEK	40.489083	-124.170105	Howe Cr	14.3	2704043	9614		
LE	NorWeST NPO HCRCD	HCRCD_9620	MONUMENT CREEK	40.463583	-124.113842	Monument Cr	14.0	2704077	1306		
LE	NorWeST NPO HCRCD	HCRCD_9621	LARABEE CREEK	40.408746	-123.899179	Larabee Cr	216.8	2705825	9605		
LE	NorWeST NPO HCRCD	HCRCD_9624	SHIVELY CREEK	40.434108	-123.966672	Shively Cr	7.3	2705713	1330		
LE	NorWeST NPO HCRCD	HCRCD_9626	STITZ CREEK	40.464804	-124.053159	Stitz Cr	10.4	2704075	9626		
LE	NorWeST NPO HCRCD	HCRCD_9628	EEL RIVER	40.465969	-124.099857	Eel R	8045.1	2704741	9628		
LE	NorWeST NPO HCRCD	HCRCD_9629	EEL RIVER	40.463904	-124.097552	Eel R	8045.1	2704741	9629		
LE	NorWeST NPO HCRCD	HCRCD_9630	EEL RIVER	40.455488	-124.078469	Eel R	8029.8	2704763	1356		
LE	NorWeST NPO HCRCD	HCRCD_9632	EEL RIVER	40.444246	-124.034962	Eel R	7990.4	2704755	1345		
LE	NorWeST NPO HCRCD	HCRCD_9634	EEL RIVER	40.415053	-123.934393	Eel R	7908.3	2708621	9634		
LE	NorWeST NPO HCRCD	HCRCD_9635	EEL RIVER	40.406552	-123.933706	Eel R	7678.2	2708623	9635		
LE	NorWeST NPO HCRCD	HCRCD_9645	LARABEE CREEK	40.398182	-123.794463	Larabee Cr	161.7	2705915	9645		
LE	NorWeST NPO HCRCD	HCRCD_9646	JORDAN CREEK	40.435770	-124.040231	Jordan Cr	12.2	2704097	1567		
LE	NorWeST NPO HCRCD	HCRCD_9647	HOWE CREEK	40.488652	-124.170296	Howe Cr	14.3	2704043	9614		
LE	NorWeST NPO HCRCD	HCRCD_9648	ATWELL CREEK	40.494579	-124.167578	Atwell Cr	11.3	2704081	9648		
LE	NorWeST NPO HCRCD	HCRCD_9657	STRONGS CREEK	40.598863	-124.119322	Strongs Cr	7.1	2702059	1315		
LE	NorWeST NPO HCRCD	HCRCD_9658	NORTH FORK STRONGS CREEK	40.601497	-124.113172	NF Strongs Cr	6.8	2702051	9658		
LE	PGE	27	Eel below the South Fork / Bottom of water column	40.374023	-123.922759	Eel R	7662.2	2708627	9813		8
LE	UCB KBG	ME Holmes	EEL RIVER/EEL RIVER	40.416642	-123.935300	Eel R	7908.3	2708621	9634		1
ME	ERRP	BRGRDSBR	Burger DS Bear Pen Canyon	39.694366	-123.412944	Burger Cr	31.9	2709759	9712		1
ME	ERRP	BRPNCYNL	Bear Pen Canyon at Burger	39.694471	-123.413917		12.6	2709761	9724		1
ME	ERRP	BRPNCYNUP	Bear Pen Cny Upper upstream of unnamed tributary	39.694438	-123.436079		3.8	2709763	9725		1
ME	ERRP	Chemise_Pool	Chamise DS Dry Cr Pool	40.043002	-123.553492	Chamise Cr	68.3	2707221	9806	Isolated Pool	1
ME	ERRP	Chemise_Riffle	Chamise DS Dry Cr	40.042613	-123.553625	Chamise Cr	68.3	2707221	9807		1
ME	ERRP	CHMS	Chamise DS Dry Cr	40.042613	-123.553625	Chamise Cr	68.3	2707221	9807		1
ME	ERRP	CHMS_P_14	Chamise DS Dry Cr Pool	40.043002	-123.553492	Chamise Cr	68.3	2707221	9806	Isolated Pool	1
ME	ERRP	CHMSPOOL	Chamise DS Dry Cr Pool	40.043002	-123.553492	Chamise Cr	68.3	2707221	9806	Isolated Pool	1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
										Pool	
ME	ERRP	CNLY_UP	CONLEY CREEK/NA	40.273425	-123.624490	Conley Cr	16.1	2706441	1667		1
ME	ERRP	DBBYN_12	Lower Dobbyn	40.236794	-123.635935	Dobbyn Cr	160.8	2706525	9720		1
ME	ERRP	DBBYN_NF	NORTH DOBBYN CREEK/NORTH DOBBYN	40.221999	-123.602231	North Dobbyn Cr	44.0	2706557	1595		1
ME	ERRP	DBBYN_SF	SOUTH DOBBYN CREEK/DOBBYNS CREEK	40.191980	-123.588280	South Dobbyn Cr	96.4	2706635	1437		1
ME	ERRP	DBBYNNF_12	NORTH DOBBYN CREEK/NORTH DOBBYN	40.221999	-123.602231	North Dobbyn Cr	44.0	2706557	1595		1
ME	ERRP	DBBYNSF_12	SOUTH DOBBYN CREEK/DOBBYNS CREEK	40.191980	-123.588280	South Dobbyn Cr	96.4	2706635	1437		1
ME	ERRP	Dobbyn_Lower	Lower Dobbyn	40.236794	-123.635935	Dobbyn Cr	160.8	2706525	9720		1
ME	ERRP	Dobbyn_SF	SOUTH DOBBYN CREEK/DOBBYNS CREEK	40.191980	-123.588280	South Dobbyn Cr	96.4	2706635	1437		1
ME	ERRP	Eel_AP	Eel at Alderpoint	40.165139	-123.599715	Eel R	5375.4	2706739	9721		1
ME	ERRP	L_DBYN_14	Lower Dobbyn	40.236794	-123.635935	Dobbyn Cr	160.8	2706525	9720		1
ME	ERRP	LLRB_Up_14	CONLEY CREEK/NA	40.273425	-123.624490	Conley Cr	16.1	2706441	1667		1
ME	ERRP	ME_AP	Eel at Alderpoint	40.165139	-123.599715	Eel R	5375.4	2706739	9721		1
ME	ERRP	ME_AP_14	Eel at Alderpoint	40.165139	-123.599715	Eel R	5375.4	2706739	9721		1
ME	ERRP	ME_BLMF_14	EEL RIVER/EEL DOWNSTRM OF MF	39.714515	-123.352465	Eel R	3790.5	2709747	1550		1
ME	ERRP	ME_USWC	Eel upstream of Woodman	39.776261	-123.391243	Eel R	3869.4	2709695	9722		1
ME	ERRP	MEEL_AP_12	Eel at Alderpoint	40.165139	-123.599715	Eel R	5375.4	2706739	9721		1
ME	ERRP	NFDBYN_14	NORTH DOBBYN CREEK/NORTH DOBBYN	40.221999	-123.602231	North Dobbyn Cr	44.0	2706557	1595		1
ME	ERRP	WDMN_UP	Woodman Creek Upper	39.744447	-123.447394	Woodman Cr	15.4	2710635	9723		1
ME	HCRCD	239	EEL RIVER/EEL RIVER	40.210058	-123.632358	Eel R	5456.1	2708745	235		1
ME	HCRCD	1437	SOUTH DOBBYN CREEK/DOBBYNS CREEK	40.191980	-123.588280	South Dobbyn Cr	96.4	2706635	1437		5
ME	HCRCD	1509	BURGER CREEK/BURGER CREEK	39.723023	-123.366493	Burger Cr	48.1	2709745	1509		5
ME	HCRCD	1527	CHAMISE CREEK/CHAMISE CREEK (UPPER)	40.036999	-123.554114	Chamise Cr	55.4	2707227	1527		3
ME	HCRCD	1550	EEL RIVER/EEL DOWNSTRM OF MF	39.714515	-123.352465	Eel R	3790.5	2709747	1550		5
ME	HCRCD	1554	EEL RIVER/EEL RIVER @ EEL ROCK	40.284682	-123.730555	Eel R	5732.5	2706399	1554		4
ME	HCRCD	1555	EEL RIVER/EEL RIVER @ DYERVILE BRIDGE	40.353659	-123.917094	Eel R	5871.0	2708635	1346		4
ME	HCRCD	1595	NORTH DOBBYN CREEK/NORTH DOBBYN	40.221999	-123.602231	North Dobbyn Cr	44.0	2706557	1595		5
ME	HCRCD	1640	SONOMA CREEK/SONOMA CREEK	40.303958	-123.797386	Sonoma Cr	12.8	2706339	1640		1
ME	HCRCD	1667	CONLEY CREEK/NA	40.273425	-123.624490	Conley Cr	16.1	2706441	1667		4
ME	HCRCD	8026	MUD CREEK/MUD CREEK UPPER	40.200717	-123.522292	Mud Cr	31.8	2706641	8026		1
ME	HCRCD	8028	MUD CREEK/MUD CREEK (DOWN)	40.199488	-123.523064	Mud Cr	31.8	2706641	8028		1
ME	HCRCD	9612	NEWMAN CREEK/NEWMAN CREEK	40.343760	-123.904739			[Not in network]	1322		1
ME	HCRCD	9625	NEWMAN CREEK/NEWMAN CRK	40.346081	-123.903535			[Not in network]	1322		4
ME	HCRCD	9636	EEL RIVER/SF EEL	40.353351	-123.913073	Eel R	5870.5	2706091	1346		1
ME	HCRCD	9637	EEL RIVER/SF EEL	40.354002	-123.915072	Eel R	5871.0	2708635	1346		1
ME	HCRCD	9639	EEL RIVER/EEL RIVER	40.341009	-123.912911	Eel R	5869.6	2708643	9639		1
ME	HCRCD	9640	EEL RIVER/EEL RIVER	40.342764	-123.873608	Eel R	5846.4	2708645	9640		1
ME	HCRCD	9641	EEL RIVER/EEL RIVER	40.345324	-123.877585	Eel R	5846.4	2708645	9640		1
ME	HCRCD	9644	KAPPLE CREEK/Kapple Creek	40.344837	-123.859753	Kapple Cr	3.8	2706133	9644		1
ME	HCRCD	9650	THOMPSON CREEK/Thompson Creek	40.344801	-123.854628	Thompson Cr	10.1	2706125	1326		3
ME	HCRCD	9651	NA/NA	40.345992	-123.858894	Kapple Cr	3.8	2706133	9644		2
ME	HSU FSP	235	EEL RIVER/SATTERLEE - UPSTREAM/SATTERLEE 2	40.211947	-123.632057	Eel R	5456.1	2708745	235		2
ME	HSU FSP	236	EEL RIVER/SATTERLEE - DOWNSTREAM	40.213182	-123.631904	Eel R	5456.1	2708745	235		1
ME	HSU FSP	239	EEL RIVER/SATTERLEE 1	40.210058	-123.632358	Eel R	5456.1	2708745	235		1
ME	HSU FSP	1322	NEWMAN CREEK/STA_122	40.348719	-123.901919			[Not in network]	1322		2

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI COMID	Site ID Stnd.	Special	Yrs
ME	HSU FSP	1326	THOMPSON CREEK/STA_126	40.345970	-123.854519	Thompson Cr	10.1	2706125	1326		2
ME	HSU FSP	1346	EEL/STA_146	40.354255	-123.914389	Eel R	5870.5	2706091	1346		1
ME	HSU FSP	1437	DOBBYNS CREEK/HTD0550.981/HTDO550.971	40.191980	-123.588280	South Dobbyn Cr	96.4	2706635	1437		2
ME	HSU FSP	1509	BURGER CREEK/HTBG0850.961/HTBG850.971/HTBG850.981	39.723023	-123.366493	Burger Cr	48.1	2709745	1509		3
ME	HSU FSP	1527	CHAMISE CREEK (UPPER)/HTCM0870.961/HTCM870.971/HTCM870.981	40.036999	-123.554114	Chamise Cr	55.4	2707227	1527		3
ME	HSU FSP	1550	EEL DOWNSTRM OF MF/HTER0880.961/HTER880.971/HTER880.981	39.714515	-123.352465	Eel R	3790.5	2709747	1550		3
ME	HSU FSP	1551	EEL RIVER(NASHMEAD BAR)/HTER0760.961/HTER760.971/HTER760.981	39.822299	-123.412875	Eel R	3985.4	2709629	1551		3
ME	HSU FSP	1554	EEL RIVER @ EEL ROCK/HTER0160.961/HTER160.971/HTER160.981	40.284682	-123.730555	Eel R	5732.5	2706399	1554		3
ME	HSU FSP	1555	EEL RIVER @ DYERVILE BRIDGE/HTER0110.961/HTER110.971/HTER110.981	40.353659	-123.917094	Eel R	5871.0	2708635	1346		3
ME	HSU FSP	1595	NORTH DOBBYN/HTDN420.981/HTND0420.961/HTND420.971	40.221999	-123.602231	North Dobbyn Cr	44.0	2706557	1595		3
ME	HSU FSP	1640	SONOMA CREEK/HTSN0160.961/HTSN160.971/HTSN160.981	40.303958	-123.797386	Sonoma Cr	12.8	2706339	1640		3
ME	HSU FSP	1642	STEELHEAD CREEK/HTSQ0100.961/HTSQ100.971	40.170649	-123.647649	Steelhead Cr	31.6	2706719	1642		2
ME	HSU FSP	1667	HTCY1460.981	40.273425	-123.624490	Conley Cr	16.1	2706441	1667		1
ME	HSU FSP	1683	HTER762.981	39.821164	-123.413593	Eel R	3985.4	2709629	1551		1
ME	NorWeST CAState SWRCB NC Region	10020	Eel River	40.211941	-123.632172	Eel R	5456.1	2708745	235		
ME	NorWeST CAState SWRCB NC Region	10021	Eel River	40.210115	-123.632440	Eel R	5456.1	2708745	235		
ME	NorWeST CAState SWRCB NC Region	10057	Thompson Creek	40.345948	-123.854338	Thompson Cr	10.1	2706125	1326		
ME	NorWeST CAState SWRCB NC Region	10121	Eel River	39.822306	-123.412988	Eel R	3985.4	2709629	1551		
ME	NorWeST CAState SWRCB NC Region	10123	Eel River	40.284637	-123.730517	Eel R	5732.5	2706399	1554		
ME	NorWeST CAState SWRCB NC Region	10344	EEL RIVER	39.822378	-123.412981	Eel R	3985.4	2709629	1498		
ME	NorWeST CAState SWRCB NC Region	10406	Eel River	39.714556	-123.352225	Eel R	3790.5	2709747	1550		5
ME	NorWeST CAState SWRCB NC Region	10606	Kapple Creek	40.345959	-123.858772	Kapple Cr	3.8	2706133	9644		
ME	NorWeST NPO HCRCD	HCRCD_1327	Thompson Creek	40.344439	-123.854533	Thompson Cr	10.1	2706125			
ME	NorWeST NPO HCRCD	HCRCD_1346	EEL RIVER	40.354120	-123.914407	Eel R	5870.5	2706091	1346		
ME	NorWeST NPO HCRCD	HCRCD_1437	SOUTH DOBBYN CREEK	40.191866	-123.588246	South Dobbyn Cr	96.4	2706635	1437		
ME	NorWeST NPO HCRCD	HCRCD_1509	BURGER CREEK	39.722991	-123.366398	Burger Cr	48.1	2709745	1509		
ME	NorWeST NPO HCRCD	HCRCD_1527	CHAMISE CREEK	40.037053	-123.554300	Chamise Cr	55.4	2707227	1527		
ME	NorWeST NPO HCRCD	HCRCD_1550	EEL RIVER	39.714475	-123.352343	Eel R	3790.5	2709747	1550		
ME	NorWeST NPO HCRCD	HCRCD_1554	EEL RIVER	40.284637	-123.730517	Eel R	5732.5	2706399	1554		
ME	NorWeST NPO HCRCD	HCRCD_1555	EEL RIVER	40.353798	-123.916999	Eel R	5871.0	2708635	1346		
ME	NorWeST NPO HCRCD	HCRCD_1595	NORTH DOBBYN CREEK	40.221972	-123.602220	North Dobbyn Cr	44.0	2706557	1595		
ME	NorWeST NPO HCRCD	HCRCD_1640	SONOMA CREEK	40.303958	-123.797303	Sonoma Cr	12.8	2706339	1640		
ME	NorWeST NPO HCRCD	HCRCD_1642	STEELHEAD CREEK	40.170645	-123.647615	Steelhead Cr	31.6	2706719	1642		
ME	NorWeST NPO HCRCD	HCRCD_1667	CONLEY CREEK	40.273392	-123.624481	Conley Cr	16.1	2706441	1667		
ME	NorWeST NPO HCRCD	HCRCD_235	EEL RIVER	40.211941	-123.632172	Eel R	5456.1	2708745	235		
ME	NorWeST NPO HCRCD	HCRCD_236	EEL RIVER	40.213198	-123.631986	Eel R	5456.1	2708745	235		
ME	NorWeST NPO HCRCD	HCRCD_239	EEL RIVER	40.210115	-123.632440	Eel R	5456.1	2708745	235		
ME	NorWeST NPO HCRCD	HCRCD_8026	MUD CREEK	40.200667	-123.522223	Mud Cr	31.8	2706641	8026		
ME	NorWeST NPO HCRCD	HCRCD_8028	MUD CREEK	40.199438	-123.523009	Mud Cr	31.8	2706641	8028		
ME	NorWeST NPO HCRCD	HCRCD_9636	EEL RIVER	40.353322	-123.912970	Eel R	5870.5	2706091	1346		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID		
ME	NorWeST NPO HCRCD	HCRCD_9637	EEL RIVER	40.353963	-123.915039	Eel R	5871.0	2708635	1346	
ME	NorWeST NPO HCRCD	HCRCD_9639	EEL RIVER	40.341021	-123.912887	Eel R	5869.6	2708643	9639	
ME	NorWeST NPO HCRCD	HCRCD_9640	EEL RIVER	40.342798	-123.873571	Eel R	5846.4	2708645	9640	
ME	NorWeST NPO HCRCD	HCRCD_9641	EEL RIVER	40.345339	-123.877575	Eel R	5846.4	2708645	9640	
ME	NorWeST NPO HCRCD	HCRCD_9644	KAPPLE CREEK	40.344706	-123.859494	Kapple Cr	3.8	2706133	9644	
ME	NorWeST NPO HCRCD	HCRCD_9650	THOMPSON CREEK	40.344797	-123.854515	Thompson Cr	10.1	2706125	1326	
ME	PGE	25	Eel below Middle Fork / Bottom of water column	39.714169	-123.352575	Eel R	3790.5	2709747	1550	
ME	PGE	26	Eel above the South Fork / Bottom of water column	40.354152	-123.914967	Eel R	5871.0	2708635	1346	9
ME	PGE	FTSW	Eel R. at Fort Seward	40.211947	-123.632057	Eel R	5456.1	2708745	235	3
MF	ERRP	Black_Butte_Lower	BLACK BUTTE RIVER/BLACK BUTTE CRK (LOWER)	39.821843	-123.082995	Black Butte R	419.6	8294911	1505	1
MF	ERRP	Black_Butte_Upper	Black Butte Falls 3 mi US MF Eel	39.804900	-123.061433	Black Butte R	403.2	8294943	9731	1
MF	ERRP	BLBT_ABJ	Black Butte US Jump Off	39.798174	-123.031978	Black Butte R	359.9	8294987	9803	1
MF	ERRP	BLBTFALL	Black Butte Falls 3 mi US MF Eel	39.804900	-123.061433	Black Butte R	403.2	8294943	9731	1
MF	ERRP	JFFBB_1_14	Black Butte DS Jumpoff Creek	39.798507	-123.032266	Black Butte R	394.7	8294967	9732	1
MF	ERRP	JFFBB_2_14	JUMPOFF CREEK/JUMPOFF CREEK	39.798891	-123.030949	Jumpoff Cr	33.7	8294965	1568	1
MF	ERRP	MF Eel Capistran 2	MF Eel Capistran Ranch #2	39.763450	-123.153383	Middle Fork Eel R	1078.5	8295063	9727	Data Missing
MF	ERRP	MF_ABME_14	MIDDLE FORK EEL RIVER/NA	39.713270	-123.352496	Middle Fork Eel R	1951.3	8295181	1678	1
MF	ERRP	MF_Bl_Williams	MF Eel downstream of Williams	39.810950	-123.139675	Middle Fork Eel R	1050.4	8294929	9728	1
MF	ERRP	MF_CAP_14	MF Eel Capistran Ranch #1	39.770617	-123.149117	Middle Fork Eel R	1078.5	8295063	9726	1
MF	ERRP	MF_Capistran	MF Eel Capistran Ranch #1	39.770617	-123.149117	Middle Fork Eel R	1078.5	8295063	9726	1
MF	ERRP	MFDSWC_12	MF Eel downstream of Williams	39.810950	-123.139675	Middle Fork Eel R	1050.4	8294929	9728	1
MF	ERRP	MFE_DR	MIDDLE FORK EEL RIVER/NA	39.713270	-123.352496	Middle Fork Eel R	1951.3	8295181	1678	1
MF	ERRP	MFE_DSWC	MF Eel downstream of Williams	39.810950	-123.139675	Middle Fork Eel R	1050.4	8294929	9728	1
MF	ERRP	Mill_MF_12	MILL CREEK/MILL CREEK (UPPER)	39.831595	-123.276762	Mill Cr	45.7	8294873	1594	DRY
MF	ERRP	WLLMSUM_12	WilliamsUS Murphy	39.855533	-123.141980	Williams Cr	40.1	8294799	9730	1
MF	ERRP	WLLMSUT_12	Williams Upper	39.885717	-123.119410	Williams Cr	30.3	8294757	9783	1
MF	ERRP	WLMSABMC	WilliamsUS Murphy	39.855533	-123.141980	Williams Cr	40.1	8294799	9730	1
MF	ERRP	WMSL_MF_14	Williams US Hwy 162	39.820295	-123.136239	Williams Cr	79.9	8294919	9729	1
MF	HCRCD	1505	BLACK BUTTE RIVER/BLACK BUTTE CRK (LOWER)	39.821843	-123.082995	Black Butte R	419.6	8294911	1505	5
MF	HCRCD	1514	BALM OF GILEAD CREEK/BALM OF GILEAD CREEK	40.030393	-123.091941	Balm of Gilead Cr	55.6	8292877	1514	3
MF	HCRCD	1520	BEAVER CREEK/BEAVER CREEK	39.936332	-122.990660	Beaver Cr	36.0	8297229	1520	5
MF	HCRCD	1543	ELK CREEK/ELK CREEK, MF	39.673437	-123.134132	Elk Cr	299.4	8295355	1543	3
MF	HCRCD	1578	MIDDLE FORK EEL RIVER/MF EEL ABOVE BLACK BUTTE.	39.826694	-123.085280	Middle Fork Eel R	531.0	8294891	1578	5
MF	HCRCD	1580	MIDDLE FORK EEL RIVER/MF EEL ABOVE THATCHER CRK	39.690642	-123.116864	Middle Fork Eel R	1411.7	8295271	1580	2
MF	HCRCD	1581	MIDDLE FORK EEL RIVER/MF EEL @ FERN PT POOL	40.027580	-123.105477	Middle Fork Eel R	232.7	8292883	1581	4
MF	HCRCD	1582	MIDDLE FORK EEL RIVER/MF EEL @ FERN PT RIFFLE	40.027815	-123.105556	Middle Fork Eel R	232.7	8292883	1582	4
MF	HCRCD	1583	MIDDLE FORK EEL RIVER/MF EEL @ OSBORN POOL	39.896471	-123.020021	Middle Fork Eel R	474.1	8294729	1583	5
MF	HCRCD	1584	MIDDLE FORK EEL RIVER/MF EEL @ OSBORN RIFFLE	39.896476	-123.019897	Middle Fork Eel R	474.1	8294729	1584	4
MF	HCRCD	1585	NORTH FORK MIDDLE FORK EEL RIVER/MF EEL, NORTH FORK	40.028869	-123.105425	NF Middle Fork Eel R	82.6	8292871	1585	3
MF	HCRCD	1587	MIDDLE FORK EEL RIVER/MF EEL @ WRIGHTS VL. BEL.FALLS	40.030628	-123.091789	Middle Fork Eel R	88.5	8292867	1587	3
MF	HCRCD	1588	MIDDLE FORK EEL RIVER/MF EEL @ WRIGHTS VL. ABV.FALLS	40.044632	-123.085739	Middle Fork Eel R	84.9	8292859	1588	1
MF	HCRCD	1589	NORTH FORK MIDDLE FORK EEL RIVER/MF,NF@ WILLOW CK	40.072517	-123.135674	NF Middle Fork Eel R	56.4	8292839	1589	2



Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
MF	HCRC	1623	RATTLESNAKE CREEK/RATTLESNAKE CREEK, MF	39.972915	-123.057026	Rattlesnake Cr	30.1	8294601	1623		5
MF	HCRC	1624	RATTLESNAKE CREEK/RATTLESNAKE POOL	39.973128	-123.057175	Rattlesnake Cr	30.1	8294601	1624		4
MF	HCRC	1625	RATTLESNAKE CREEK/RATTLESNAKE RIFFLE	39.973227	-123.057173	Rattlesnake Cr	30.1	8294601	1625		5
MF	HCRC	1641	SPANISH CREEK/SPANISH CREEK	39.606092	-122.865306	Spanish Cr	34.4	8297669	1641		5
MF	HCRC	1643	THATCHER CREEK/THATCHER CREEK	39.688530	-123.117038	Thatcher Cr	93.4	8295291	1643		2
MF	HCRC	1654	BLACK BUTTE RIVER/BLACK BUTTE (UPPER)	39.595026	-122.859143	Black Butte R	30.1	8297691	1654		4
MF	HCRC	1678	MIDDLE FORK EEL RIVER/NA	39.713270	-123.352496	Middle Fork Eel R	1951.3	8295181	1678		5
MF	HCRC	8019	MIDDLE FORK EEL RIVER/MF EEL	39.707850	-123.334720	Middle Fork Eel R	1938.4	8295193	1678		5
MF	HSU FSP	243	MF EEL RIVER/MCKENZIE BAR NEAR DOS RIOS	39.706652	-123.330345	Middle Fork Eel R	1932.8	8295203	1678		1
MF	HSU FSP	244	MF EEL RIVER/MCKENZIE BAR NEAR DOS RIOS	39.709556	-123.340288	Middle Fork Eel R	1940.4	8295191	1678		1
MF	HSU FSP	1402	BUCKHORN CREEK/HTBK2880/HTBK2880.971/HTBK2880.981	39.662825	-122.915736	Buckhorn Cr	11.1	8297585	1402		3
MF	HSU FSP	1502	BALDY CREEK/HTBA2800/HTBA2800.961/HTBA2800.971	39.667813	-122.917713	Baldy Cr	24.2	8297539	1502		3
MF	HSU FSP	1503	BLACK BUTTE CREEK (MIDDLE)/HTBB2230.961/HTBB2230.971	39.732384	-122.947111	Black Butte R	256.4	8297427	1503		1
MF	HSU FSP	1505	BLACK BUTTE CRK (LOWER)/HTBB1460.961/HTBB1460.971/HTBB1460.981	39.821843	-123.082995	Black Butte R	419.6	8294911	1505		3
MF	HSU FSP	1514	BALM OF GILEAD CREEK/HTBM4300.961/HTBM4300.971/HTBM4300.981	40.030393	-123.091941	Balm of Gilead Cr	55.6	8292877	1514		3
MF	HSU FSP	1520	BEAVER CREEK/HTBV2360.961/HTBV2360.971/HTBV2360.981	39.936332	-122.990660	Beaver Cr	36.0	8297229	1520		2
MF	HSU FSP	1526	COLD CREEK/HTCL2520.961/HTCL2520.971	39.695126	-122.920450	Cold Cr	57.9	8297487	1526		2
MF	HSU FSP	1543	ELK CREEK, MF/HTEK1150.961/HTEL1150.971/HTEL1150.981	39.673437	-123.134132	Elk Cr	299.4	8295355	1543		3
MF	HSU FSP	1556	FLY CREEK/HTFL2120.961	39.896915	-123.018830	Fly Cr	14.8	8294731	1556		1
MF	HSU FSP	1568	JUMPOFF CREEK/HTJU1640.961/HTJU1640.971	39.798891	-123.030949	Jumpoff Cr	33.7	8294965	1568		2
MF	HSU FSP	1578	MF EEL ABOVE BLACK BUTTE./HTMF1470.961/HTMF1470.971	39.826694	-123.085280	Middle Fork Eel R	531.0	8294891	1578		2
MF	HSU FSP	1580	MF EEL ABOVE THATCHER CRK/HTMF1155.961/HTMF1155.971/HTMF1155.981	39.690642	-123.116864	Middle Fork Eel R	1411.7	8295271	1580		3
MF	HSU FSP	1581	MF EEL @ FERN PT POOL/HTMF3894.961/HTMF3894.971/HTMF3894.981	40.027580	-123.105477	Middle Fork Eel R	232.7	8292883	1581		3
MF	HSU FSP	1582	MF EEL @ FERN PT RIFFLE/HTMF3895.961/HTMF3895.971/HTMF3895.981	40.027815	-123.105556	Middle Fork Eel R	232.7	8292883	1582		3
MF	HSU FSP	1583	MF EEL @ OSBORN POOL/HTMF2151.961/HTMF2151.971	39.896471	-123.020021	Middle Fork Eel R	474.1	8294729	1583		2
MF	HSU FSP	1584	MF EEL @ OSBORN RIFFLE/HTMF2150.961/HTMF2150.971/HTMF2150.981	39.896476	-123.019897	Middle Fork Eel R	474.1	8294729	1584		2
MF	HSU FSP	1585	MF EEL, NORTH FORK/HTMF1080.961/HTMF1080.971/HTMF3898.981	40.028869	-123.105425	NF Middle Fork Eel R	82.6	8292871	1585		3
MF	HSU FSP	1586	MF EEL (UPPER)/HTMF4158.961	40.109775	-122.992977	Middle Fork Eel R	17.6	8294125	1586		1
MF	HSU FSP	1587	MF EEL @ WRIGHTSVL. BEL.FALLS/HTMF3696.961/HTMF3861.971/HTMF3861.981	40.030628	-123.091789	Middle Fork Eel R	88.5	8292867	1587		3
MF	HSU FSP	1588	MF EEL @ WRIGHTSVL.ABV.FALLS/HTMF4158.961/HTMF4158.971	40.044632	-123.085739	Middle Fork Eel R	84.9	8292859	1588		1
MF	HSU FSP	1589	MF,NF@ WILLOW CK/HTMF1220.961/HTWW1220.971/HTWW1220.981	40.072517	-123.135674	NF Middle Fork Eel R	56.4	8292839	1589		3
MF	HSU FSP	1593	MENDENHALL CREEK/HTMN2630.961/HTMN2630.971/HTMN2630.981	39.557714	-123.000925	Mendenhall Cr	19.2	8297745	1593		3

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
MF	HSU FSP	1594	MILL CREEK (UPPER)/HTMP1440.961	39.831595	-123.276762	Mill Cr	45.7	8294873	1594		1
MF	HSU FSP	1622	ROBINSON CREEK/HTMF5082.971/HTRO5082.961	40.109774	-122.992977	Middle Fork Eel R	17.6	8294125	1622		2
MF	HSU FSP	1623	RATTLESNAKE CREEK, MF/HTRT2870.961/HTRT2870.971	39.972915	-123.057026	Rattlesnake Cr	30.1	8294601	1623		2
MF	HSU FSP	1624	RATTLESNAKE	39.973128	-123.057175	Rattlesnake Cr	30.1	8294601	1624		3
			POOL/HTRT3000.961/HTRT3000.971/HTRT3000.981								
MF	HSU FSP	1625	RATTLESNAKE	39.973227	-123.057173	Rattlesnake Cr	30.1	8294601	1625		3
			RIFFLE/HTRT3001.961/HTRT3001.971/HTRT3001.981								
MF	HSU FSP	1641	SPANISH CREEK/HTSP3320.961/HTSP3320.981	39.606092	-122.865306	Spanish Cr	34.4	8297669	1641		2
MF	HSU FSP	1643	THATCHER	39.688530	-123.117038	Thatcher Cr	93.4	8295291	1643		3
			CREEK/HTTH1160.961/HTTH1160.971/HTTH1160.981								
MF	HSU FSP	1654	BLACK BUTTE	39.595026	-122.859143	Black Butte R	30.1	8297691	1654		3
			(UPPER)/HTBB3360.971/HTBB3360.981/HTBB3380.961								
MF	HSU FSP	1677	HTBB1450.981	39.823580	-123.086615	Black Butte R	419.6	8294911	1505		1
MF	HSU FSP	1678	HTMF870.981	39.713270	-123.352496	Middle Fork Eel R	1951.3	8295181	1678		1
MF	HSU FSP	2028	MURPHY CREEK/38-1	39.880787	-123.163503	Murphy Cr	11.1	8294721	2028		1
MF	HSU FSP	2043	EASTMAN CREEK/59-1	39.707231	-123.334272	Eastman Cr	5.5	8295241	2043		1
MF	HSU FSP	2047	SALT CREEK/59-2	39.697463	-123.269582	Salt Cr	43.2	8295273	2047		1
MF	HSU FSP	2049	COLD CREEK (UPP)/57-4	39.678388	-122.827058	Cold Cr	6.5	8297575	2049		1
MF	HSU FSP	2058	SPANISH CREEK (UPP)/61-2	39.633191	-122.788734	Spanish Cr	7.6	8297615	2058		1
MF	HSU FSP	2059	SPANISH CREEK (LOW)/61-1	39.629277	-122.817373	Spanish Cr	15.1	8297629	2059		1
MF	HSU FSP	2064	CROCKER CREEK/65-1	39.548143	-123.073289	Crocker Cr	11.8	8295553	2064		1
MF	HSU FSP	2065	SULPHUR SPRINGS CREEK/65-2	39.545599	-123.041624	Sulphur Springs Cr	14.1	8295565	2065		1
MF	NorWeST CAState SWRCB NC Region	10024	Eel River - Middle Fork	39.706678	-123.330283	Middle Fork Eel R	1932.8	8295203	1678		
MF	NorWeST CAState SWRCB NC Region	10025	Eel River - Middle Fork	39.709471	-123.340392	Middle Fork Eel R	1940.4	8295191	1678		
MF	NorWeST CAState SWRCB NC Region	10154	Eel River - Middle Fork	40.030607	-123.091737	Middle Fork Eel R	88.5	8292867	1587		1
MF	NorWeST CAState SWRCB NC Region	10155	Eel River - Middle Fork	40.044624	-123.086103	Middle Fork Eel R	84.9	8292859	1588		
MF	NorWeST CAState SWRCB NC Region	10191	Rattlesnake Creek	39.973148	-123.056968	Rattlesnake Cr	30.1	8294601	1624		1
MF	NorWeST CAState SWRCB NC Region	10404	Eel River - Middle Fork	39.707815	-123.335951	Middle Fork Eel R	1938.4	8295193	1678		1
MF	NorWeST CAState SWRCB NC Region	10407	Eel River - Middle Fork	39.713217	-123.352348	Middle Fork Eel R	1951.3	8295181	1678		4
MF	NorWeST NPO HCRCD	HCRCD_1402	BUCKHORN CREEK	39.662735	-122.915695	Buckhorn Cr	11.1	8297585	1402		
MF	NorWeST NPO HCRCD	HCRCD_1502	BALDY CREEK	39.667783	-122.917731	Baldy Cr	24.2	8297539	1502		
MF	NorWeST NPO HCRCD	HCRCD_1503	BLACK BUTTE RIVER	39.732068	-122.946796	Black Butte R	268.4	8297419	1503		
MF	NorWeST NPO HCRCD	HCRCD_1505	BLACK BUTTE RIVER	39.821865	-123.082957	Black Butte R	419.6	8294911	1505		
MF	NorWeST NPO HCRCD	HCRCD_1514	BALM OF GILEAD CREEK	40.030457	-123.091749	Balm of Gilead Cr	55.6	8292877	1514		
MF	NorWeST NPO HCRCD	HCRCD_1520	BEAVER CREEK	39.936137	-122.990678	Beaver Cr	36.0	8297229	1520		
MF	NorWeST NPO HCRCD	HCRCD_1526	COLD CREEK	39.695090	-122.920235	Cold Cr	57.9	8297487	1526		
MF	NorWeST NPO HCRCD	HCRCD_1543	ELK CREEK	39.673440	-123.134140	Elk Cr	299.4	8295355	1543		
MF	NorWeST NPO HCRCD	HCRCD_1556	FLY CREEK	39.896757	-123.018790	Fly Cr	14.8	8294731	1556		
MF	NorWeST NPO HCRCD	HCRCD_1568	JUMPOFF CREEK	39.798945	-123.030962	Jumpoff Cr	33.7	8294965	1568		
MF	NorWeST NPO HCRCD	HCRCD_1578	MIDDLE FORK EEL RIVER	39.826736	-123.085311	Middle Fork Eel R	531.0	8294891	1578		
MF	NorWeST NPO HCRCD	HCRCD_1580	MIDDLE FORK EEL RIVER	39.690721	-123.116927	Middle Fork Eel R	1411.7	8295271	1580		
MF	NorWeST NPO HCRCD	HCRCD_1581	MIDDLE FORK EEL RIVER	40.027581	-123.105532	Middle Fork Eel R	232.7	8292883	1581		
MF	NorWeST NPO HCRCD	HCRCD_1582	MIDDLE FORK EEL RIVER	40.027814	-123.105525	Middle Fork Eel R	232.7	8292883	1582		
MF	NorWeST NPO HCRCD	HCRCD_1583	MIDDLE FORK EEL RIVER	39.896423	-123.020016	Middle Fork Eel R	474.1	8294729	1583		
MF	NorWeST NPO HCRCD	HCRCD_1584	MIDDLE FORK EEL RIVER	39.896431	-123.019892	Middle Fork Eel R	474.1	8294729	1584		
MF	NorWeST NPO HCRCD	HCRCD_1585	NORTH FORK MIDDLE FORK EEL RIVER	40.028852	-123.105446	NF Middle Fork Eel R	82.6	8292871	1585		

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI Reach COMID	Site ID Stnd.	Special	Yrs
MF	NorWeST NPO HCRCD	HCRCD_1586	MIDDLE FORK EEL RIVER	40.109872	-122.992842	Middle Fork Eel R	17.6	8294125	1586		
MF	NorWeST NPO HCRCD	HCRCD_1587	MIDDLE FORK EEL RIVER	40.030607	-123.091737	Middle Fork Eel R	88.5	8292867	1587		
MF	NorWeST NPO HCRCD	HCRCD_1589	NORTH FORK MIDDLE FORK EEL RIVER	40.072522	-123.135673	NF Middle Fork Eel R	56.4	8292839	1589		
MF	NorWeST NPO HCRCD	HCRCD_1593	MENDENHALL CREEK	39.557645	-123.000921	Mendenhall Cr	19.2	8297745	1593		
MF	NorWeST NPO HCRCD	HCRCD_1594	MILL CREEK	39.831609	-123.276717	Mill Cr	45.7	8294873	1594		
MF	NorWeST NPO HCRCD	HCRCD_1622	ROBINSON CREEK	40.109351	-122.991242	Robinson Cr	6.8	8294123	1622		
MF	NorWeST NPO HCRCD	HCRCD_1623	RATTLESNAKE CREEK	39.972955	-123.056880	Rattlesnake Cr	30.1	8294601	1623		
MF	NorWeST NPO HCRCD	HCRCD_1624	RATTLESNAKE CREEK	39.973148	-123.056968	Rattlesnake Cr	30.1	8294601	1624		
MF	NorWeST NPO HCRCD	HCRCD_1625	RATTLESNAKE CREEK	39.973215	-123.056962	Rattlesnake Cr	30.1	8294601	1625		
MF	NorWeST NPO HCRCD	HCRCD_1641	SPANISH CREEK	39.605781	-122.864648	Spanish Cr	34.4	8297669	1641		
MF	NorWeST NPO HCRCD	HCRCD_1643	THATCHER CREEK	39.688413	-123.117030	Thatcher Cr	93.4	8295291	1643		
MF	NorWeST NPO HCRCD	HCRCD_1654	BLACK BUTTE RIVER	39.595165	-122.858555	Black Butte R	30.1	8297691	1654		
MF	NorWeST NPO HCRCD	HCRCD_1678	MIDDLE FORK EEL RIVER	39.713286	-123.352482	Middle Fork Eel R	1951.3	8295181	1678		
MF	NorWeST NPO HCRCD	HCRCD_2047	Salt Creek	39.695641	-123.269388	Salt Cr	43.2	8295273	2047		
MF	NorWeST NPO HCRCD	HCRCD_2064	Crocker Creek	39.548728	-123.072661	Crocker Cr	11.8	8295553	2064		
MF	NorWeST NPO HCRCD	HCRCD_2065	Sulphur Springs Creek	39.544917	-123.041713	Sulphur Springs Cr	14.1	8295565	2065		
MF	NorWeST NPO HCRCD	HCRCD_3006	MF Eel @ Dos Rios	39.713160	-123.351762	Middle Fork Eel R	1951.3	8295181			
MF	NorWeST NPO HCRCD	HCRCD_8019	MIDDLE FORK EEL RIVER	39.707679	-123.334773	Middle Fork Eel R	1938.4	8295193	1678		
MF	NorWeST NPO HCRCD NRIS	03df89d0-0eae-44ee-ae95-dea20e327466	H2O_Temp_RCD_Crocker_2064_1996	39.548203	-123.073340	Crocker Cr	11.8	8295553	2064		1
MF	NorWeST NPO HCRCD NRIS	071b22d3-069f-47e0-a2ea-7af55a063e66	H2O_Temp_RCD_NFEel_1585_1996	40.028848	-123.105441	NF Middle Fork Eel R	82.6	8292871	1585		2
MF	NorWeST NPO HCRCD NRIS	13977648-5d23-4497-870f-5b73f90c5b46	H2O_Temp_RCD_Rttlesnke_1624_1997	39.973121	-123.056955	Rattlesnake Cr	30.1	8294601	1624		9
MF	NorWeST NPO HCRCD NRIS	1dbf638c-e3be-48ca-8cc9-99cbdcc22377	H2O_Temp_RCD_MFEel_1588_1996	40.044630	-123.086103	Middle Fork Eel R	84.9	8292859	1588		1
MF	NorWeST NPO HCRCD NRIS	3df7895f-3819-4b29-9f44-52d777c9b593	H2O_Temp_RCD_MFEel_1583_2011	39.896423	-123.020018	Middle Fork Eel R	474.1	8294729	1583		8
MF	NorWeST NPO HCRCD NRIS	520d06e9-4a5a-4454-a32c-2314c1d749eb	H2O_Temp_RCD_Rttlesnke_1623_1997	39.972964	-123.056884	Rattlesnake Cr	30.1	8294601	1623		4
MF	NorWeST NPO HCRCD NRIS	74484050-fb19-4b88-9ce5-26ea74a40555	H2O_Temp_RCD_BlkJutte_1503_1997	39.727869	-122.941890	Black Butte R	256.4	8297427	1503		1
MF	NorWeST NPO HCRCD NRIS	75716855-2690-4738-baa5-2fe93ca00bb7	H2O_Temp_RCD_Spanish_1641_1999	39.605780	-122.864644	Spanish Cr	34.4	8297669	1641		1
MF	NorWeST NPO HCRCD NRIS	7a7e4ad0-5860-4ee5-a135-78423baf5d82	H2O_Temp_RCD_MFEel_1622_1997	40.109716	-122.994589	Middle Fork Eel R	17.6	8294125	1622		1
MF	NorWeST NPO HCRCD NRIS	7b7f7566-9c76-496f-8607-a4344e1a5c51	H2O_Temp_RCD_Beaver_1520_1997	39.936140	-122.990722	Beaver Cr	36.0	8297229	1520		3
MF	NorWeST NPO HCRCD NRIS	ceca17d4-3bd3-4244-98ae-3fc95d1fdd03	H2O_Temp_RCD_MFEel_1581_2010	40.027569	-123.105532	Middle Fork Eel R	232.7	8292883	1581		10
MF	NorWeST NPO HCRCD NRIS	de9f8f4e-c41f-4701-8ab5-2d5be4d2a5c8	H2O_Temp_RCD_MFEel_1584_2012	39.896430	-123.019893	Middle Fork Eel R	474.1	8294729	1584		8
MF	NorWeST NPO HCRCD NRIS	e3300384-92ff-4d41-bd7e-c362563eebbc	H2O_Temp_RCD_Rttlesnke_1625_1997	39.973236	-123.056960	Rattlesnake Cr	30.1	8294601	1625		8
MF	NorWeST NPO HCRCD NRIS	ed0497f1-fce6-4e7a-a986-e87a7ba76107	H2O_Temp_RCD_BlkJutte_1505_2009	39.821871	-123.082963	Black Butte R	419.6	8294911	1505		7

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
MF	NorWeST NPO HCRCD NRIS	fbdd969f-b6c2-4e9d-a379-fc43a7990d25	H2O_Temp_RCD_MFEel_1582_2005	40.027817	-123.105525	Middle Fork Eel R	232.7	8292883	1582		11
MF	NorWeST USFS AREMP NRIS	F975EC20E4BA62ECE04400144F6A461C	CAUBB001IN01 WATER_INCHANNEL	39.686087	-122.916717	Black Butte R	160.3	8297505	9857		2
MF	NorWeST USFS AREMP NRIS	F975EC20E4BD62ECE04400144F6A461C	CAGIL001IN01 WATER_INCHANNEL	40.030351	-123.091653	Balm of Gilead Cr	55.6	8292877	1514		1
MF	NorWeST USFS AREMP NRIS	F975EC20E4CF62ECE04400144F6A461C	CAHOW001IN01 WATER_INCHANNEL	39.896695	-123.016419	Fly Cr	14.8	8294731	9851		2
MF	NorWeST USFS MendocinoNF NRIS	144a3524-c839-40bd-b267-bb5f98d02658	H2O_Temp_050856_BlkButte_2520_2004	39.695993	-122.920355	Black Butte R	221.3	8297479	9850		1
MF	NorWeST USFS MendocinoNF NRIS	2a72e3ea-7d75-44f4-82bf-f0296d8174ca	H2O_Temp_Spanish_050853_4800	39.633153	-122.788330	Spanish Cr	7.6	8297615	2058		1
MF	NorWeST USFS MendocinoNF NRIS	4334319d-3da9-463d-803e-28d2ec5b8109	H2O_Temp_Spanish_050853_3700_2004	39.624972	-122.842345	Spanish Cr	22.0	8297637	9849		1
MF	PGE	24.1	Middle Fork Eel at Cable Creek / Bottom of water column	39.708668	-123.338109	Middle Fork Eel R	1938.4	8295193	1678		9
MF	PGE	24.2	Middle Fork Eel mouth at Rowland Bar / Bottom of water column	39.713304	-123.351943	Middle Fork Eel R	1951.3	8295181	1678		9
MF	UCB KBG	SPATT_2015_MF@Dos Rios 2	MIDDLE FORK EEL RIVER/NA	39.711180	-123.344858	Middle Fork Eel R	1951.3	8295181	1678		1
NF	ERRP	AZBLMK_14	Asbill at McKay Ranch	39.924775	-123.361500	Asbill Cr	22.4	2709379	9718		1
NF	ERRP	AZBLMK_15	Asbill at McKay Ranch	39.924775	-123.361500	Asbill Cr	22.4	2709379	9718		1
NF	ERRP	Hulls_NF	HULLS CREEK (LOW)/32-2	39.917044	-123.253814	Hulls Cr	75.7	2709421	2025		1
NF	ERRP	NFE_Lovelace	NF Eel at Brett Lovelace	39.980292	-123.345217	NF Eel R	610.7	2709147	9719		1
NF	ERRP	NFEEL_MB	NORTH FORK EEL RIVER/NF EEL @ MINA BRIDGE	39.937325	-123.347787	NF Eel R	649.8	2709327	1485		1
NF	HCRCD	1410	COX CREEK/COX CREEK	40.157446	-123.360172	Cox Cr	12.6	2706765	1410		4
NF	HCRCD	1438	WILSON CREEK/WILSON CREEK	39.938789	-123.381173	Wilson Cr	25.0	2709317	1438		3
NF	HCRCD	1485	NORTH FORK EEL RIVER/NF EEL @ MINA BRIDGE	39.937325	-123.347787	NF Eel R	649.8	2709327	1485		2
NF	HCRCD	1501	ASBILL CREEK/ASBILL CREEK	39.931348	-123.364490	Asbill Cr	22.4	2709379	1501		4
NF	HCRCD	1569	KETTENPOM CREEK/KETTENPOM CREEK	40.174141	-123.371003	Kettenpom Cr	41.0	2706699	1569		1
NF	HCRCD	1599	WEST FORK OF NORTH FORK EEL RIVER/WEST FORK OF NORTH FORK EEL RIVER	40.213558	-123.387660	Bradburn Cr	47.9	2706585	4042		1
NF	HCRCD	1653	YELLOWJACKET CREEK/YELLOW JACKET CREEK	40.140108	-123.354812	Yellowjacket Cr	5.8	2706823	1653		5
NF	HCRCD	1656	NORTH FORK EEL RIVER/NF EEL BELOW SALT CREEK (LOWER)	40.135084	-123.355400	NF Eel R	231.0	2706881	1656		5
NF	HCRCD	1684	SALT CREEK/NA	40.135026	-123.355984	Salt Cr	63.1	2706853	1684		4
NF	HCRCD	4042	WEST FORK OF NORTH FORK EEL RIVER/NF EEL WEST FORK	40.213457	-123.387796	Bradburn Cr	47.9	2706585	4042		3
NF	HCRCD	4043	EAST FORK NORTH FORK EEL RIVER/NF EEL EAST FORK	40.214301	-123.387200	EF NF Eel R	10.7	2706577	4043		1
NF	HCRCD	4045	NORTH FORK EEL RIVER/NA	40.173701	-123.369881	NF Eel R	134.1	2706691	4045		4
NF	HCRCD	4046	NORTH FORK EEL RIVER/NA	40.135097	-123.354740	NF Eel R	231.0	2706881	1656		3
NF	HCRCD	4051	NORTH FORK EEL RIVER/NA	40.179647	-123.376139	NF Eel R	90.2	2706681	4051		4
NF	HCRCD	4062	EAST FORK NORTH FORK EEL RIVER/NF EEL EAST FORK	40.214345	-123.387198	EF NF Eel R	10.7	2706577	4043		1
NF	HCRCD	4069	NA/NA	40.154763	-123.437578	Bluff Cr	9.1	2706793	4069		1
NF	HCRCD	4070	NA/NA	40.159269	-123.399906	Bluff Cr	21.4	2706761	4070		1
NF	HCRCD	4071	NA/NA	40.157688	-123.359591	Cox Cr	12.6	2706765	1410		1
NF	HCRCD	4072	NA/NA	40.174175	-123.371203	Kettenpom Cr	41.0	2706699	1569		1
NF	HCRCD	4073	NA/NA	40.243053	-123.453038	Panther Cr	8.0	2706493	4073		1
NF	HCRCD	4074	NA/NA	40.064244	-123.299295	Red Mountain Cr	49.7	2707149	4050		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
NF	HCRC	4075	NA/NA	40.132950	-123.359781	Salt Cr	63.1	2706853	1684		1
NF	HCRC	4077	NA/NA	40.048226	-123.293822	NF Eel R	343.4	2707197	4077		1
NF	HCRC	8067	Salt Creek/Salt Creek at Mo	40.134551	-123.356847	Salt Cr	63.1	2706853	1684		1
NF	HCRC	8068	North Fork Eel River/North Fork Eel	40.213498	-123.387354	NF Eel R	60.4	2706605	8068		1
NF	HSU FSP	1410	COX CREEK/HTCX1840/HTCX1840.971/HTCX1840.981	40.157446	-123.360172	Cox Cr	12.6	2706765	1410		3
NF	HSU FSP	1438	WILSON CREEK/HTWS880.971	39.938789	-123.381173	Wilson Cr	25.0	2709317	1438		1
NF	HSU FSP	1485	NF EEL @ MINA BRIDGE/HTNF1020.971	39.937325	-123.347787	NF Eel R	649.8	2709327	1485		1
NF	HSU FSP	1501	ASBILL CREEK/HTAS0990.961/HTAS990.971	39.931348	-123.364490	Asbill Cr	22.4	2709379	1501		2
NF	HSU FSP	1506	BRADBURN CREEK/HTBD2390.961	40.211185	-123.395911	Bradburn Cr	11.1	2706613	1506		1
NF	HSU FSP	1569	KETTENPOM CREEK/HTKE1230.961	40.174141	-123.371003	Kettenpom Cr	41.0	2706699	1569		1
NF	HSU FSP	1570	KETTENPOM CREEK/HTKE2385.961	40.132805	-123.391608	Kettenpom Cr	12.3	2706851	1570		1
NF	HSU FSP	1600	NF EEL WEST FORK/HTNF2100.961	40.213571	-123.387610	Bradburn Cr	47.9	2706585	4042		1
NF	HSU FSP	1601	NF EEL RIVER/HTNF1000.961	39.937356	-123.347836	NF Eel R	649.8	2709327	1485		1
NF	HSU FSP	1620	ROCK CREEK/HTRK1760.961	40.125328	-123.331092		1.6	2706893	1620		1
NF	HSU FSP	1639	SALT CREEK/HTSL1860.961	40.129724	-123.367388	Salt Cr	59.5	2706981	1639		1
NF	HSU FSP	1653	YELLOW JACKET CREEK/HTJ1800.981/HTYJ1800.961/HTYJ1800.971	40.140108	-123.354812	Yellowjacket Cr	5.8	2706823	1653		3
NF	HSU FSP	1655	BRADBURN CREEK/HTBD2110.971	40.213481	-123.387786	Bradburn Cr	47.9	2706585	4042		1
NF	HSU FSP	1656	NF EEL BELOW SALT CREEK (LOWER)/HTNF1860.981	40.135084	-123.355400	NF Eel R	231.0	2706881	1656		1
NF	HSU FSP	1659	NF EEL ABOVE SALT CREEK/HTNF1870.971	40.135180	-123.356394	NF Eel R	164.2	2706841	1659		1
NF	HSU FSP	1684	HTSL1798.981	40.135026	-123.355984	Salt Cr	63.1	2706853	1684		1
NF	HSU FSP	2022	BEAR CANYON/28-1	39.960116	-123.322606		13.0	2709237	2022		1
NF	HSU FSP	2023	HULLS CREEK (UPP)/32-5	39.918973	-123.197341	Hulls Cr	34.6	2709415	2023		1
NF	HSU FSP	2024	PEPPERWOOD CREEK/32-4	39.918855	-123.197307	Pepperwood Cr	4.7	2709441	2024		
NF	HSU FSP	2025	HULLS CREEK (LOW)/32-2	39.917044	-123.253814	Hulls Cr	75.7	2709421	2025		1
NF	HSU FSP	2027	WHO WHO CREEK/32-1	39.916673	-123.254274	Who Who Cr	5.6	2709431	2027		1
NF	HSU FSP	4042	NF EEL WEST FORK/1185	40.213457	-123.387796	Bradburn Cr	47.9	2706585	4042		2
NF	HSU FSP	4043	1186	40.214301	-123.387200	EF NF Eel R	10.7	2706577	4043		1
NF	HSU FSP	4044	1182/1182__EE	40.174262	-123.370932	NF Eel R	93.0	2706689	4044		2
NF	HSU FSP	4045	1183/1183__EE	40.173701	-123.369881	NF Eel R	134.1	2706691	4045		3
NF	HSU FSP	4046	1184	40.135097	-123.354740	NF Eel R	231.0	2706881	1656		2
NF	HSU FSP	4050	RED MOUNTAIN CREEK/1186	40.062278	-123.304403	Red Mountain Cr	49.7	2707149	4050		1
NF	HSU FSP	4051	1182	40.179647	-123.376139	NF Eel R	90.2	2706681	4051		1
NF	NorWeST CAState SWRCB NC Region	10070	Eel River - North Fork	40.174276	-123.371103	NF Eel R	93.0	2706689	4044		
NF	NorWeST CAState SWRCB NC Region	10071	Eel River - North Fork	40.173745	-123.369874	NF Eel R	134.1	2706691	4045		
NF	NorWeST CAState SWRCB NC Region	10138	Kettenpom Creek	40.132801	-123.391599	Kettenpom Cr	12.3	2706851	1570		1
NF	NorWeST CAState SWRCB NC Region	10182	Red Mountain Creek	40.062354	-123.304368	Red Mountain Cr	49.7	2707149			1
NF	NorWeST CAState SWRCB NC Region	10232	Cox Creek	40.157424	-123.360163	Cox Cr	12.6	2706765	1410		1
NF	NorWeST CAState SWRCB NC Region	10513	Bluff Creek	40.154786	-123.437690	Bluff Cr	9.1	2706793	4069		
NF	NorWeST CAState SWRCB NC Region	10514	Bluff Creek	40.159193	-123.399949	Bluff Cr	21.4	2706761	4070		
NF	NorWeST CAState SWRCB NC Region	10517	Panther Creek	40.242995	-123.453007	Panther Cr	8.0	2706493	4073		
NF	NorWeST CAState SWRCB NC Region	10518	Red Mountain Creek	40.064249	-123.299295	Red Mountain Cr	49.7	2707149	4050		
NF	NorWeST CAState SWRCB NC Region	10519	Salt Creek	40.132922	-123.359758	Salt Cr	63.1	2706853	1684		
NF	NorWeST CAState SWRCB NC Region	10520	North Fork Eel	40.048192	-123.293875	NF Eel R	343.4	2707197	4077		
NF	NorWeST NPO HCRC	HCRC_1410	COX CREEK	40.157424	-123.360163	Cox Cr	12.6	2706765	1410		
NF	NorWeST NPO HCRC	HCRC_1438	WILSON CREEK	39.938833	-123.381275	Wilson Cr	25.0	2709317	1438		
NF	NorWeST NPO HCRC	HCRC_1485	NORTH FORK EEL RIVER	39.937290	-123.347833	NF Eel R	649.8	2709327	1485		
NF	NorWeST NPO HCRC	HCRC_1501	ASBILL CREEK	39.931198	-123.364576	Asbill Cr	22.4	2709379	1501		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
NF	NorWeST NPO HCRCD	HCRCD_1506	BRADBURN CREEK	40.211060	-123.396234	Bradburn Cr	11.1	2706613	1506		
NF	NorWeST NPO HCRCD	HCRCD_1569	KETTENPOM CREEK	40.174219	-123.371077	Kettenpom Cr	41.0	2706699	1569		
NF	NorWeST NPO HCRCD	HCRCD_1596	NF Eel above Kettenpom Crk	40.174739	-123.371574	NF Eel R	93.0	2706689			
NF	NorWeST NPO HCRCD	HCRCD_1597	NF Eel below Kettenpom Crk	40.173701	-123.369173	NF Eel R	136.2	2706717			
NF	NorWeST NPO HCRCD	HCRCD_1599	WEST FORK OF NORTH FORK EEL RIVER	40.213508	-123.387713	Bradburn Cr	47.9	2706585	4042		
NF	NorWeST NPO HCRCD	HCRCD_1600	WEST FORK OF NORTH FORK EEL RIVER	40.213518	-123.387658	Bradburn Cr	47.9	2706585	4042		
NF	NorWeST NPO HCRCD	HCRCD_1620	TRIB TO ROCK CREEK	40.125247	-123.331086		1.6	2706893	1620		
NF	NorWeST NPO HCRCD	HCRCD_1653	YELLOWJACKET CREEK	40.140175	-123.354893	Yellowjacket Cr	5.8	2706823	1653		
NF	NorWeST NPO HCRCD	HCRCD_1655	WEST FORK OF NORTH FORK EEL RIVER	40.213495	-123.387790	Bradburn Cr	47.9	2706585	4042		
NF	NorWeST NPO HCRCD	HCRCD_1656	NORTH FORK EEL RIVER	40.135023	-123.355401	NF Eel R	231.0	2706881	1656		
NF	NorWeST NPO HCRCD	HCRCD_1659	NORTH FORK EEL RIVER	40.135078	-123.356541	NF Eel R	164.2	2706841	1659		
NF	NorWeST NPO HCRCD	HCRCD_1684	SALT CREEK	40.134893	-123.356396	Salt Cr	63.1	2706853	1684		
NF	NorWeST NPO HCRCD	HCRCD_2022	Bear Canyon Creek	39.960295	-123.321869		13.0	2709237	2022		
NF	NorWeST NPO HCRCD	HCRCD_2024	Pepperwood Creek	39.918600	-123.196952	Pepperwood Cr	4.7	2709441	2024		
NF	NorWeST NPO HCRCD	HCRCD_2025	Hulls Creek (Lower)	39.917641	-123.254629	Hulls Cr	75.7	2709421	2025		
NF	NorWeST NPO HCRCD	HCRCD_2027	Who Who Creek	39.916914	-123.254404	Who Who Cr	5.6	2709431	2027		
NF	NorWeST NPO HCRCD	HCRCD_4042	WEST FORK OF NORTH FORK EEL RIVER	40.213493	-123.387806	Bradburn Cr	47.9	2706585	4042		
NF	NorWeST NPO HCRCD	HCRCD_4043	EAST FORK NORTH FORK EEL RIVER	40.214290	-123.387510	EF NF Eel R	10.7	2706577	4043		
NF	NorWeST NPO HCRCD	HCRCD_4045	NORTH FORK EEL RIVER	40.173745	-123.369873	NF Eel R	134.1	2706691	4045		
NF	NorWeST NPO HCRCD	HCRCD_4046	NORTH FORK EEL RIVER	40.135018	-123.354741	NF Eel R	231.0	2706881	1656		
NF	NorWeST NPO HCRCD	HCRCD_4051	NORTH FORK EEL RIVER	40.179593	-123.376260	NF Eel R	90.2	2706681	4051		
NF	NorWeST NPO HCRCD	HCRCD_4062	EAST FORK NORTH FORK EEL RIVER	40.214345	-123.387510	EF NF Eel R	10.7	2706577	4043		
NF	NorWeST NPO HCRCD	HCRCD_8067	Salt Creek	40.134556	-123.356852	Salt Cr	63.1	2706853	1684		
NF	NorWeST NPO HCRCD	HCRCD_8068	North Fork Eel River	40.213450	-123.387569	NF Eel R	60.4	2706605	8068		
NF	NorWeST NPO HCRCD NRIS	6383710e-04c7-4654-a401-5281bbc2a93a	H2O_Temp_RCD_Ppprwd_2024_1996	39.918813	-123.197532	Pepperwood Cr	4.7	2709441	2024		1
NF	NorWeST USFS AREMP NRIS	F975EC20E4C262ECE04400144F6A461C	CAEEL001IN01 WATER_INCHANNEL	40.174516	-123.371348	NF Eel R	93.0	2706689	4044		1
NF	NorWeST USFS SixRiversNF NRIS	04d4070e-86f9-4b39-928c-a59b4023c17f	H2O_Temp_RCD_Cox_4071_2002	40.157711	-123.359655	Cox Cr	12.6	2706765	1410		4
NF	NorWeST USFS SixRiversNF NRIS	0c729d37-a171-48de-9875-44e994517bea	NorthForkEel_Wilburn_H2O_temp02	40.048890	-123.294690	NF Eel R	343.4	2707197	4077		1
NF	NorWeST USFS SixRiversNF NRIS	2e4e0f4f-e053-477c-81f7-84732efef2	MiddleBluff_lowWater_H2O_temp01	40.160576	-123.401905	Bluff Cr	21.4	2706761	9858		1
NF	NorWeST USFS SixRiversNF NRIS	3092fddd-7537-4cf2-bafd-e972155778ee	NorthForkEel_belowSalt_H2O_temp01	40.134612	-123.352205	NF Eel R	231.0	2706881	9860		7
NF	NorWeST USFS SixRiversNF NRIS	3e7d4849-cec7-4ee1-a46e-2b2ac9a50c8c	WestForkNorthForkEel_belowPanther&Bar_H2O_temp02	40.244521	-123.433195	West Fork NF Eel R	25.1	2706553	9867		2
NF	NorWeST USFS SixRiversNF NRIS	415dc44c-93fa-4e7d-b920-34f408554283	NorthForkEel_below_Salt_H2O_temp06b	40.135016	-123.354517	NF Eel R	231.0	2706881	1656		1
NF	NorWeST USFS SixRiversNF NRIS	47c279c8-a650-4fcf-8725-5518357b4595	UpperBluff_H2O_temp02	40.155050	-123.437691	Bluff Cr	9.1	2706793	4069		2
NF	NorWeST USFS SixRiversNF NRIS	50f4cea9-8276-4cb8-a67b-8432031e6b0d	RMC_H2O_temp02	40.062524	-123.305323	Red Mountain Cr	49.7	2707149	4050		1
NF	NorWeST USFS SixRiversNF NRIS	5f88f81f-7593-423c-ab68-887d5c341d67	NFE_belowestKettenpom_H2O_temp04	40.170953	-123.362633	NF Eel R	136.2	2706717	9862		2
NF	NorWeST USFS SixRiversNF NRIS	612419f0-2148-4c6a-80e8-88b7fd6a1d7b	WestForkNorthForkEel_nearMouth_H2O_temp03	40.213264	-123.388196	Bradburn Cr	47.9	2706585	4042		7



Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI Reach COMID	Site ID Stnd.	Special	Yrs
NF	NorWeST USFS SixRiversNF NRIS	6c437f86-11cf-4330-b6e4-cf42297fdc52	Salt_nearmouth_H2O_temp06	40.133586	-123.358230	Salt Cr	63.1	2706853	1684		4
NF	NorWeST USFS SixRiversNF NRIS	6fc1d084-8985-416c-8c81-e6d2cd93e9e3	NorthForkEel_belowCox_H2O_temp05	40.156332	-123.360617	NF Eel R	154.3	2706777	9859		1
NF	NorWeST USFS SixRiversNF NRIS	70278ac8-6829-417e-8b77-b66ef1fb8d7b	NorthForkEel_belowEast&West_H2O_temp03	40.213359	-123.387493	NF Eel R	60.4	2706605	8068		1
NF	NorWeST USFS SixRiversNF NRIS	93caf490-6855-4ab5-b8dc-7c87eb69837d	Panther_aboveCountryRoad_H2O_temp01	40.242535	-123.454355	Panther Cr	8.0	2706493	4073		2
NF	NorWeST USFS SixRiversNF NRIS	a93977a1-1c25-43dc-a20a-3eb2313c7454	Salt_aboveBridge_H2O_temp04	40.129277	-123.367630	Salt Cr	59.5	2706981	1639		1
NF	NorWeST USFS SixRiversNF NRIS	ab6d08b3-d5f9-4d3d-b397-531d66da6986	NorthForkEel_aboveKettenpom_H2O_temp98	40.180839	-123.376052	NF Eel R	84.9	2706669	4051		9
NF	NorWeST USFS SixRiversNF NRIS	c46cbbed-c8f2-411a-b5d6-a0afbc82580d	Salt_aboveBridge_1stTrib_H2O_temp08	40.126204	-123.368875	Salt Cr	59.5	2706981	9866		2
NF	NorWeST USFS SixRiversNF NRIS	c99306bd-5009-4ba8-93ca-9021e23551b1	H2O_Temp_RCD_Kettenpom_1569_1996	40.174250	-123.371216	Kettenpom Cr	41.0	2706699	1569		6
NF	NorWeST USFS SixRiversNF NRIS	d4ada3fc-593b-425e-83bf-24d28749fa4f	Salt_nearmouth_H2O_temp04	40.132360	-123.361476	Salt Cr	63.1	2706853	1684		1
NF	NorWeST USFS SixRiversNF NRIS	e61f7e8c-de48-4629-96de-247f54b47a29	NorthForkEel_belowKettenpom_H2O_temp96	40.173878	-123.368424	NF Eel R	136.2	2706717	9863		8
NF	NorWeST USFS SixRiversNF NRIS	e9028603-4942-49eb-b70e-fe4ffeab9903	EastForkNorthForkEel_nearMouth_H2O_temp01b	40.213708	-123.387569	EF NF Eel R	10.7	2706577	4043		2
SFL	ERRP	BC_MC_14	BUCK GULCH/BUCK GULCH	40.123638	-123.914050		2.3	8285230	8001		1
SFL	ERRP	BLLUSSFE	BULL CREEK/BULL CREEK	40.339151	-123.942120	Bull Cr	107.6	8286600	1417		1
SFL	ERRP	BRDG_MC	Bridges AB SF Eel Mendocino	39.907080	-123.753365	Bridges Cr	8.5	8288612	9774		1
SFL	ERRP	BRPN_SF	BEAR PEN CREEK/BEAR PEN CRK.	39.935025	-123.777085	Bear Pen Cr	13.0	8287178	1516		1
SFL	ERRP	BUCKMCSC	BUCK GULCH/BUCK GULCH	40.123638	-123.914050		2.3	8285230	8001		1
SFL	ERRP	DNNR_RWD	Dinner Low Isolated Pool	40.094468	-123.930136	Dinner Cr	3.8	8285312	9792		1
SFL	ERRP	INDIAN	INDIAN CREEK/INDIAN CREEK	39.976891	-123.806077	Indian Cr	70.3	8287014	1565		1
SFL	ERRP	KNSYSLMN	Kinsey Upper	40.184888	-123.907795	Kinsey Cr	3.8	8285098	9796		1
SFL	ERRP	LTSPRL	LITTLE SPROUL CREEK/LITTLE SPROUL CREEK	40.067440	-123.836307	Little Sproul Cr	10.1	8285362	1477		1
SFL	ERRP	MCCOY	MCCOY CREEK/MCCOY CREEK	39.953985	-123.775748	McCoy Cr	18.1	8287074	1576		1
SFL	ERRP	MF	SF Eel Meyers Flat SPATT 2015	40.258058	-123.838931	SF Eel R	1571.5	8286602	9779		1
SFL	ERRP	MLLRBE	Trib of Miller 2015 SRF Site	40.134159	-123.923269			[Not in network]	9791		1
SFL	ERRP	PV	SF Eel at Phillippsville SPATT	40.205483	-123.788828	SF Eel R	1426.1	8285062	9778		2
SFL	ERRP	Rdwd_Ab_Seeley	Redwood US Seely	40.130864	-123.858731	Redwood Cr	62.0	8285222	9788		
SFL	ERRP	Rdwd_Dinner	Dinner Low Isolated Pool	40.094468	-123.930136	Dinner Cr	3.8	8285312	9792		1
SFL	ERRP	Rdwd_grover	Redwood Spring Source	40.118047	-123.889420			[Not in network]	9794	Spring	
SFL	ERRP	Rdwd_Lower_Park_Pool	Redwood Low DS Briceland Rd Bridge Isolated Pool	40.121690	-123.841223	Redwood Cr	67.3	8285238	9787	Isolated Pool	1
SFL	ERRP	RDWD_TG1	Redwood Spring Source	40.118047	-123.889420			[Not in network]	9794	Spring	1
SFL	ERRP	RDWD_TG2	Redwood Spring Source 2	40.117901	-123.887462			[Not in network]	9795	Spring	1
SFL	ERRP	RDWDPOOL	Redwood Isolated Pool 6 at V Weir	40.100105	-123.904705	Redwood Cr	18.1	8285304	9790	Isolated Pool	1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs	
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID			ID Stnd.
SFL	ERRP	RDWDWHPL	Redwood Whitmore Grove Isolated Pool	40.121991	-123.839621	Redwood Cr	67.3	8285238	9786	Isolated Pool	1
SFL	ERRP	RG	SOUTH FORK EEL RIVER/SF EEL@PIERCY	40.000747	-123.787331	SF Eel R	881.3	8285574	1416		2
SFL	ERRP	RW_3_14	Redwood Creek/Seely Ck	40.131184	-123.857169	Redwood Cr	62.0	8285222	1614		1
SFL	ERRP	RW_DNR_14	Dinner Low Isolated Pool	40.094468	-123.930136	Dinner Cr	3.8	8285312	9792		1
SFL	ERRP	RW_MC_14	MILLER CREEK/MILLER CREEK	40.111457	-123.912297	Miller Cr	9.5	8285280	8012		1
SFL	ERRP	RW_MC2	Trib of Miller 2015 SRF Site	40.134159	-123.923269				9791	[Not in network]	1
SFL	ERRP	RW_PLK_14	REDWOOD CREEK/POLLOCK CREEK	40.096781	-123.910609	Redwood Cr	7.0	8285332	1412		1
SFL	ERRP	RW_SLY_14	Redwood US Seely 5 Isolated Pool	40.130655	-123.859381	Redwood Cr	45.6	8285224	9789		1
SFL	ERRP	RW1_14	Redwood DS China	40.098185	-123.909190	Redwood Cr	18.1	8285304	9800		1
SFL	ERRP	RW2_14	Redwood US Tank	40.110921	-123.895619	Redwood Cr	38.4	8285268	9801		1
SFL	ERRP	SF_Phil_12	SF Eel at Phillipsville SPATT	40.205483	-123.788828	SF Eel R	1426.1	8285062	9778		1
SFL	ERRP	SFE_DS	SF Eel DS Sproul SPATT	40.073649	-123.826672	SF Eel R	1204.8	8286748	9776		1
SFL	ERRP	SFE_PRCY12	SOUTH FORK EEL RIVER/SF EEL@PIERCY	40.000747	-123.787331	SF Eel R	881.3	8285574	1416		1
SFL	ERRP	SFEMRND_12	SF Eel Miranda 2012 Temp Probe	40.227208	-123.825898	SF Eel R	1460.2	8285012	9780		1
SFL	ERRP	SH	SF Eel at Standish Hickey SPATT	39.875999	-123.726421	SF Eel R	653.1	8288622	9777		2
SFL	ERRP	SLMNSFL	NA/NA	40.210494	-123.893749	SF Salmon Cr	28.7	8285070	1630		1
SFL	ERRP	SLMNUPTF	Salmon Upper 7 at Three Falls	40.230764	-123.912177	Salmon Cr	31.3	8284996	9797		1
SFL	ERRP	SPRL_L2	Sproul DS Little Sproul	40.067779	-123.835571		62.2	8285360	9775		1
SFL	ERRP	SPRL_LB	SPROUL CREEK/SPROUL	40.068425	-123.830270		62.2	8285360	1137		1
SFL	ERRP	WILDCAT	WILDCAT CREEK/WILDCAT CREEK	39.912090	-123.761295	Wildcat Cr	15.7	8287204	1773		1
SFL	HCRCD	241	SOUTH FORK EEL RIVER/SF EEL RIVER	40.005530	-123.777421	SF Eel R	898.2	8285554	230		1
SFL	HCRCD	249	SOUTH FORK EEL RIVER/SF EEL	40.125710	-123.827116	SF Eel R	1312.5	8286648	249		1
SFL	HCRCD	1102	SPROUL CREEK/SPROUL	40.012164	-123.857481		3.1	8285532	1102		2
SFL	HCRCD	1103	TRIB TO WEST FORK SPROUL CREEK/SPROUL	40.009052	-123.860645		4.8	8285528	1103		3
SFL	HCRCD	1104	COX CREEK/SPROUL	40.022921	-123.863820	Cox Cr	3.9	8285496	1104		2
SFL	HCRCD	1105	TRIB TO WEST FORK SPROUL CREEK/SPROUL	40.023668	-123.866730		2.8	8285486	1105		2
SFL	HCRCD	1106	LA DOO CREEK/LADOO	40.040991	-123.895669	La Doo Cr	3.9	8285438	1106		3
SFL	HCRCD	1107	TRIB TO WEST FORK SPROUL CREEK/WEST FORK SPROUL	40.038290	-123.901817		3.3	8285446	1107		1
SFL	HCRCD	1108	WEST FORK SPROUL CREEK/WEST FORK SPROUL	40.049941	-123.909978	West Fork Sproul Cr	5.0	8285414	1108		1
SFL	HCRCD	1109	TRIB TO WEST FORK SPROUL CREEK/WEST FORK SPROUL	40.050151	-123.908257		3.9	8285412	1109		1
SFL	HCRCD	1117	SEBBAS CREEK/SEBBAS	39.969368	-123.885918	Sebbas Cr	7.3	8287034	1117		2
SFL	HCRCD	1136	WARDEN CREEK/SPROUL	40.055379	-123.852492	Warden Cr	4.1	8285400	1136		1
SFL	HCRCD	1137	SPROUL CREEK/SPROUL	40.068425	-123.830270		62.2	8285360	1137		2
SFL	HCRCD	1302	SQUAW CREEK/SQUAW CR*	40.348295	-123.989989	Squaw Cr	12.2	8284792	1302		5
SFL	HCRCD	1303	CANOE CREEK/CANOE CR*	40.295153	-123.904866	Canoe Cr	27.2	8284864	1303		1
SFL	HCRCD	1305	COW CREEK/COW CR*	40.351322	-123.963161	Cow Cr	6.3	8284780	1305		1
SFL	HCRCD	1407	SPROUL CREEK/SPROUL	40.040319	-123.866396		18.4	8285482	1407		4
SFL	HCRCD	1408	SPROUL CREEK/SPROUL	40.053730	-123.848305		51.7	8285404	1138		4
SFL	HCRCD	1409	WEST FORK SPROUL CREEK/SPROUL (WEST FORK)	40.040867	-123.867123	West Fork Sproul Cr	21.9	8285432	1409		2
SFL	HCRCD	1412	REDWOOD CREEK/POLLOCK CREEK	40.096781	-123.910609	Redwood Cr	7.0	8285332	1412		3
SFL	HCRCD	1415	SOUTH FORK EEL RIVER/SF EEL (MIRANDA BRIDGE)	40.217799	-123.816328	SF Eel R	1446.3	8285034	1415		1
SFL	HCRCD	1416	SOUTH FORK EEL RIVER/SF EEL@PIERCY	40.000747	-123.787331	SF Eel R	881.3	8285574	1416		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFL	HCRCD	1417	BULL CREEK/BULL CREEK	40.339151	-123.942120	Bull Cr	107.6	8286600	1417		1
SFL	HCRCD	1424	BURNS CREEK/BURNS CREEK	40.320847	-124.039134	Burns Cr	4.5	8283558	1424		2
SFL	HCRCD	1444	CUNEO CREEK/CUNEO CREEK	40.335653	-124.033793	Cuneo Cr	11.5	8283550	1444		1
SFL	HCRCD	1467	HARPER CREEK/HARPER CREEK	40.352294	-123.988426	Harper Cr	4.0	8284768	1467		1
SFL	HCRCD	1477	LITTLE SPROUL CREEK/LITTLE SPROUL CREEK	40.067440	-123.836307	Little Sproul Cr	10.1	8285362	1477		2
SFL	HCRCD	1512	BULL CREEK/BULL CREEK	40.351188	-124.005568	Bull Cr	72.2	8284190	1512		5
SFL	HCRCD	1525	CHINA CREEK/CHINA CREEK	40.097569	-123.910920	China Cr	10.2	8285306	1525		3
SFL	HCRCD	1532	COW CREEK/COW CREEK	40.351674	-123.962948	Cow Cr	6.3	8284780	1305		5
SFL	HCRCD	1537	EAST BRANCH SOUTH FORK EEL RIVER/SF EEL, EAST BRANCH	40.076951	-123.777422	East Branch SF Eel R	197.1	8285364	1537		1
SFL	HCRCD	1572	LEGGETT CREEK/LEGGETT CREEK (UPPER)	40.151531	-123.839254	Leggett Cr	11.0	8285192	1572		4
SFL	HCRCD	1576	MCCOY CREEK/MCCOY CREEK	39.953985	-123.775748	McCoy Cr	18.1	8287074	1576		3
SFL	HCRCD	1590	MILL CREEK/MILL CREEK	40.349779	-124.021309	Mill Cr	7.8	8283540	1590		1
SFL	HCRCD	1606	PIERCY CREEK/PIERCY CREEK	39.972368	-123.805670	Piercy Cr	9.4	8287032	1606		2
SFL	HCRCD	1614	REDWOOD CREEK/REDWOOD CRK. (WALLY'S REPAIR)	40.130615	-123.856507	Redwood Cr	62.0	8285222	1614		1
SFL	HCRCD	1621	RED MOUNTAIN CREEK/RED MOUNTAIN CREEK	39.929018	-123.761966	Red Mountain Cr	31.2	8288610	1621		3
SFL	HCRCD	1629	SALMON CREEK/SALMON CREEK (ABV SF SALMON)	40.214691	-123.893078	Salmon Cr	40.4	8285044	1629		2
SFL	HCRCD	1633	SOUTH FORK EEL RIVER/SF EEL @ DYERVILLE BRIDGE	40.353770	-123.921560	SF Eel R	1785.1	8284766	1633		4
SFL	HCRCD	1634	SOUTH FORK EEL RIVER/SF EEL @ SYLVANDALE	40.182455	-123.775596	SF Eel R	1391.8	8285120	1634		4
SFL	HCRCD	1668	BULL CREEK/NA	40.314663	-124.034378	Bull Cr	35.4	8283562	1668		3
SFL	HCRCD	1670	CUNEO CREEK/NA	40.333136	-124.027261	Cuneo Cr	11.5	8283550	1670		2
SFL	HCRCD	1770	INDIAN CREEK/INDIAN CREEK	39.946813	-123.898622	Indian Cr	23.7	8287084	1770		1
SFL	HCRCD	1772	PIERCY CREEK/PIERCY CREEK	39.972344	-123.805794	Piercy Cr	9.4	8287032	1606		1
SFL	HCRCD	1773	WILDCAT CREEK/WILDCAT CREEK	39.912090	-123.761295	Wildcat Cr	15.7	8287204	1773		1
SFL	HCRCD	1776	BEAR PEN CREEK/BEAR PEN CREEK	39.933834	-123.777158	Bear Pen Cr	13.0	8287178	1516		1
SFL	HCRCD	1786	INDIAN CREEK/INDIAN CREEK	39.967791	-123.866960	Indian Cr	54.0	8287048	1786		1
SFL	HCRCD	8001	BUCK GULCH/BUCK GULCH	40.123638	-123.914050		2.3	8285230	8001		5
SFL	HCRCD	8002	DINNER CREEK/DINNER CREEK	40.098330	-123.929959	Dinner Cr	3.8	8285312	8002		1
SFL	HCRCD	8003	DINNER CREEK/DINNER CREEK	40.095035	-123.931402	Dinner Cr	3.8	8285312	8002		5
SFL	HCRCD	8004	ELK CREEK/ELK CREEK	40.284373	-123.834131	Elk Cr	17.5	8284942	8004		4
SFL	HCRCD	8012	MILLER CREEK/MILLER CREEK	40.111457	-123.912297	Miller Cr	9.5	8285280	8012		4
SFL	HCRCD	8013	MILLER CREEK/MILLER CREEK	40.112300	-123.912240	Miller Cr	9.5	8285280	8012		1
SFL	HCRCD	8014	MILLER CREEK/MILLER CREEK	40.112692	-123.913787	Miller Cr	9.5	8285280	8012		1
SFL	HCRCD	8021	LEGGETT CREEK/LEGGETT CREEK 2	40.155033	-123.840821	Leggett Cr	11.0	8285192	1572		4
SFL	HCRCD	8023	SALMON CREEK/SALMON CREEK (MOESCHKE'S)	40.238591	-123.971184	Salmon Cr	8.4	8284978	8023		3
SFL	HCRCD	8024	SOUTH FORK SALMON CREEK/SALMON CREEK, SOUTH FORK	40.182169	-123.890897	SF Salmon Cr	21.1	8285104	8024		1
SFL	HCRCD	8031	BULL CREEK/PREACHER GULCH	40.288416	-124.009714		2.7	8283570	8031		2
SFL	HCRCD	8032	MILLER CREEK/MILLER CREEK	40.103782	-123.906812	Miller Cr	9.5	8285280	8032		2
SFL	HCRCD	8033	MILL CREEK/MILL CREEK	40.229392	-123.863142	Mill Cr	5.3	8285002	1592		3
SFL	HCRCD	8034	LEGGETT CREEK/LEGGETT CREEK	40.133112	-123.826078	Leggett Cr	13.1	8285218	8034		1
SFL	HCRCD	8035	LEGGETT CREEK/LEGGETT CREEK	40.153498	-123.839990	Leggett Cr	11.0	8285192	1572		1
SFL	HCRCD	8036	KINSEY CREEK/KINSEY CREEK	40.181282	-123.891227	Kinsey Cr	6.4	8285106	8036		2
SFL	HCRCD	8037	BOGUS CREEK/BOGUS CREEK	40.195973	-123.880267	Bogus Cr	3.8	8285072	8037		2
SFL	HCRCD	8039	TOSTIN CREEK/TOSTIN CREEK	40.180805	-123.889908	Tostin Cr	5.5	8285142	8039		3
SFL	HCRCD	8040	TRIB TO TOM LONG CREEK/WILDCAT--TRIB. TO LOM LONG	40.035281	-123.669043		9.0	8285466	8040		1
SFL	HCRCD	8041	TOM LONG CREEK/LOM LONG	40.020341	-123.665614	Tom Long Cr	19.5	8285516	8041		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID		
SFL	HCRCD	8042	SOUTH FORK SALMON CREEK/SALMON; S.F. ESTES	40.184517	-123.889783	SF Salmon Cr	21.1	8285104	8042	1
SFL	HCRCD	8047	BULL CREEK/NA	40.344449	-124.024538	Bull Cr	58.1	8283548	8047	1
SFL	HCRCD	8048	NA/NA	40.333457	-124.026451	Cuneo Cr	11.5	8283550	1670	2
SFL	HCRCD	8049	NA/NA	40.073158	-123.786266	East Branch SF Eel R	197.1	8285364	1537	2
SFL	HCRCD	8055	NA/NA	40.210494	-123.893749	SF Salmon Cr	28.7	8285070	1630	2
SFL	HCRCD	8056	SALMON CREEK/NA	40.233965	-123.839034	Salmon Cr	95.1	8285008	8056	1
SFL	HCRCD	8057	NA/NA	40.011082	-123.629326	Tom Long Cr	9.5	8285558	8057	1
SFL	HCRCD	8058	NA/NA	40.013386	-123.653826		4.2	8285526	8058	1
SFL	HCRCD	8061	Redwood Creek/Seely Ck	40.131184	-123.857169	Redwood Cr	62.0	8285222	1614	1
SFL	HCRCD	8064	Bull Creek/Bull Ck abv Kemp	40.290437	-124.010006	Bull Cr	29.6	8283566	8064	1
SFL	HCRCD	8065	Decker Creek/Decker Ck	40.333100	-123.938251	Decker Cr	6.2	8284816	8065	1
SFL	HCRCD	8066	Panther Creek/Panther Ck/Bull	40.289887	-124.010905	Panther Cr	8.5	8283568	8066	1
SFL	HCRCD	9622	CANOE CREEK/CANOE CRK	40.294874	-123.906670	Canoe Cr	27.2	8284864	1303	3
SFL	HCRCD	9623	COW CREEK/COW CREEK	40.349851	-123.963819	Cow Cr	6.3	8284780	1305	4
SFL	HSU FSP	230	S.F. EEL RIVER/M-F COOKS VALLEY	40.002656	-123.777079	SF Eel R	891.9	8285576	230	2
SFL	HSU FSP	241	SF EEL RIVER/M-F COOKS VALLEY 2	40.005530	-123.777421	SF Eel R	898.2	8285554	230	1
SFL	HSU FSP	242	SF EEL RIVER/RANDALL - GARBERVILLE	40.093720	-123.796729	SF Eel R	1211.6	8285318	242	1
SFL	HSU FSP	1102	SPROUL/GA10	40.012164	-123.857481		3.1	8285532	1102	2
SFL	HSU FSP	1103	SPROUL/GA11	40.009052	-123.860645		4.8	8285528	1103	2
SFL	HSU FSP	1104	SPROUL/GA12	40.022921	-123.863820	Cox Cr	3.9	8285496	1104	2
SFL	HSU FSP	1105	SPROUL/GA13	40.023668	-123.866730		2.8	8285486	1105	2
SFL	HSU FSP	1107	WEST FORK SPROUL/GA15	40.038290	-123.901817		3.3	8285446	1107	2
SFL	HSU FSP	1108	WEST FORK SPROUL/GA16	40.049941	-123.909978	West Fork Sproul Cr	5.0	8285414	1108	2
SFL	HSU FSP	1109	WEST FORK SPROUL/GA17	40.050151	-123.908257		3.9	8285412	1109	2
SFL	HSU FSP	1116	COULBORN/GA8	39.968581	-123.895577	Couborn Cr	4.5	8287030	1116	2
SFL	HSU FSP	1117	SEBBAS/GA9	39.969368	-123.885918	Sebbas Cr	7.3	8287034	1117	2
SFL	HSU FSP	1136	SPROUL/GA28	40.055379	-123.852492	Warden Cr	4.1	8285400	1136	1
SFL	HSU FSP	1137	SPROUL/GA29	40.068425	-123.830270		62.2	8285360	1137	1
SFL	HSU FSP	1138	GA30	40.053726	-123.848309		51.7	8285404	1138	1
SFL	HSU FSP	1300	BULL CR/BULL 1	40.340412	-123.945157	Bull Cr	107.6	8286600	1413	1
SFL	HSU FSP	1302	SQUAW CR*/SQUAW 1 (61% OG)/STA_102	40.348295	-123.989989	Squaw Cr	12.2	8284792	1302	3
SFL	HSU FSP	1303	CANOE CR*/CANOE 1 (62% OG)/STA_103	40.295153	-123.904866	Canoe Cr	27.2	8284864	1303	3
SFL	HSU FSP	1305	COW CR*/COW 1 (93% OG)/STA_105	40.351322	-123.963161	Cow Cr	6.3	8284780	1305	3
SFL	HSU FSP	1337	CUNEO/STA_137	40.333450	-124.042991	SF Cuneo Cr	1.8	8283552	1337	1
SFL	HSU FSP	1407	SPROUL/GA25/HTSR0520/HTSR520.971	40.040319	-123.866396		18.4	8285482	1407	3
SFL	HSU FSP	1408	SPROUL/GA27/HTSR0460/HTSR460.971	40.053730	-123.848305		51.7	8285404	1138	3
SFL	HSU FSP	1409	SPROUL (WEST FORK)/GA26/HTSR0530/HTSR530.971	40.040867	-123.867123	West Fork Sproul Cr	21.9	8285432	1409	3
SFL	HSU FSP	1411	LITTLE SPROUL CREEK/HTLS0460/HTLS460.971	40.075979	-123.846973	Little Sproul Cr	10.1	8285362	1411	2
SFL	HSU FSP	1412	POLLOCK CREEK/HTPO0580/HTPO580.971/HTPO580.981	40.096781	-123.910609	Redwood Cr	7.0	8285332	1412	3
SFL	HSU FSP	1413	SPROUL CREEK/HTSR0360/HTSR360.971	40.068529	-123.829534		62.2	8285360	1137	2
SFL	HSU FSP	1415	SF EEL (MIRANDA BRIDGE)/HTSF190.971/HTSF190.981	40.217799	-123.816328	SF Eel R	1446.3	8285034	1415	2
SFL	HSU FSP	1416	SF EEL@PIERCY/HTSF445.971	40.000747	-123.787331	SF Eel R	881.3	8285574	1416	1
SFL	HSU FSP	1417	BULL CREEK/HTBL116.971	40.339151	-123.942120	Bull Cr	107.6	8286600	1417	1
SFL	HSU FSP	1419	BULL CREEK/HTBL394.971	40.333150	-124.025541	Bull Cr	43.8	8283554	1419	1
SFL	HSU FSP	1424	BURNS CREEK/HTBS560.971/HTBS560.981	40.320847	-124.039134	Burns Cr	4.5	8283558	1424	2

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFL	HSU FSP	1426	BURNS CREEK/HTBS720.971	40.319030	-124.043098	Burns Cr	4.5	8283558	1426		1
SFL	HSU FSP	1427	BURNS CREEK/HTBS830.971	40.318320	-124.047095	Burns Cr	4.5	8283558	1427		1
SFL	HSU FSP	1429	BURNS CREEK (NORTH FORK)/HTBS840.971	40.318375	-124.047753		1.1	8284194	1429		1
SFL	HSU FSP	1430	BURNS CREEK (SOUTH FORK)/HTBS1040.971	40.316443	-124.051241	Burns Cr	2.4	8283560	1430		1
SFL	HSU FSP	1431	BURNS CREEK (SOUTH FORK)/HTBS850.971	40.318105	-124.048092	Burns Cr	2.4	8283560	1431		1
SFL	HSU FSP	1435	COW CREEK/HTCW205.971	40.352047	-123.962799	Cow Cr	6.3	8284780	1305		1
SFL	HSU FSP	1440	CUNEO CREEK (SOUTH FORK)/HTCN1080.971	40.327644	-124.051404	SF Cuneo Cr	1.8	8283552	1440		1
SFL	HSU FSP	1442	CUNEO CREEK (SO. FORK )/HTCN1245.971	40.326653	-124.054317	SF Cuneo Cr	1.8	8283552	1442		1
SFL	HSU FSP	1444	CUNEO CREEK/HTCN445.971	40.335653	-124.033793	Cuneo Cr	11.5	8283550	1444		1
SFL	HSU FSP	1445	CUNEO CREEK/HTCN520.971	40.337570	-124.038111	Cuneo Cr	11.5	8283550	1445		1
SFL	HSU FSP	1446	CUNEO CREEK/HTCN534.971	40.337444	-124.038508	Cuneo Cr	7.5	8283544	1446		1
SFL	HSU FSP	1447	CUNEO CREEK (NORTH FORK)/HTCN535.971	40.337733	-124.038448	NF Cuneo Cr	3.2	8284188	1447		1
SFL	HSU FSP	1448	CUNEO CREEK/HTCN580.971	40.336553	-124.040636	Cuneo Cr	7.5	8283544	1448		1
SFL	HSU FSP	1450	CUNEO CREEK/HTCN590.971	40.336506	-124.041423	Cuneo Cr	5.6	8283546	1449		1
SFL	HSU FSP	1451	CUNEO CREEK (SOUTH FORK)/HTCN595.971	40.335974	-124.041686	SF Cuneo Cr	1.8	8283552	1451		1
SFL	HSU FSP	1453	CUNEO CREEK (SOUTH FORK)/HTCN755.971	40.331808	-124.044765	SF Cuneo Cr	1.8	8283552	1453		1
SFL	HSU FSP	1464	ROCK CREEK@LEGGETT/HTRK960.971	39.884046	-123.723663	Rock Cr	5.5	8287240	1464		1
SFL	HSU FSP	1466	HARPER CREEK/HTHA250.971	40.350601	-123.987648	Harper Cr	4.0	8284768	1466		1
SFL	HSU FSP	1467	HARPER CREEK/HTHA260.971	40.352294	-123.988426	Harper Cr	4.0	8284768	1467		1
SFL	HSU FSP	1468	HARPER CREEK/HTHA400.971	40.356469	-123.992840	Harper Cr	4.0	8284768	1468		1
SFL	HSU FSP	1469	HARPER CREEK/HTHA488.971	40.358639	-123.992928	Harper Cr	4.0	8284768	1469		1
SFL	HSU FSP	1472	HARPER CREEK (EAST FORK)/HTHA497.971	40.359315	-123.992849	Harper Cr	1.9	8284758	1472		1
SFL	HSU FSP	1476	LEGGET CREEK/HTLG270.971	40.129900	-123.822406	Leggett Cr	13.1	8285218	1476		1
SFL	HSU FSP	1477	LITTLE SPROUL CREEK/HDLS420.971	40.067440	-123.836307	Little Sproul Cr	10.1	8285362	1477		1
SFL	HSU FSP	1511	BULL CREEK/HTBL390.971	40.334089	-124.025751	Bull Cr	58.1	8283548	1511		2
SFL	HSU FSP	1512	BULL CREEK/HTBL0391.961	40.351188	-124.005568	Bull Cr	72.2	8284190	1512		1
SFL	HSU FSP	1513	BULL CREEK/HTBL0110.961	40.339218	-123.940309	Bull Cr	107.6	8286600	1417		1
SFL	HSU FSP	1516	BEAR PEN CRK./HTBP0870.961	39.935025	-123.777085	Bear Pen Cr	13.0	8287178	1516		1
SFL	HSU FSP	1518	BURNS CREEK/HTBS0670.961/HTBS552.971	40.321777	-124.035799	Burns Cr	4.5	8283558	1518		2
SFL	HSU FSP	1522	CANOE CREEK/HTCA0170.961	40.294553	-123.902270	Canoe Cr	27.2	8284864	1303		1
SFL	HSU FSP	1525	CHINA CREEK/HTCH0600.961/HTCH600.971/HTCH670.981	40.097569	-123.910920	China Cr	10.2	8285306	1525		3
SFL	HSU FSP	1532	COW CREEK/HTCW0190.961/HTCW190.981	40.351674	-123.962948	Cow Cr	6.3	8284780	1305		2
SFL	HSU FSP	1535	DEAN CREEK/HTDE0280.961/HTDE280.971	40.140654	-123.807853	Dean Cr	37.1	8285200	1535		2
SFL	HSU FSP	1536	DEAN CREEK/HTDE0400.961	40.138349	-123.787536	Dean Cr	37.1	8285200	1536		1
SFL	HSU FSP	1537	SF EEL,EAST BRANCH/HTEB0380.961	40.076951	-123.777422	East Branch SF Eel R	197.1	8285364	1537		1
SFL	HSU FSP	1538	SF EEL,EAST BRANCH/HTEB0850.961/HTEB850.971/HTEB850.981	40.001040	-123.707016	East Branch SF Eel R	77.1	8285582	1538		3
SFL	HSU FSP	1539	SF EEL, EAST BRANC"/HTEB0410.961/HTEB410.971/HTEB410.981	40.066412	-123.759969	East Branch SF Eel R	179.1	8286658	1539		3
SFL	HSU FSP	1541	ELK CREEK/HTEK0180.961/HTEK180.971	40.278815	-123.852315	Elk Cr	17.5	8284942	1541		2
SFL	HSU FSP	1560	FISH CREEK/HTFS0390.962	40.059085	-123.779286	Fish Cr	5.2	8285426	1560		1
SFL	HSU FSP	1565	INDIAN CREEK/HTIN0510.861	39.976891	-123.806077	Indian Cr	70.3	8287014	1565		1
SFL	HSU FSP	1572	LEGGETT CREEK (UPPER)/HTLG0390.961/HTLG390.971	40.151531	-123.839254	Leggett Cr	11.0	8285192	1572		2
SFL	HSU FSP	1575	LOW GAP CK (PIERCY)/HTLW0550.961	39.997565	-123.780275	Low Gap Cr	9.4	8286982	1575		1
SFL	HSU FSP	1576	MCCOY CREEK/HTMC0540.961/HTMC540.971/HTMC540.981	39.953985	-123.775748	McCoy Cr	18.1	8287074	1576		3
SFL	HSU FSP	1590	MILL CREEK/HTML0330.961/HTML330.981	40.349779	-124.021309	Mill Cr	7.8	8283540	1590		2

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI COMID	Site ID Stnd.	Special	Yrs
SFL	HSU FSP	1591	MILL CREEK (BELOW LEGGETT)/HTML0680.961/HTML680.971/HTML680.981	39.885492	-123.744653	Mill Cr	6.2	8287228	1591		3
SFL	HSU FSP	1592	MILL CREEK (SALMON)/HTML0280.961/HTML280.971	40.228991	-123.862363	Mill Cr	5.3	8285002	1592		2
SFL	HSU FSP	1606	PIERCY CREEK/HTPI0500.961	39.972368	-123.805670	Piercy Cr	9.4	8287032	1606		1
SFL	HSU FSP	1614	REDWOOD CRK. (WALLY'S REPAIR)/HTRC0340.961/HTRC340.971	40.130615	-123.856507	Redwood Cr	62.0	8285222	1614		2
SFL	HSU FSP	1616	REDWOOD CREEK/HTRE0310.961	40.125991	-123.847532	Redwood Cr	67.3	8285238	1616		1
SFL	HSU FSP	1617	REDWOOD CREEK/HTRE0500.961	40.111250	-123.889176	Redwood Cr	38.4	8285268	1617		1
SFL	HSU FSP	1621	RED MOUNTAIN CREEK/HTRM0550.961/HTRM550.971/HTRM550.981	39.929018	-123.761966	Red Mountain Cr	31.2	8288610	1621		3
SFL	HSU FSP	1628	SALMON CREEK/HTSA0200.961/HTSA200.971	40.235223	-123.832816	Salmon Cr	95.1	8285008	1628		2
SFL	HSU FSP	1629	SALMON CREEK(ABV SF SALMON)/HTSA0380.961/HTSA380.971/HTSA380.981	40.214691	-123.893078	Salmon Cr	40.4	8285044	1629		3
SFL	HSU FSP	1630	SF SALMON CREEK/HTSC0200.961/HTSC200.971/HTSC386.981	40.214219	-123.892891	SF Salmon Cr	32.9	8285052	1630		3
SFL	HSU FSP	1632	SEELY CR.REDWOOD(HEADH20)/HTSE0480.961	40.148696	-123.865677		2.8	8285180	1632		1
SFL	HSU FSP	1633	SF EEL @ DYERVILE BRIDGE/HTSF0080.961/HTSF112.971/HTSF112.981	40.353770	-123.921560	SF Eel R	1785.1	8284766	1633		3
SFL	HSU FSP	1634	SF EEL @ SYLVANDALE/HTSF0240.961/HTSF270.971/HTSF270.981	40.182455	-123.775596	SF Eel R	1391.8	8285120	1634		3
SFL	HSU FSP	1637	SF EEL RIVER (BELOW PIERCY)/HTSF0500.961/HTSF500.971/HTSF500.981	39.967402	-123.803204	SF Eel R	794.8	8287056	1637		3
SFL	HSU FSP	1668	HTBL0390.961/HTBL870.981	40.314663	-124.034378	Bull Cr	35.4	8283562	1668		1
SFL	HSU FSP	1669	HTCH675.981	40.111288	-123.931623		2.9	8285274	1669		1
SFL	HSU FSP	1670	HTCN401.981	40.333136	-124.027261	Cuneo Cr	11.5	8283550	1670		1
SFL	HSU FSP	1671	HTLW500.981	39.995693	-123.778043	Low Gap Cr	9.4	8286982	1575		1
SFL	HSU FSP	1674	HTRM750.981	39.932199	-123.743883	Red Mountain Cr	31.2	8288610	1674		1
SFL	HSU FSP	1680	HTBL391.981	40.351579	-124.005525	Bull Cr	72.2	8284190	1680		1
SFL	HSU FSP	1770	INDIAN CREEK/SFE1	39.946813	-123.898622	Indian Cr	23.7	8287084	1770		4
SFL	HSU FSP	1771	INDIAN CREEK/SFE2	39.986021	-123.833984	Indian Cr	60.2	8286998	1771		4
SFL	HSU FSP	1772	PIERCY CREEK/SFE3	39.972344	-123.805794	Piercy Cr	9.4	8287032	1606		3
SFL	HSU FSP	1773	WILDCAT CREEK/SFE4	39.912090	-123.761295	Wildcat Cr	15.7	8287204	1773		3
SFL	HSU FSP	1774	STANDLEY CREEK/SFE5	39.957805	-123.803180	Standley Cr	18.9	8287102	1774		4
SFL	HSU FSP	1775	MOODY CREEK/SFE6	39.961275	-123.876048	Moody Cr	5.6	8287078	1775		4
SFL	HSU FSP	1776	BEAR PEN CREEK/SFE7	39.933834	-123.777158	Bear Pen Cr	13.0	8287178	1516		4
SFL	HSU FSP	1781	INDIAN CREEK/SFE12	39.946472	-123.899402	Indian Cr	10.1	8287086	1781		1
SFL	HSU FSP	1782	ANDERSON CREEK/SFE13	39.945636	-123.898615	Anderson Cr	11.2	8287132	1782		1
SFL	HSU FSP	1784	SEBAS CREEK/SFE15	39.966512	-123.882256	Sebbas Cr	7.3	8287034	1784		1
SFL	HSU FSP	1785	LAMPKINS CREEK/SFE16	39.965257	-123.878445		1.7	8287036	1785		1
SFL	HSU FSP	1786	INDIAN CREEK/SFE17	39.967791	-123.866960	Indian Cr	54.0	8287048	1786		2
SFL	HSU FSP	1825	SFE18	39.976890	-123.806162	Indian Cr	70.3	8287014	1565		1
SFL	HSU FSP	5811	WEST FORK SPROUL CREEK/WFSCR364	40.040456	-123.888861	West Fork Sproul Cr	20.3	8285444	5811		1
SFL	HSU FSP	5812	WEST FORK SPROUL CREEK/WFSCR366	40.040168	-123.887626	West Fork Sproul Cr	20.3	8285444	5811		1
SFL	NorWeST CAState CDFW PSWRRegion NRIS	d65ce8ac-20c7-4ad9-b8cb-c05e630bd1f2	H2O_temp_CDFW_111CE0569_2010	40.345986	-123.993123	Squaw Cr	12.2	8284792	9840		1
SFL	NorWeST CAState SWRCB NC Region	10017	Eel River - Middle Fork	40.002656	-123.777288	SF Eel R	891.9	8285576	230		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID		
SFL	NorWeST CAState SWRCB NC Region	10022	Eel River - Middle Fork	40.005528	-123.777611	SF Eel R	898.2	8285554	230	
SFL	NorWeST CAState SWRCB NC Region	10023	RANDALL Creek	40.093845	-123.796583	SF Eel R	1211.6	8285318	242	
SFL	NorWeST CAState SWRCB NC Region	10027	Sproul Creek	40.009288	-123.860917		4.8	8285528	1103	
SFL	NorWeST CAState SWRCB NC Region	10028	Sproul Creek	40.023365	-123.864124	Cox Cr	3.9	8285496	1104	
SFL	NorWeST CAState SWRCB NC Region	10029	Sproul Creek	40.024065	-123.867693		2.8	8285486	1105	
SFL	NorWeST CAState SWRCB NC Region	10030	Ladoo Creek	40.040978	-123.895630	La Doo Cr	3.9	8285438	1106	1
SFL	NorWeST CAState SWRCB NC Region	10031	Sproul Creek - West Fork	40.038309	-123.901848		3.3	8285446	1107	
SFL	NorWeST CAState SWRCB NC Region	10032	Sproul Creek - West Fork	40.050068	-123.909965	West Fork Sproul Cr	5.0	8285414	1108	
SFL	NorWeST CAState SWRCB NC Region	10033	Sproul Creek - West Fork	40.050141	-123.908228		3.9	8285412	1109	
SFL	NorWeST CAState SWRCB NC Region	10034	Coulborn Creek	39.968581	-123.895709	Couborn Cr	4.5	8287030	1116	
SFL	NorWeST CAState SWRCB NC Region	10035	Sebbas Creek	39.969414	-123.885861	Sebbas Cr	7.3	8287034	1117	
SFL	NorWeST CAState SWRCB NC Region	10039	Sproul Creek	40.055526	-123.852858	Warden Cr	4.1	8285400	1136	
SFL	NorWeST CAState SWRCB NC Region	10040	Sproul Creek	40.068760	-123.830423		62.2	8285360	1137	
SFL	NorWeST CAState SWRCB NC Region	10041	Sproul Creek	40.054027	-123.848326		51.7	8285404	1138	
SFL	NorWeST CAState SWRCB NC Region	10061	Indian Creek	39.946895	-123.898735	Indian Cr	23.7	8287084	1770	
SFL	NorWeST CAState SWRCB NC Region	10062	Piercy Creek	39.972233	-123.805737	Piercy Cr	9.4	8287032	1606	
SFL	NorWeST CAState SWRCB NC Region	10063	Standley Creek	39.957986	-123.803285	Standley Cr	18.9	8287102	1774	
SFL	NorWeST CAState SWRCB NC Region	10064	Moody Creek	39.961180	-123.875941	Moody Cr	5.6	8287078	1775	
SFL	NorWeST CAState SWRCB NC Region	10065	Bear Pen Creek	39.933924	-123.777301	Bear Pen Cr	13.0	8287178	1516	
SFL	NorWeST CAState SWRCB NC Region	10069	Indian Creek	39.967804	-123.866999	Indian Cr	54.0	8287048	1786	
SFL	NorWeST CAState SWRCB NC Region	10081	Bull Creek	40.334089	-124.025764	Bull Cr	58.1	8283548	1511	
SFL	NorWeST CAState SWRCB NC Region	10106	Dean Creek	40.138207	-123.787431	Dean Cr	37.1	8285200	1536	
SFL	NorWeST CAState SWRCB NC Region	10157	Mill Creek	40.349768	-124.021414	Mill Cr	7.8	8283540	1590	
SFL	NorWeST CAState SWRCB NC Region	10159	Mill Creek	40.229004	-123.862363	Mill Cr	5.3	8285002	1592	
SFL	NorWeST CAState SWRCB NC Region	10173	Piercy Creek	39.972269	-123.805619	Piercy Cr	9.4	8287032	1606	1
SFL	NorWeST CAState SWRCB NC Region	10181	Redwood Creek	40.130648	-123.856432	Redwood Cr	62.0	8285222	1614	
SFL	NorWeST CAState SWRCB NC Region	10222	Sproul Creek - West Fork	40.040916	-123.867112	West Fork Sproul Cr	21.9	8285432	1409	1
SFL	NorWeST CAState SWRCB NC Region	10224	Sproul Creek	40.054027	-123.848321		51.7	8285404	1138	1
SFL	NorWeST CAState SWRCB NC Region	10237		39.966523	-123.882258	Sebbas Cr	7.3	8287034	1784	
SFL	NorWeST CAState SWRCB NC Region	10252	Squaw Creek	40.348301	-123.989991	Squaw Cr	12.2	8284792	1302	
SFL	NorWeST CAState SWRCB NC Region	10253	Canoe Creek	40.295149	-123.904865	Canoe Cr	27.2	8284864	1303	
SFL	NorWeST CAState SWRCB NC Region	10254	Cow Creek	40.351335	-123.963202	Cow Cr	6.3	8284780	1305	
SFL	NorWeST CAState SWRCB NC Region	10260	Cuneo Creek	40.333502	-124.043102	SF Cuneo Cr	1.8	8283552	1337	
SFL	NorWeST CAState SWRCB NC Region	10283	BULL CREEK	40.321479	-124.035222	Bull Cr	35.4	8283562	1420	
SFL	NorWeST CAState SWRCB NC Region	10284	BULL CREEK	40.351589	-124.005561	Bull Cr	72.2	8284190	1421	
SFL	NorWeST CAState SWRCB NC Region	10285	BULL CREEK	40.339129	-123.942016	Bull Cr	107.6	8286600	1422	
SFL	NorWeST CAState SWRCB NC Region	10305	CUNEO CREEK	40.333131	-124.027480	Cuneo Cr	11.5	8283550	1443	
SFL	NorWeST CAState SWRCB NC Region	10321	ROCK CREEK	39.884061	-123.723795	Rock Cr	5.5	8287240	1459	
SFL	NorWeST CAState SWRCB NC Region	10324	ROCK CREEK	39.884061	-123.723795	Rock Cr	5.5	8287240	1462	
SFL	NorWeST CAState SWRCB NC Region	10329	HARPER CREEK	40.352288	-123.988487	Harper Cr	4.0	8284768	1467	
SFL	NorWeST CAState SWRCB NC Region	10336	Little Sproul Creek	40.067675	-123.836377	Little Sproul Cr	10.1	8285362	1477	
SFL	NorWeST CAState SWRCB NC Region	10561	Cuneo Creek	40.333350	-124.026397	Cuneo Cr	11.5	8283550	1670	
SFL	NorWeST CAState SWRCB NC Region	10562		40.073527	-123.786440	East Branch SF Eel R	197.1	8285364	1537	
SFL	NorWeST CAState SWRCB NC Region	10566	South Fork Eel	40.210515	-123.893728	SF Salmon Cr	28.7	8285070	1630	
SFL	NorWeST CAState SWRCB NC Region	10568	Tom Long Creek	40.011099	-123.629286	Tom Long Cr	9.5	8285558	8057	



Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFL	NorWeST CAState SWRCB NC Region	10569	Tom and Jerry Creek	40.013385	-123.653815		4.2	8285526	8058		
SFL	NorWeST NPO HCRCD	HCRCD_1102	SPROUL CREEK	40.012152	-123.857482		3.1	8285532	1102		
SFL	NorWeST NPO HCRCD	HCRCD_1103	TRIB TO WEST FORK SPROUL CREEK	40.009288	-123.860917		4.8	8285528	1103		
SFL	NorWeST NPO HCRCD	HCRCD_1104	COX CREEK	40.023365	-123.864124	Cox Cr	3.9	8285496	1104		
SFL	NorWeST NPO HCRCD	HCRCD_1105	TRIB TO WEST FORK SPROUL CREEK	40.024065	-123.867693		2.8	8285486	1105		
SFL	NorWeST NPO HCRCD	HCRCD_1106	LA DOO CREEK	40.040978	-123.895630	La Doo Cr	3.9	8285438	1106		
SFL	NorWeST NPO HCRCD	HCRCD_1107	TRIB TO WEST FORK SPROUL CREEK	40.038309	-123.901848		3.3	8285446	1107		
SFL	NorWeST NPO HCRCD	HCRCD_1108	WEST FORK SPROUL CREEK	40.050068	-123.909966	West Fork Sproul Cr	5.0	8285414	1108		
SFL	NorWeST NPO HCRCD	HCRCD_1109	TRIB TO WEST FORK SPROUL CREEK	40.050141	-123.908228		3.9	8285412	1109		
SFL	NorWeST NPO HCRCD	HCRCD_1116	COULBORN CREEK	39.968581	-123.895709	Couborn Cr	4.5	8287030	1116		
SFL	NorWeST NPO HCRCD	HCRCD_1117	SEBBAS CREEK	39.969414	-123.885861	Sebbas Cr	7.3	8287034	1117		
SFL	NorWeST NPO HCRCD	HCRCD_1136	WARDEN CREEK	40.055526	-123.852858	Warden Cr	4.1	8285400	1136		
SFL	NorWeST NPO HCRCD	HCRCD_1137	SPROUL CREEK	40.068760	-123.830423		62.2	8285360	1137		
SFL	NorWeST NPO HCRCD	HCRCD_1302	SQUAW CREEK	40.348301	-123.989991	Squaw Cr	12.2	8284792	1302		
SFL	NorWeST NPO HCRCD	HCRCD_1303	CANOE CREEK	40.295149	-123.904865	Canoe Cr	27.2	8284864	1303		
SFL	NorWeST NPO HCRCD	HCRCD_1305	COW CREEK	40.351335	-123.963202	Cow Cr	6.3	8284780	1305		
SFL	NorWeST NPO HCRCD	HCRCD_1407	SPROUL CREEK	40.040337	-123.866391		18.4	8285482	1407		
SFL	NorWeST NPO HCRCD	HCRCD_1408	SPROUL CREEK	40.054027	-123.848321		51.7	8285404	1138		
SFL	NorWeST NPO HCRCD	HCRCD_1409	WEST FORK SPROUL CREEK	40.040916	-123.867112	West Fork Sproul Cr	21.9	8285432	1409		
SFL	NorWeST NPO HCRCD	HCRCD_1411	LITTLE SPROUL CREEK	40.075995	-123.846739	Little Sproul Cr	10.1	8285362	1411		
SFL	NorWeST NPO HCRCD	HCRCD_1412	REDWOOD CREEK	40.096775	-123.910488	Redwood Cr	7.0	8285332	1412		
SFL	NorWeST NPO HCRCD	HCRCD_1413	SPROUL CREEK	40.068905	-123.829646		62.2	8285360	1137		
SFL	NorWeST NPO HCRCD	HCRCD_1415	SOUTH FORK EEL RIVER	40.217846	-123.816245	SF Eel R	1446.3	8285034	1415		
SFL	NorWeST NPO HCRCD	HCRCD_1416	SOUTH FORK EEL RIVER	40.001022	-123.787259	SF Eel R	881.3	8285574	1416		
SFL	NorWeST NPO HCRCD	HCRCD_1417	BULL CREEK	40.339099	-123.942070	Bull Cr	107.6	8286600	1417		
SFL	NorWeST NPO HCRCD	HCRCD_1424	BURNS CREEK	40.320845	-124.039132	Burns Cr	4.5	8283558	1424		
SFL	NorWeST NPO HCRCD	HCRCD_1435	COW CREEK	40.352056	-123.962831	Cow Cr	6.3	8284780	1305		
SFL	NorWeST NPO HCRCD	HCRCD_1444	CUNEO CREEK	40.335623	-124.033908	Cuneo Cr	11.5	8283550	1444		
SFL	NorWeST NPO HCRCD	HCRCD_1464	ROCK CREEK	39.884057	-123.723796	Rock Cr	5.5	8287240	1464		
SFL	NorWeST NPO HCRCD	HCRCD_1467	HARPER CREEK	40.352288	-123.988487	Harper Cr	4.0	8284768	1467		
SFL	NorWeST NPO HCRCD	HCRCD_1476	LEGGETT CREEK	40.129860	-123.822495	Leggett Cr	13.1	8285218	1476		
SFL	NorWeST NPO HCRCD	HCRCD_1477	LITTLE SPROUL CREEK	40.067675	-123.836377	Little Sproul Cr	10.1	8285362	1477		
SFL	NorWeST NPO HCRCD	HCRCD_1512	BULL CREEK	40.351204	-124.005510	Bull Cr	72.2	8284190	1512		
SFL	NorWeST NPO HCRCD	HCRCD_1513	BULL CREEK	40.339245	-123.940314	Bull Cr	107.6	8286600	1417		
SFL	NorWeST NPO HCRCD	HCRCD_1516	BEAR PEN CREEK	39.934864	-123.777223	Bear Pen Cr	13.0	8287178	1516		
SFL	NorWeST NPO HCRCD	HCRCD_1518	BURNS CREEK	40.321863	-124.035787	Burns Cr	4.5	8283558	1518		
SFL	NorWeST NPO HCRCD	HCRCD_1522	CANOE CREEK	40.294571	-123.902264	Canoe Cr	27.2	8284864	1303		
SFL	NorWeST NPO HCRCD	HCRCD_1525	CHINA CREEK	40.097634	-123.910861	China Cr	10.2	8285306	1525		
SFL	NorWeST NPO HCRCD	HCRCD_1532	COW CREEK	40.351695	-123.963017	Cow Cr	6.3	8284780	1305		
SFL	NorWeST NPO HCRCD	HCRCD_1535	DEAN CREEK	40.140679	-123.807814	Dean Cr	37.1	8285200	1535		
SFL	NorWeST NPO HCRCD	HCRCD_1537	EAST BRANCH SOUTH FORK EEL RIVER	40.077043	-123.777617	East Branch SF Eel R	197.1	8285364	1537		
SFL	NorWeST NPO HCRCD	HCRCD_1538	EAST BRANCH SOUTH FORK EEL RIVER	40.001057	-123.707118	East Branch SF Eel R	77.1	8285582	1538		
SFL	NorWeST NPO HCRCD	HCRCD_1539	EAST BRANCH SOUTH FORK EEL RIVER	40.066412	-123.760013	East Branch SF Eel R	179.1	8286658	1539		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFL	NorWeST NPO HCRCD	HCRCD_1541	ELK CREEK	40.278727	-123.852231	Elk Cr	17.5	8284942	1541		
SFL	NorWeST NPO HCRCD	HCRCD_1565	INDIAN CREEK	39.976874	-123.806084	Indian Cr	70.3	8287014	1565		
SFL	NorWeST NPO HCRCD	HCRCD_1572	LEGGETT CREEK	40.151519	-123.839304	Leggett Cr	11.0	8285192	1572		
SFL	NorWeST NPO HCRCD	HCRCD_1575	LOW GAP CREEK	39.997555	-123.780597	Low Gap Cr	9.4	8286982	1575		
SFL	NorWeST NPO HCRCD	HCRCD_1576	MCCOY CREEK	39.953963	-123.775764	McCoy Cr	18.1	8287074	1576		
SFL	NorWeST NPO HCRCD	HCRCD_1590	MILL CREEK	40.349768	-124.021414	Mill Cr	7.8	8283540	1590		
SFL	NorWeST NPO HCRCD	HCRCD_1591	MILL CREEK	39.885501	-123.744777	Mill Cr	6.2	8287228	1591		
SFL	NorWeST NPO HCRCD	HCRCD_1606	PIERCY CREEK	39.972269	-123.805619	Piercy Cr	9.4	8287032	1606		
SFL	NorWeST NPO HCRCD	HCRCD_1614	REDWOOD CREEK	40.130648	-123.856432	Redwood Cr	62.0	8285222	1614		
SFL	NorWeST NPO HCRCD	HCRCD_1616	REDWOOD CREEK	40.125996	-123.847522	Redwood Cr	67.3	8285238	1616		
SFL	NorWeST NPO HCRCD	HCRCD_1617	REDWOOD CREEK	40.111339	-123.888964	Redwood Cr	38.4	8285268	1617		
SFL	NorWeST NPO HCRCD	HCRCD_1621	RED MOUNTAIN CREEK	39.929108	-123.762119	Red Mountain Cr	31.2	8288610	1621		
SFL	NorWeST NPO HCRCD	HCRCD_1628	SALMON CREEK	40.235185	-123.832832	Salmon Cr	95.1	8285008	1628		
SFL	NorWeST NPO HCRCD	HCRCD_1629	SALMON CREEK	40.214637	-123.893104	Salmon Cr	40.4	8285044	1629		
SFL	NorWeST NPO HCRCD	HCRCD_1630	SOUTH FORK SALMON CREEK	40.214215	-123.892884	SF Salmon Cr	32.9	8285052	1630		
SFL	NorWeST NPO HCRCD	HCRCD_1632	TRIB TO SEELY CREEK	40.148710	-123.865637		2.8	8285180	1632		
SFL	NorWeST NPO HCRCD	HCRCD_1633	SOUTH FORK EEL RIVER	40.353887	-123.921571	SF Eel R	1785.1	8284766	1633		
SFL	NorWeST NPO HCRCD	HCRCD_1634	SOUTH FORK EEL RIVER	40.182555	-123.775656	SF Eel R	1391.8	8285120	1634		
SFL	NorWeST NPO HCRCD	HCRCD_1637	SOUTH FORK EEL RIVER	39.967466	-123.803507	SF Eel R	794.8	8287056	1637		
SFL	NorWeST NPO HCRCD	HCRCD_1668	BULL CREEK	40.314694	-124.034297	Bull Cr	35.4	8283562	1668		
SFL	NorWeST NPO HCRCD	HCRCD_1670	CUNEO CREEK	40.333114	-124.027264	Cuneo Cr	11.5	8283550	1670		
SFL	NorWeST NPO HCRCD	HCRCD_1770	INDIAN CREEK	39.946895	-123.898735	Indian Cr	23.7	8287084	1770		
SFL	NorWeST NPO HCRCD	HCRCD_1772	PIERCY CREEK	39.972233	-123.805737	Piercy Cr	9.4	8287032	1606		
SFL	NorWeST NPO HCRCD	HCRCD_1773	WILDCAT CREEK	39.912119	-123.761295	Wildcat Cr	15.7	8287204	1773		
SFL	NorWeST NPO HCRCD	HCRCD_1774	STANDLEY CREEK	39.957986	-123.803285	Standley Cr	18.9	8287102	1774		
SFL	NorWeST NPO HCRCD	HCRCD_1775	MOODY CREEK	39.961180	-123.875941	Moody Cr	5.6	8287078	1775		
SFL	NorWeST NPO HCRCD	HCRCD_1776	BEAR PEN CREEK	39.933924	-123.777301	Bear Pen Cr	13.0	8287178	1516		
SFL	NorWeST NPO HCRCD	HCRCD_1781	INDIAN CREEK	39.946409	-123.899522	Indian Cr	10.1	8287086	1781		
SFL	NorWeST NPO HCRCD	HCRCD_1782	ANDERSON CREEK	39.945482	-123.898819	Anderson Cr	11.2	8287132	1782		
SFL	NorWeST NPO HCRCD	HCRCD_1783	Coulborn Creek	39.963545	-123.892241	Couborn Cr	6.6	8287042			
SFL	NorWeST NPO HCRCD	HCRCD_1784	SEBBAS CREEK	39.966523	-123.882258	Sebbas Cr	7.3	8287034	1784		
SFL	NorWeST NPO HCRCD	HCRCD_1785	TRIB TO INDIAN CREEK	39.965220	-123.878419		1.7	8287036	1785		
SFL	NorWeST NPO HCRCD	HCRCD_1786	INDIAN CREEK	39.967804	-123.866999	Indian Cr	54.0	8287048	1786		
SFL	NorWeST NPO HCRCD	HCRCD_241	SOUTH FORK EEL RIVER	40.005528	-123.777611	SF Eel R	898.2	8285554	230		
SFL	NorWeST NPO HCRCD	HCRCD_249	SOUTH FORK EEL RIVER	40.125632	-123.827104	SF Eel R	1312.5	8286648	249		
SFL	NorWeST NPO HCRCD	HCRCD_3001	Bull Creek	40.292068	-124.012334	Bull Cr	29.6	8283566			
SFL	NorWeST NPO HCRCD	HCRCD_3003	SF Eel @ Reynolds	39.940865	-123.781748	SF Eel R	746.8	8288608			
SFL	NorWeST NPO HCRCD	HCRCD_3005	Seely Cr, Redwood junkyard	40.133378	-123.860849	Seely Cr	15.2	8285210			
SFL	NorWeST NPO HCRCD	HCRCD_8001	BUCK GULCH	40.123600	-123.913944		2.3	8285230	8001		
SFL	NorWeST NPO HCRCD	HCRCD_8002	DINNER CREEK	40.098368	-123.930017	Dinner Cr	3.8	8285312	8002		
SFL	NorWeST NPO HCRCD	HCRCD_8003	DINNER CREEK	40.095065	-123.931345	Dinner Cr	3.8	8285312	8002		
SFL	NorWeST NPO HCRCD	HCRCD_8004	ELK CREEK	40.284247	-123.834108	Elk Cr	17.5	8284942	8004		
SFL	NorWeST NPO HCRCD	HCRCD_8012	MILLER CREEK	40.111518	-123.911993	Miller Cr	9.5	8285280	8012		
SFL	NorWeST NPO HCRCD	HCRCD_8013	MILLER CREEK	40.112345	-123.912232	Miller Cr	9.5	8285280	8012		
SFL	NorWeST NPO HCRCD	HCRCD_8014	MILLER CREEK	40.112842	-123.913668	Miller Cr	9.5	8285280	8012		
SFL	NorWeST NPO HCRCD	HCRCD_8021	LEGGETT CREEK	40.154995	-123.840912	Leggett Cr	11.0	8285192	1572		
SFL	NorWeST NPO HCRCD	HCRCD_8023	SALMON CREEK	40.238592	-123.971184	Salmon Cr	8.4	8284978	8023		
SFL	NorWeST NPO HCRCD	HCRCD_8024	SOUTH FORK SALMON CREEK	40.182221	-123.890860	SF Salmon Cr	21.1	8285104	8024		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFL	NorWeST NPO HCRCD	HCRCD_8031	BULL CREEK	40.288538	-124.009736		2.7	8283570	8031		
SFL	NorWeST NPO HCRCD	HCRCD_8032	MILLER CREEK	40.103709	-123.906765	Miller Cr	9.5	8285280	8032		
SFL	NorWeST NPO HCRCD	HCRCD_8033	MILL CREEK	40.229365	-123.863174	Mill Cr	5.3	8285002	1592		
SFL	NorWeST NPO HCRCD	HCRCD_8035	LEGGETT CREEK	40.153505	-123.839972	Leggett Cr	11.0	8285192	1572		
SFL	NorWeST NPO HCRCD	HCRCD_8036	KINSEY CREEK	40.181264	-123.891231	Kinsey Cr	6.4	8285106	8036		
SFL	NorWeST NPO HCRCD	HCRCD_8039	TOSTIN CREEK	40.180850	-123.889916	Tostin Cr	5.5	8285142	8039		
SFL	NorWeST NPO HCRCD	HCRCD_8040	TRIB TO TOM LONG CREEK	40.035274	-123.669026		9.0	8285466	8040		
SFL	NorWeST NPO HCRCD	HCRCD_8041	TOM LONG CREEK	40.020368	-123.665568	Tom Long Cr	19.5	8285516	8041		
SFL	NorWeST NPO HCRCD	HCRCD_8042	SOUTH FORK SALMON CREEK	40.184428	-123.889783	SF Salmon Cr	21.1	8285104	8042		
SFL	NorWeST NPO HCRCD	HCRCD_8047	BULL CREEK	40.344449	-124.024603	Bull Cr	58.1	8283548	8047		
SFL	NorWeST NPO HCRCD	HCRCD_8056	SALMON CREEK	40.233860	-123.838971	Salmon Cr	95.1	8285008	8056		
SFL	NorWeST NPO HCRCD	HCRCD_8061	Redwood Creek	40.131049	-123.857136	Redwood Cr	62.0	8285222	1614		
SFL	NorWeST NPO HCRCD	HCRCD_8064	Bull Creek	40.290471	-124.010073	Bull Cr	29.6	8283566	8064		
SFL	NorWeST NPO HCRCD	HCRCD_8065	Decker Creek	40.333110	-123.938252	Decker Cr	6.2	8284816	8065		
SFL	NorWeST NPO HCRCD	HCRCD_8066	Panther Creek	40.289747	-124.010911	Panther Cr	8.5	8283568	8066		
SFL	NorWeST NPO HCRCD	HCRCD_9622	CANOE CREEK	40.294932	-123.906675	Canoe Cr	27.2	8284864	1303		
SFL	NorWeST NPO HCRCD	HCRCD_9623	COW CREEK	40.349870	-123.963876	Cow Cr	6.3	8284780	1305		
SFL	State Parks	BULL_CREEK_Above_Landslide	BULL_CREEK_Above_Landslide	40.310222	-124.031675	Bull Cr	35.4	8283562	9833		1
SFL	State Parks	BULL_CREEK_BAXTER	BULL_CREEK_BAXTER	40.345348	-124.024349	Bull Cr	58.1	8283548	9834		11
SFL	State Parks	BULL_CREEK_Below_Landslide	BULL_CREEK_Below_Landslide	40.312362	-124.032605	Bull Cr	35.4	8283562	9835		1
SFL	State Parks	BULL_CREEK_GALASTAR	BULL_CREEK_GALASTAR	40.329633	-124.031847	Bull Cr	43.8	8283554	9836		12
SFL	State Parks	BULL_CREEK_HAMILTON	BULL_CREEK_HAMILTON	40.341094	-124.025441	Bull Cr	58.1	8283548	9848		1
SFL	State Parks	BULL_CREEK_MARIAN	BULL_CREEK_MARIAN	40.337647	-124.026620	Bull Cr	58.1	8283548	9841		3
SFL	State Parks	BULL_CREEK_PANTHER	BULL_CREEK_PANTHER	40.290397	-124.009549	Bull Cr	29.6	8283566	8064		13
SFL	State Parks	BULL_CREEK_SF_EEL	BULL_CREEK_SF_EEL	40.339246	-123.941780	Bull Cr	107.6	8286600	1417		13
SFL	State Parks	BULL_CREEK_USGS	BULL_CREEK_USGS	40.351172	-124.005607	Bull Cr	72.2	8284190	1512		11
SFL	State Parks	BULL_HAMILTON_MIDDLE	BULL_HAMILTON_MIDDLE	40.344528	-124.024380	Bull Cr	58.1	8283548	8047		2
SFL	State Parks	BULL_MARIAN_UPPER_BOT	BULL_MARIAN_UPPER_BOT	40.335188	-124.025510	Bull Cr	58.1	8283548	9842		2
SFL	State Parks	BULL_MARIAN_UPPER_TOP	BULL_MARIAN_UPPER_TOP	40.335197	-124.025505	Bull Cr	58.1	8283548	9843		1
SFL	State Parks	BULL_MILL_LOWER	BULL_MILL_LOWER	40.351280	-124.018735	Bull Cr	67.9	8283538	9844		2
SFL	State Parks	BULL_MILL_UPPER	BULL_MILL_UPPER	40.347382	-124.024343	Bull Cr	58.1	8283548	9845		1
SFL	State Parks	BULL_PILOT_BOT	BULL_PILOT_BOT	40.349335	-123.971770	Bull Cr	94.0	8284788	9846		2
SFL	State Parks	BULL_PILOT_TOP	BULL_PILOT_TOP	40.349308	-123.972151	Bull Cr	94.0	8284788	9847		2
SFL	State Parks	BURNS_CREEK	BURNS_CREEK	40.321062	-124.038703	Burns Cr	4.5	8283558	1424		5
SFL	State Parks	CANOE_CREEK	CANOE_CREEK	40.294114	-123.912213	Canoe Cr	27.2	8284864	9832		7
SFL	State Parks	COW_CREEK	COW_CREEK	40.351187	-123.963585	Cow Cr	6.3	8284780	1305		12
SFL	State Parks	CUNEO_BRIDGE	CUNEO_BRIDGE	40.333165	-124.027111	Cuneo Cr	11.5	8283550	1670		13
SFL	State Parks	DECKER_CREEK	DECKER_CREEK	40.333221	-123.937724	Decker Cr	6.2	8284816	8065		10
SFL	State Parks	DURPHY_CREEK	DURPHY_CREEK	40.020420	-123.794250	Durphy Cr	6.3	8285506	9831		6
SFL	State Parks	MILL_CREEK	MILL_CREEK	40.350877	-124.023184	Mill Cr	7.8	8283540	9852		8
SFL	State Parks	MILL_CREEK_2	MILL_CREEK_2	40.350877	-124.023184	Mill Cr	7.8	8283540	9852		3
SFL	State Parks	NF_PANTHER_LOWER	NF_PANTHER_LOWER	40.288024	-124.014904		4.3	8283578	9853		9
SFL	State Parks	NF_PANTHER_UPPER	NF_PANTHER_UPPER	40.286445	-124.026597		4.3	8283578	9854		9
SFL	State Parks	PREACHER_GULCH	PREACHER_GULCH	40.288506	-124.008553		2.7	8283570	9856		7
SFL	State Parks	SF_CUNEO_LOWER	SF_CUNEO_LOWER	40.334052	-124.042643	SF Cuneo Cr	1.8	8283552	1337		9
SFL	State Parks	SF_CUNEO_UPPER	SF_CUNEO_UPPER	40.327017	-124.053631	SF Cuneo Cr	1.8	8283552	1442		9

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site			
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.	Special	Yrs
SFL	State Parks	SOUTH_FORK_EEL	SOUTH_FORK_EEL	40.338142	-123.938291	SF Eel R	1672.7	8286664	9855		2
SFL	State Parks	SQUAW_CREEK	SQUAW_CREEK	40.348084	-123.989760	Squaw Cr	12.2	8284792	1302		13
SFL	UCB KBG	SPATT_2015_Meyers Flat	SF Eel Meyers Flat SPATT 2015	40.258058	-123.838930	SF Eel R	1571.5	8286602	9779		1
SFL	UCB KBG	SPATT_2015_Phillipsville	SF Eel at Phillipsville SPATT	40.205483	-123.788827	SF Eel R	1426.1	8285062	9778		1
SFL	USFS PSWRS RSL	Bull_USGS_DTS-12	Bull Creek at USGS gage DTS-12	40.351172	-124.005607	Bull Cr	72.2	8284190	1512		12
SFL	USFS PSWRS RSL	Bull_USGS_Pendant_A	Bull Creek at USGS gage Pendant A	40.351172	-124.005607	Bull Cr	72.2	8284190	1512		7
SFL	USFS PSWRS RSL	Bull_USGS_Pendant_B	Bull Creek at USGS gage Pendant B	40.351172	-124.005607	Bull Cr	72.2	8284190	1512		6
SFU	BLM Arcata	SF_Eel_Camp_StMichael	SF Eel US Rattlesnake	39.821710	-123.654690	SF Eel R	352.9	8287376	9810		2
SFU	BLM Arcata	Upper_South_Fork_Eel	SF Eel upstream of Elder	39.727480	-123.645740	SF Eel R	125.9	8287584	1657		2
SFU	ERRP	Ang	SF Eel Angelo Salser Bar SPATT	39.742378	-123.638086	SF Eel R	149.6	8287546	9760		1
SFU	ERRP	Ang_14	SF Eel Angelo Salser Bar SPATT	39.742378	-123.638086	SF Eel R	149.6	8287546	9760		1
SFU	ERRP	BB	SF Eel Big Bend Lodge	39.825492	-123.680683	SF Eel R	472.2	8287346	9770		1
SFU	ERRP	CEDAR	Cedar US SFE at Gomde Monastery	39.839933	-123.707450	Cedar Cr	39.5	8287286	9771		1
SFU	ERRP	Dark_Canyon_Jack_Hearts	Dark Canyon US Jack Hearts	39.728242	-123.662256		1.7	8287578	9755		2
SFU	ERRP	Elder_12	ELDER CREEK/ELDER CREEK (# 6)	39.729127	-123.646608	Elder Cr	16.9	8287590	1461		1
SFU	ERRP	Jack_Hearts_Low	JACK OF HEARTS CREEK/JACK OF HEARTS CREEK	39.722456	-123.652091	Jack of Hearts Cr	10.2	8287586	1566		1
SFU	ERRP	JackH_12	JACK OF HEARTS CREEK/JACK OF HEARTS CREEK	39.722456	-123.652091	Jack of Hearts Cr	10.2	8287586	1566		1
SFU	ERRP	LCHRLUSF	DUTCH CHARLIE CREEK/DUTCH CHARLIE CK	39.689886	-123.659037	Dutch Charlie Cr	11.4	8287662	1534		1
SFU	ERRP	RATT_101	RATTLESNAKE CREEK/RATTLESNAKE CREEK	39.823756	-123.654503	Rattlesnake Cr	98.9	8287348	1610		1
SFU	ERRP	RATT_TOP	Rattlesnake DS Mud - Hole in the Wall	39.828487	-123.606995	Rattlesnake Cr	65.6	8287330	9769		1
SFU	ERRP	RDWBRAN_12	REDWOOD CREEK/REDWOOD CRK. (BRANSCOMB)	39.680102	-123.657110	Redwood Cr	8.0	8287698	1613		1
SFU	ERRP	Rdwd_Branscomb	REDWOOD CREEK/REDWOOD CRK. (BRANSCOMB)	39.680102	-123.657110	Redwood Cr	8.0	8287698	1613		1
SFU	ERRP	SF_Branscomb	SF Eel US Branscomb Rd	39.681270	-123.650052	SF Eel R	76.0	8287694	9752		1
SFU	ERRP	SF_UCAP_12	SF Eel Angelo Salser Bar SPATT	39.742378	-123.638086	SF Eel R	149.6	8287546	9760		1
SFU	ERRP	SFE_14HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE_1HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE_BBL	SF Eel Big Bend Lodge	39.825492	-123.680683	SF Eel R	472.2	8287346	9770		1
SFU	ERRP	SFE0SCPL	SF Eel Angelo Sci Cntr Pool	39.719049	-123.652259	SF Eel R	114.3	8287608	9753	Pool Array	1
SFU	ERRP	SFE0WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE10TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE10WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE11HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE11TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE12HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE12WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE13WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE14WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE16HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE16TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE16WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE1HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE1TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE1WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE2HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE2TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE3WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE4HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE4SCPL	SF Eel Angelo Sci Cntr Pool	39.719049	-123.652259	SF Eel R	114.3	8287608	9753	Pool Array	1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFU	ERRP	SFE5TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE5WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE6HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE6SCPL	SF Eel Angelo Sci Cntr Pool	39.719049	-123.652259	SF Eel R	114.3	8287608	9753	Pool Array	1
SFU	ERRP	SFE6TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE7WPL	SF Eel at Wilderness Pool	39.740792	-123.633089	SF Eel R	149.6	8287546	9759	Pool Array	1
SFU	ERRP	SFE8HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFE8SCPL	SF Eel Angelo Sci Cntr Pool	39.719049	-123.652259	SF Eel R	114.3	8287608	9753	Pool Array	1
SFU	ERRP	SFE8TMPL	SF Eel DS Ten Mile Pool	39.754875	-123.631444	SF Eel R	325.5	8287530	9761	Pool Array	1
SFU	ERRP	SFE9HPL	SF Eel Hunters Pool	39.758097	-123.637006	SF Eel R	325.5	8287530	9764	Pool Array	1
SFU	ERRP	SFEASCPL	SF Eel Angelo Sci Cntr	39.719117	-123.652492	SF Eel R	114.3	8287608	9805		1
SFU	ERRP	SFEBRAN_12	SF Eel US Branscomb Rd	39.681270	-123.650052	SF Eel R	76.0	8287694	9752		1
SFU	ERRP	SFEDSCC	SF Eel DS Cedar	39.839414	-123.709747	SF Eel R	527.3	8287288	9773		1
SFU	ERRP	SFEDSELD12	SOUTH FORK EEL RIVER/SF EEL BELOW ELDER CRK.	39.730246	-123.648117	SF Eel R	145.9	8287574	1635		1
SFU	ERRP	SFEDSJH	SF Eel DS Jack of Hearts	39.723928	-123.649189	SF Eel R	125.9	8287584	9756		1
SFU	ERRP	SFEDSTM	SF Eel DS Ten Mile	39.755922	-123.631289	SF Eel R	325.5	8287530	9762		1
SFU	ERRP	SFEHPLDS	SF Eel DS Hunters Pool	39.758936	-123.637314	SF Eel R	325.5	8287530	9765		1
SFU	ERRP	SFEHPLUP	SF Eel US Hunter Pool	39.758056	-123.636372	SF Eel R	325.5	8287530	9763		1
SFU	ERRP	SFEPPUS	SF Eel Angelo Pete's Pool	39.733270	-123.646410	SF Eel R	145.9	8287574	9799		1
SFU	ERRP	SFEUSCC	SF Eel US Cedar	39.838223	-123.708496	SF Eel R	485.5	8287296	9772		1
SFU	ERRP	SFEUSMC	SF Eel Upper US Mud Creek	39.643780	-123.615785	SF Eel R	39.9	8287738	9751		1
SFU	ERRP	SFEWHPL	SF Eel at White House	39.747486	-123.633417	SF Eel R	153.9	8288648	9758		1
SFU	ERRP	SFEWMPL	SF Eel at Walker Meadow	39.736119	-123.631544	SF Eel R	145.9	8287574	9757		1
SFU	ERRP	SFEWPLDS	SF Eel DS Wilderness Pool 2015 Probe	39.741325	-123.634189	SF Eel R	149.6	8287546	9781		1
SFU	ERRP	Streeter_Camp_Pool	Streeter Camp Pool	39.742996	-123.532410	Streeter Cr	12.6	8287562	9768	DRY/Isolat ed Pool	
SFU	ERRP	Streeter_Restoration_Pool	Streeter Creek Isolated Pool at Restoration Project	39.741180	-123.532297	Streeter Cr	12.6	8287562	9767	Isolated Pool	1
SFU	ERRP	STRTR_PL	Streeter Creek Isolated Pool at Restoration Project	39.741180	-123.532297	Streeter Cr	12.6	8287562	9767	Isolated Pool	1
SFU	ERRP	STRTR_PL12	Streeter Creek Isolated Pool at Restoration Project	39.741180	-123.532297	Streeter Cr	12.6	8287562	9767	Isolated Pool	1
SFU	ERRP	TNMI_PL_12	Ten Mile US Streeter Pool	39.744986	-123.527536	Tenmile Cr	103.0	8287552	9766	DRY	
SFU	ERRP	UpJack_Hrts	Jack of Hearts Upper	39.716638	-123.684878	Jack of Hearts Cr	7.4	8287604	9754		1
SFU	HCRCD	1461	ELDER CREEK/ELDER CREEK (# 6)	39.729127	-123.646608	Elder Cr	16.9	8287590	1461		5
SFU	HCRCD	1480	MISERY CREEK/MISERY CREEK (ELDER CRK)	39.719957	-123.611771	Misery Cr	2.0	8287626	1480		1
SFU	HCRCD	1534	DUTCH CHARLIE CREEK/DUTCH CHARLIE CK	39.689872	-123.659036	Dutch Charlie Cr	11.4	8287662	1534		4
SFU	HCRCD	1542	ELK CREEK/ELK CREEK (RATTLESNAKE)	39.825760	-123.593473	Elk Cr	10.1	8287392	1542		1
SFU	HCRCD	1566	JACK OF HEARTS CREEK/JACK OF HEARTS CREEK	39.722456	-123.652091	Jack of Hearts Cr	10.2	8287586	1566		5
SFU	HCRCD	1577	MUD CREEK/MUD CREEK	39.647429	-123.613078	Mud Cr	13.3	8287730	1577		4
SFU	HCRCD	1610	RATTLESNAKE CREEK/RATTLESNAKE CREEK	39.823756	-123.654503	Rattlesnake Cr	98.9	8287348	1610		1
SFU	HCRCD	1611	RATTLESNAKE CREEK/RATTLESNAKE CREEK	39.823528	-123.566750	Rattlesnake Cr	41.5	8287350	1611		4
SFU	HCRCD	1612	REDWOOD CREEK/REDWOOD CRK. @ BRAN.DUMP	39.671189	-123.667310	Redwood Cr	8.0	8287698	1612		5
SFU	HCRCD	1638	SOUTH FORK EEL RIVER/SF EEL RIVER (ABV RATTLESNAKE)	39.820934	-123.653674	SF Eel R	352.9	8287376	1638		1
SFU	HCRCD	1646	TENMILE CREEK/TEN MILE CRK ( LAYTONVILLE)	39.688098	-123.492182	Tenmile Cr	46.0	8287676	1645		5
SFU	HCRCD	1647	TENMILE CREEK/TEN MILE CRK (LOWER NEAR SF)	39.754604	-123.631225	Tenmile Cr	169.4	8287534	1647		5
SFU	HCRCD	1657	SOUTH FORK EEL RIVER/SF EEL ABOVE ELDER	39.728493	-123.648052	SF Eel R	125.9	8287584	1657		3

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFU	HCRCD	1658	SOUTH FORK EEL RIVER/SF EEL @ BRANSCOMB	39.653047	-123.627726	SF Eel R	60.1	8287732	1636		5
SFU	HCRCD	1673	PETERSON CREEK/NA	39.752489	-123.583799	Peterson Cr	6.0	8287540	1673		2
SFU	HCRCD	1675	TENMILE CREEK/NA	39.756837	-123.584688	Tenmile Cr	155.3	8287532	1675		2
SFU	HCRCD	1778	HOLLOW TREE CREEK/HOLLOW TREE CREEK	39.847890	-123.727188	Hollow Tree Cr	108.2	8287274	1778		1
SFU	HCRCD	1779	REDWOOD CREEK/REDWOOD CREEK	39.673943	-123.664030	Redwood Cr	8.0	8287698	1779		1
SFU	HCRCD	1780	DUTCH CHARLIE CREEK/DUTCH CHARLIE CREEK	39.684075	-123.699941	Dutch Charlie Cr	4.6	8287670	1780		1
SFU	HCRCD	1838	MUDDY GULCH CREEK/MUDDY GULCH	39.670831	-123.642015	Muddy Gulch Cr	1.3	8287696	1838		1
SFU	HCRCD	1839	BEAR CREEK/BEAR CREEK	39.637021	-123.596204	Bear Cr	2.2	8287742	1839		1
SFU	HCRCD	1840	TAYLOR CREEK/TAYLOR CREEK	39.642578	-123.603687	Taylor Cr	1.7	8287736	1840		1
SFU	HCRCD	2029	HOLLOW TREE CREEK/HOLLOW TREE (LOWER)	39.823351	-123.728564	Hollow Tree Cr	96.8	8287372	2029		1
SFU	HCRCD	2036	HOLLOW TREE CREEK/HOLLOW TREE (UPPER)	39.739173	-123.719928	Hollow Tree Cr	12.4	8287554	2036		1
SFU	HCRCD	2037	HUCKLEBERRY CREEK/HUCKLEBERRY CREEK	39.739156	-123.720431	Huckleberry Cr	7.3	8287564	2037		1
SFU	HCRCD	2142	HOLLOW TREE CREEK/HOLLOW TREE (MIDDLE)	39.766269	-123.738095	Hollow Tree Cr	37.7	8287508	2142		1
SFU	HCRCD	2150	BOND CREEK/BOND CREEK	39.766997	-123.737710	Bond Cr	6.7	8287490	2150		1
SFU	HCRCD	2151	REDWOOD CREEK/REDWOOD CREEK (HOLLOW TREE)	39.777755	-123.753622	Redwood Cr	8.9	8287470	2151		1
SFU	HCRCD	2152	MICHAELS CREEK/MICHAELS CREEK	39.762687	-123.721864	Michaels Cr	9.5	8287504	2152		1
SFU	HCRCD	8016	PETERSON CREEK/PETERSON CREEK	39.753643	-123.585235	Peterson Cr	6.0	8287540	1673		2
SFU	HCRCD	8038	LOST MAN CREEK/LOSTMAN	39.796687	-123.741819	Lost Man Cr	2.9	8287420	8038		1
SFU	HCRCD	8045	NA/NA	39.645556	-123.619165	SF Eel R	60.1	8287732	8045		1
SFU	HCRCD	8046	NA/NA	39.746170	-123.643172	Barnwell Cr	2.0	8288644	8046		1
SFU	HCRCD	8050	NA/NA	39.729111	-123.646238	Elder Cr	16.9	8287590	1461		1
SFU	HCRCD	8052	NA/NA	39.740762	-123.629852	Fox Cr	2.8	8287544	8052		1
SFU	HCRCD	8054	NA/NA	39.828234	-123.596727	Rattlesnake Cr	62.1	8287342	8054		1
SFU	HCRCD	8059	NA/NA	39.720555	-123.649688	SF Eel R	114.3	8287608	8059		1
SFU	HCRCD	8060	NA/NA	39.723648	-123.651126	Jack of Hearts Cr	10.2	8287586	1566		1
SFU	HCRCD	8062	Bear Creek/Bear Creek	39.786285	-123.751605	Bear Cr	2.7	8287456	8062		1
SFU	HCRCD	8063	Hollow Tree Creek/Hollow Tree	39.786232	-123.751173	Hollow Tree Cr	61.4	8288634	8063		1
SFU	HSU FSP	1433	CEDAR CREEK/HTCE1480.971	39.884144	-123.682758	Cedar Cr	39.5	8287286	1433		1
SFU	HSU FSP	1456	ELDER CREEK (# 1)/HTED1880.971	39.718036	-123.603602	Elder Cr	3.6	8287612	1456		1
SFU	HSU FSP	1457	ELDER CREEK (# 2)/HTED1750.971	39.720571	-123.612757	Elder Cr	16.9	8287590	1457		1
SFU	HSU FSP	1458	ELDER CREEK (# 3)/HTED1550.971	39.726807	-123.627539	Elder Cr	16.9	8287590	1458		1
SFU	HSU FSP	1460	ELDER CREEK (# 5)/HTED1400.971	39.729736	-123.644231	Elder Cr	16.9	8287590	1460		1
SFU	HSU FSP	1461	ELDER CREEK (# 6)/HTED1390.971/HTED1390.981/HTED1440.961	39.729127	-123.646608	Elder Cr	16.9	8287590	1461		3
SFU	HSU FSP	1463	ELK RIVER (RATTLESNAKE)/ELK CREEK (RATTLESNAKE)/HTEC1400.981/HTEK1400.971	39.811954	-123.591911	Elk Cr	10.1	8287392	1463		2
SFU	HSU FSP	1479	PARALYSE CREEK/HTPY1880.971	39.717891	-123.603731		4.9	8287632	1479		1
SFU	HSU FSP	1480	MISERY CREEK (ELDER CRK)/HTMS1980.971	39.719957	-123.611771	Misery Cr	2.0	8287626	1480		1
SFU	HSU FSP	1524	CEDAR CREEK/HTCE0780.961/HTCE780.971	39.839921	-123.701334	Big Dann Cr	12.6	8287290	1524		2
SFU	HSU FSP	1533	DUTCH CHARLIE CK./HTDC1430.961	39.689886	-123.659037	Dutch Charlie Cr	11.4	8287662	1534		1
SFU	HSU FSP	1534	DUTCH CHARLIE CK./HTDC1400.961/HTDC1400.971/HTDC1400.981	39.689872	-123.659036	Dutch Charlie Cr	11.4	8287662	1534		3
SFU	HSU FSP	1540	ELDER CREEK/HTED1440.971	39.730134	-123.635704	Elder Cr	16.9	8287590	1540		1
SFU	HSU FSP	1542	ELK CREEK (RATTLESNAKE)/HTEK1280.961/HTEK1280.971	39.825760	-123.593473	Elk Cr	10.1	8287392	1542		2
SFU	HSU FSP	1557	FOSTER CREEK/HTFO1180.961	39.836003	-123.615073	Foster Cr	22.9	8287320	1557		1
SFU	HSU FSP	1558	FOSTER CREEK/HTFO1220.961/HTFO1220.971	39.838774	-123.615944	Foster Cr	19.9	8287294	1557		2
SFU	HSU FSP	1562	HOLLOW TREE CK./HTHO0740.961	39.857215	-123.728090	Hollow Tree Cr	108.2	8287274	1562		1
SFU	HSU FSP	1563	HOLLOW TREE CREEK/HTHO0750.961	39.857081	-123.728279	Hollow Tree Cr	108.2	8287274	1562		1

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI Reach COMID	Site ID Stnd.	Special	Yrs
SFU	HSU FSP	1566	JACK OF HEARTS CREEK/HTJA1400.961/HTJA1400.971/HTJA1400.981	39.722456	-123.652091	Jack of Hearts Cr	10.2	8287586	1566		3
SFU	HSU FSP	1577	MUD CREEK/HTMD159.981/HTMD1590.961/HTMD1590.971	39.647429	-123.613078	Mud Cr	13.3	8287730	1577		3
SFU	HSU FSP	1608	RATTLESNAKE @ BELL SPRINGS/HTRA1355.961/HTRA1355.971	39.827980	-123.576994	Rattlesnake Cr	49.9	8287340	1608		2
SFU	HSU FSP	1609	RATTLESNAKE @ CUMMINGS CRK./HTRA1080.961/HTRA1080.971	39.832265	-123.628218	Rattlesnake Cr	90.3	8287322	1609		2
SFU	HSU FSP	1610	RATTLESNAKE CREEK/HTRA0870.961/HTRA870.971/HTRA870.981	39.823756	-123.654503	Rattlesnake Cr	98.9	8287348	1610		3
SFU	HSU FSP	1611	RATTLESNAKE CREEK/HTRA1400.961	39.823528	-123.566750	Rattlesnake Cr	41.5	8287350	1611		1
SFU	HSU FSP	1612	REDWOOD CRK. @ BRAN.DUMP/HTRC1550.961/HTRC1550.971/HTRC1550.981	39.671189	-123.667310	Redwood Cr	8.0	8287698	1612		3
SFU	HSU FSP	1613	REDWOOD CRK. (BRANSCOMB)/HTRC1460.961	39.680102	-123.657110	Redwood Cr	8.0	8287698	1613		1
SFU	HSU FSP	1635	SF EEL BELOW ELDER CRK./HTSF1150.961	39.730246	-123.648117	SF Eel R	145.9	8287574	1635		1
SFU	HSU FSP	1636	SF EEL RIVER (AT BRANSCOMB)/HTSF1460.981/HTSF1550.961	39.653016	-123.627712	SF Eel R	60.1	8287732	1636		2
SFU	HSU FSP	1638	SF EEL RIVER (ABV RATTLESNAKE)/HTSF0850.961/HTSF850.971	39.820934	-123.653674	SF Eel R	352.9	8287376	1638		2
SFU	HSU FSP	1644	TEN MILE CK LOWER: STREETER/HTTM1440.961/HTTM1440.971	39.746055	-123.528887	Tenmile Cr	120.2	8288654	1644		2
SFU	HSU FSP	1645	TEN MILE CREEK (UPPER)/HTTM1230.961	39.688404	-123.492377	Tenmile Cr	46.0	8287676	1645		1
SFU	HSU FSP	1646	TEN MILE CRK ( LAYTONVILLE)/HTTM1700.961/HTTM1700.971/HTTM1700.981	39.688098	-123.492182	Tenmile Cr	46.0	8287676	1645		3
SFU	HSU FSP	1647	TEN MILE CRK (LOWER NEAR SF)/HTTM1210.961/HTTM1210.971/HTTM1210.981	39.754604	-123.631225	Tenmile Cr	169.4	8287534	1647		3
SFU	HSU FSP	1657	SF EEL ABOVE ELDER/HTSF1200.971/HTSF1200.981	39.728493	-123.648052	SF Eel R	125.9	8287584	1657		2
SFU	HSU FSP	1658	SF EEL @ BRANSCOMB/HTSF1530.961/HTSF1530.971	39.653047	-123.627726	SF Eel R	60.1	8287732	1636		2
SFU	HSU FSP	1672	HTPE1850.981	39.739580	-123.583906	Peterson Cr	3.5	8288652	1672		1
SFU	HSU FSP	1673	HTPE1450.981	39.752489	-123.583799	Peterson Cr	6.0	8287540	1673		1
SFU	HSU FSP	1675	HTTM1410.981	39.756837	-123.584688	Tenmile Cr	155.3	8287532	1675		1
SFU	HSU FSP	1777	HOLLOW TREE CREEK/SFE8	39.829855	-123.727927	Hollow Tree Cr	96.8	8287372	1777		1
SFU	HSU FSP	1778	HOLLOW TREE CREEK/SFE9	39.847890	-123.727188	Hollow Tree Cr	108.2	8287274	1778		3
SFU	HSU FSP	1779	REDWOOD CREEK/SFE10	39.673943	-123.664030	Redwood Cr	8.0	8287698	1779		2
SFU	HSU FSP	1780	DUTCH CHARLIE CREEK/SFE11	39.684075	-123.699941	Dutch Charlie Cr	4.6	8287670	1780		2
SFU	HSU FSP	2032	BOND CREEK/41-3	39.767008	-123.738107	Bond Cr	6.7	8287490	2032		2
SFU	HSU FSP	2034	MICHAELS CREEK/41-5	39.764449	-123.717050	Michaels Cr	6.5	8287502	2034		1
SFU	HSU FSP	2137	Walters Creek/41-8	39.789093	-123.729357	Walters Cr	2.4	8287438	2137		1
SFU	HSU FSP	2138	Waldron Creek/41-9	39.755919	-123.725987	Waldron Cr	3.2	8288658	2138		1
SFU	HSU FSP	5805	HOLLOW TREE CREEK/HTRCR368	39.813832	-123.760922	Hollow Tree Cr	75.8	8288630	5805		1
SFU	HSU FSP	5806	HOLLOW TREE CREEK/HTRCR371	39.814144	-123.761361	Hollow Tree Cr	75.8	8288630	5805		1
SFU	HSU FSP	5807	HOLLOW TREE CREEK/HTRCR817	39.814501	-123.761841	Hollow Tree Cr	75.8	8288630	5805		1
SFU	NorWeST CAState SWRCB NC Region	10066	Hollow Tree Creek	39.847969	-123.727320	Hollow Tree Cr	108.2	8287274	1778		
SFU	NorWeST CAState SWRCB NC Region	10067	Redwood Creek	39.673869	-123.664038	Redwood Cr	8.0	8287698	1779		
SFU	NorWeST CAState SWRCB NC Region	10068	Dutch Charlie Creek	39.683960	-123.699946	Dutch Charlie Cr	4.6	8287670	1780		
SFU	NorWeST CAState SWRCB NC Region	10110	Elder Creek	39.730060	-123.635704	Elder Cr	16.9	8287590	1540		1
SFU	NorWeST CAState SWRCB NC Region	10130	Hollow Tree Creek	39.857323	-123.728201	Hollow Tree Cr	108.2	8287274	1562		
SFU	NorWeST CAState SWRCB NC Region	10205	Eel River - South Fork	39.820930	-123.653675	SF Eel R	352.9	8287376	1638		



Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFU	NorWeST CAState SWRCB NC Region	10297	CEDAR CREEK	39.883920	-123.682884	Cedar Cr	39.5	8287286	1434		
SFU	NorWeST CAState SWRCB NC Region	10337	PARALYZE CANYON	39.717877	-123.603577		4.9	8287632	1478		
SFU	NorWeST CAState SWRCB NC Region	10339	MISERY CREEK	39.719910	-123.611883	Misery Cr	2.0	8287626	1480		
SFU	NorWeST CAState SWRCB NC Region	10340	RATTLESNAKE CREEK	39.832261	-123.628291	Rattlesnake Cr	90.3	8287322	1481		
SFU	NorWeST CAState SWRCB NC Region	10558	Eel River - South Fork	39.645408	-123.619390	SF Eel R	60.1	8287732	8045		
SFU	NorWeST CAState SWRCB NC Region	10559	Barnwell Creek	39.746208	-123.643203	Barnwell Cr	2.0	8288644	8046		
SFU	NorWeST CAState SWRCB NC Region	10563	Elder Creek	39.729188	-123.646240	Elder Cr	16.9	8287590	1461		
SFU	NorWeST CAState SWRCB NC Region	10564	Fox Creek	39.740700	-123.629800	Fox Cr	2.8	8287544	8052		
SFU	NorWeST CAState SWRCB NC Region	10565	Rattlesnake Creek	39.828154	-123.596858	Rattlesnake Cr	62.1	8287342	8054		
SFU	NorWeST CAState SWRCB NC Region	10570	South Fork Eel	39.720570	-123.649741	SF Eel R	114.3	8287608	8059		
SFU	NorWeST CAState SWRCB NC Region	10571	Jack of Hearst Creek	39.723760	-123.651206	Jack of Hearts Cr	10.2	8287586	1566		
SFU	NorWeST NPO HCRCD	HCRCD_1433	CEDAR CREEK	39.883910	-123.682810	Cedar Cr	39.5	8287286	1433		
SFU	NorWeST NPO HCRCD	HCRCD_1456	ELDER CREEK	39.717977	-123.603445	Elder Cr	3.6	8287612	1456		
SFU	NorWeST NPO HCRCD	HCRCD_1457	ELDER CREEK	39.720559	-123.612764	Elder Cr	16.9	8287590	1457		
SFU	NorWeST NPO HCRCD	HCRCD_1458	ELDER CREEK	39.726763	-123.627572	Elder Cr	16.9	8287590	1458		
SFU	NorWeST NPO HCRCD	HCRCD_1460	ELDER CREEK	39.729736	-123.644231	Elder Cr	16.9	8287590	1460		
SFU	NorWeST NPO HCRCD	HCRCD_1461	ELDER CREEK	39.729188	-123.646608	Elder Cr	16.9	8287590	1461		
SFU	NorWeST NPO HCRCD	HCRCD_1463	ELK CREEK	39.811951	-123.592015	Elk Cr	10.1	8287392	1463		
SFU	NorWeST NPO HCRCD	HCRCD_1480	MISERY CREEK	39.719910	-123.611883	Misery Cr	2.0	8287626	1480		
SFU	NorWeST NPO HCRCD	HCRCD_1524	BIG DANN CREEK	39.839969	-123.701649	Big Dann Cr	12.6	8287290	1524		
SFU	NorWeST NPO HCRCD	HCRCD_1533	DUTCH CHARLIE CREEK	39.689991	-123.659184	Dutch Charlie Cr	11.4	8287662	1534		
SFU	NorWeST NPO HCRCD	HCRCD_1534	DUTCH CHARLIE CREEK	39.689909	-123.659265	Dutch Charlie Cr	11.4	8287662	1534		
SFU	NorWeST NPO HCRCD	HCRCD_1540	ELDER CREEK	39.730060	-123.635704	Elder Cr	16.9	8287590	1540		
SFU	NorWeST NPO HCRCD	HCRCD_1542	ELK CREEK	39.825807	-123.593661	Elk Cr	10.1	8287392	1542		
SFU	NorWeST NPO HCRCD	HCRCD_1557	FOSTER CREEK	39.835867	-123.615322	Foster Cr	22.9	8287320	1557		
SFU	NorWeST NPO HCRCD	HCRCD_1558	FOSTER CREEK	39.838741	-123.616313	Foster Cr	19.9	8287294	1557		
SFU	NorWeST NPO HCRCD	HCRCD_1562	HOLLOW TREE CREEK	39.857323	-123.728201	Hollow Tree Cr	108.2	8287274	1562		
SFU	NorWeST NPO HCRCD	HCRCD_1563	HOLLOW TREE CREEK	39.857199	-123.728401	Hollow Tree Cr	108.2	8287274	1562		
SFU	NorWeST NPO HCRCD	HCRCD_1566	JACK OF HEARTS CREEK	39.722480	-123.652194	Jack of Hearts Cr	10.2	8287586	1566		
SFU	NorWeST NPO HCRCD	HCRCD_1577	MUD CREEK	39.647428	-123.613077	Mud Cr	13.3	8287730	1577		
SFU	NorWeST NPO HCRCD	HCRCD_1608	RATTLESNAKE CREEK	39.827914	-123.577194	Rattlesnake Cr	49.9	8287340	1608		
SFU	NorWeST NPO HCRCD	HCRCD_1609	RATTLESNAKE CREEK	39.832242	-123.628230	Rattlesnake Cr	90.3	8287322	1609		
SFU	NorWeST NPO HCRCD	HCRCD_1610	RATTLESNAKE CREEK	39.823805	-123.654594	Rattlesnake Cr	98.9	8287348	1610		
SFU	NorWeST NPO HCRCD	HCRCD_1611	RATTLESNAKE CREEK	39.823445	-123.567142	Rattlesnake Cr	41.5	8287350	1611		
SFU	NorWeST NPO HCRCD	HCRCD_1612	REDWOOD CREEK	39.671208	-123.667321	Redwood Cr	8.0	8287698	1612		
SFU	NorWeST NPO HCRCD	HCRCD_1613	REDWOOD CREEK	39.680089	-123.657313	Redwood Cr	8.0	8287698	1613		
SFU	NorWeST NPO HCRCD	HCRCD_1635	SOUTH FORK EEL RIVER	39.730257	-123.648170	SF Eel R	145.9	8287574	1635		
SFU	NorWeST NPO HCRCD	HCRCD_1636	SOUTH FORK EEL RIVER	39.652837	-123.628024	SF Eel R	60.1	8287732	1636		
SFU	NorWeST NPO HCRCD	HCRCD_1638	SOUTH FORK EEL RIVER	39.820930	-123.653675	SF Eel R	352.9	8287376	1638		
SFU	NorWeST NPO HCRCD	HCRCD_1644	TENMILE CREEK	39.745992	-123.529086	Tenmile Cr	120.2	8288654	1644		
SFU	NorWeST NPO HCRCD	HCRCD_1645	TENMILE CREEK	39.688275	-123.492689	Tenmile Cr	46.0	8287676	1645		
SFU	NorWeST NPO HCRCD	HCRCD_1646	TENMILE CREEK	39.687949	-123.492400	Tenmile Cr	46.0	8287676	1645		
SFU	NorWeST NPO HCRCD	HCRCD_1647	TENMILE CREEK	39.754593	-123.631232	Tenmile Cr	169.4	8287534	1647		
SFU	NorWeST NPO HCRCD	HCRCD_1657	SOUTH FORK EEL RIVER	39.728465	-123.648074	SF Eel R	125.9	8287584	1657		
SFU	NorWeST NPO HCRCD	HCRCD_1658	SOUTH FORK EEL RIVER	39.652862	-123.628048	SF Eel R	60.1	8287732	1636		
SFU	NorWeST NPO HCRCD	HCRCD_1673	PETERSON CREEK	39.752344	-123.583972	Peterson Cr	6.0	8287540	1673		
SFU	NorWeST NPO HCRCD	HCRCD_1675	TENMILE CREEK	39.756869	-123.584776	Tenmile Cr	155.3	8287532	1675		
SFU	NorWeST NPO HCRCD	HCRCD_1778	HOLLOW TREE CREEK	39.847969	-123.727320	Hollow Tree Cr	108.2	8287274	1778		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
SFU	NorWeST NPO HCRCD	HCRCD_1779	REDWOOD CREEK	39.673869	-123.664038	Redwood Cr	8.0	8287698	1779		
SFU	NorWeST NPO HCRCD	HCRCD_1780	DUTCH CHARLIE CREEK	39.683960	-123.699946	Dutch Charlie Cr	4.6	8287670	1780		
SFU	NorWeST NPO HCRCD	HCRCD_1839	BEAR CREEK	39.637019	-123.596282	Bear Cr	2.2	8287742	1839		
SFU	NorWeST NPO HCRCD	HCRCD_1840	TAYLOR CREEK	39.642578	-123.603707	Taylor Cr	1.7	8287736	1840		
SFU	NorWeST NPO HCRCD	HCRCD_2029	HOLLOW TREE CREEK	39.823363	-123.728800	Hollow Tree Cr	96.8	8287372	2029		
SFU	NorWeST NPO HCRCD	HCRCD_2034	Michael's Creek	39.764503	-123.717169	Michaels Cr	6.5	8287502	2034		
SFU	NorWeST NPO HCRCD	HCRCD_2036	HOLLOW TREE CREEK	39.739267	-123.719782	Hollow Tree Cr	12.4	8287554	2036		
SFU	NorWeST NPO HCRCD	HCRCD_2037	HUCKLEBERRY CREEK	39.739184	-123.720464	Huckleberry Cr	7.3	8287564	2037		
SFU	NorWeST NPO HCRCD	HCRCD_2142	HOLLOW TREE CREEK	39.766111	-123.738359	Hollow Tree Cr	37.7	8287508	2142		
SFU	NorWeST NPO HCRCD	HCRCD_2150	BOND CREEK	39.766849	-123.737840	Bond Cr	6.7	8287490	2150		
SFU	NorWeST NPO HCRCD	HCRCD_2151	REDWOOD CREEK	39.777777	-123.753696	Redwood Cr	8.9	8287470	2151		
SFU	NorWeST NPO HCRCD	HCRCD_2152	MICHAELS CREEK	39.762698	-123.721891	Michaels Cr	9.5	8287504	2152		
SFU	NorWeST NPO HCRCD	HCRCD_8016	PETERSON CREEK	39.753625	-123.585290	Peterson Cr	6.0	8287540	1673		
SFU	NorWeST NPO HCRCD	HCRCD_8038	LOST MAN CREEK	39.796702	-123.741820	Lost Man Cr	2.9	8287420	8038		
SFU	NorWeST NPO HCRCD	HCRCD_8062	Bear Creek	39.786246	-123.751621	Bear Cr	2.7	8287456	8062		
SFU	NorWeST NPO HCRCD	HCRCD_8063	Hollow Tree Creek	39.786229	-123.751171	Hollow Tree Cr	61.4	8288634	8063		
SFU	NorWeST USGS NWIS CA	11475560	ELDER C NR BRANSCOMB CA	39.729809	-123.644036	Elder Cr	16.9	8287590	1460		
SFU	NorWeST USGS NWIS CA	11475610	CAHTO C NR LAYTONVILLE CA	39.671568	-123.498427	Cahto Cr	14.4	8288668	9837		
SFU	UCB KBG	SPATT_2015_Angelo	SF Eel Angelo Salsar Bar SPATT	39.742377	-123.638086	SF Eel R	149.6	8287546	9760		1
SFU	USGS NWIS	11475560	USGS 11475560 ELDER C NR BRANSCOMB CA	39.729760	-123.643900	Elder Cr	16.9	8287590	1460		4
SFU	USGS NWIS	11475610	USGS 11475610 CAHTO C NR LAYTONVILLE CA	39.671720	-123.498220	Cahto Cr	14.4	8288668	9837		9
UE	ERRP	ANDSN_UE	Anderson at Upper Eel	39.508630	-122.845120	Anderson Cr	31.2	8305456	9733		1
UE	ERRP	Baechtel Upper	Baechtel at end of County Road	39.366775	-123.405700	Baechtel Cr	6.6	8307180	9749		1
UE	ERRP	BCHTL_MD_12	Baechtel Creek on Larry Desmond Property Pool	39.370381	-123.362983	Baechtel Cr	21.2	8307176	9748		1
UE	ERRP	BCHTLUP_12	Baechtel at end of County Road	39.366775	-123.405700	Baechtel Cr	6.6	8307180	9749		1
UE	ERRP	BERRY	Berry US Upper Eel	39.423770	-122.851810	Berry Cr	2.8	8308488	9738		1
UE	ERRP	BLSLCRUE	Blue Slide US Bear Creek UE	39.317940	-122.839810	Blue Slides Cr	9.1	8309034	9742		1
UE	ERRP	BRCK_UE	Bear US Blue Slide UE	39.327930	-122.828250	Bear Cr	24.2	8308966	9743		1
UE	ERRP	CBC_UE	Copper Butte Low	39.429140	-122.845730	Copper Butte Cr	7.4	8308468	9737		1
UE	ERRP	CC_UP_UE	CORBIN CREEK/CORBIN CREEK	39.528972	-122.848897	Corbin Cr	113.0	8305428	1529		1
UE	ERRP	CLDCRUE	Cold US Eel at Bloody Rock	39.471830	-122.832870	Cold Cr	38.1	8308190	9735		1
UE	ERRP	Eel at Hearst	EEL RIVER/EMANDEL	39.493360	-123.210043	Eel R	1208.0	8306718	8005		2
UE	ERRP	HMMNGBRD	Hummingbird US Upper Eel	39.403740	-122.860130	Hummingbird Cr	4.7	8308548	9739		1
UE	ERRP	ME_ABMF_14	EEL RIVER/EEL UPSTRM OF MF	39.712327	-123.354365	Eel R	1836.4	8303364	1549		1
UE	ERRP	ME_BLVA_14	Eel DS Cape Horn at End of County Rd	39.406056	-123.124831	Eel R	913.3	8307082	9744		1
UE	ERRP	ME_BSCD_14	EEL RIVER/EEL @ CABLEXING SCOTT DAM	39.407753	-122.970505	Eel R	751.0	8309952	1546		1
UE	ERRP	ME_EMD_14	EEL RIVER/EEL RIVER @ HEARST RIFFLE	39.492795	-123.176586	Eel R	1200.0	8306724	1454		1
UE	ERRP	ME_PBR_14	EEL RIVER/NA	39.381888	-123.095323	Eel R	898.0	8307566	1685		1
UE	ERRP	MS	EEL RIVER/EEL RIVER @162 BRIDGE	39.625223	-123.342064	Eel R	1369.6	8303456	1403		2
UE	ERRP	OutBeav_12	Outlet Beaver Pond	39.563557	-123.403632	Outlet Cr	337.7	8303574	9785	Isolated Pool	1
UE	ERRP	Panther_Soda	PANTHER CREEK/PANTHER CREEK	39.438463	-122.986628	Panther Cr	20.8	8308412	1605		
UE	ERRP	RTLSNKUE	Rattlesnake Upper Eel US USFS M6	39.493320	-122.864650	Rattlesnake Cr	19.5	8308096	9734		1
UE	ERRP	Sherwood_Lower_1	Sherwood 1 Kelly Harris	39.513772	-123.434281	Sherwood Cr	25.9	8303746	9745		1
UE	ERRP	Sherwood_Up_2	Sherwood 2 Kelly Harris	39.514917	-123.435025	Sherwood Cr	16.3	8303696	9746		1
UE	ERRP	ShrwdDS_12	Sherwood 1 Kelly Harris	39.513772	-123.434281	Sherwood Cr	25.9	8303746	9745		1
UE	ERRP	SHRWDUP_12	Sherwood 2 Kelly Harris	39.514917	-123.435025	Sherwood Cr	16.3	8303696	9746		1
UE	ERRP	SKLTN_UE	Skeleton downstream of USFS Road M3	39.437580	-122.834880	Skeleton Cr	7.0	8308414	9736		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site				
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.	Special	Yrs	
UE	ERRP	TGC_UE	Thistle Glade US Upper Eel	39.394190	-122.867270	Thistle Glade Cr	7.0	8308598	9740			1
UE	ERRP	UE_BRR	Eel at Bloody Rock (new)	39.467574	-122.842500	Eel R	301.2	8309934	9802			1
UE	ERRP	UEELEMND12	EEL RIVER/EEL RIVER @ HEARST RIFFLE	39.492795	-123.176586	Eel R	1200.0	8306724	1454			1
UE	ERRP	UERF	Rice Cr DS USFS M3	39.349360	-122.871430	Rice Cr	27.2	8308824	9741			1
UE	ERRP	Upper_Soda	SODA CREEK/SODA CREEK	39.438895	-122.984848	Soda Cr	28.5	8308446	1631	Isolated Pool		1
UE	ERRP	Upper_Soda_POOL	SODA CREEK/SODA CREEK	39.438895	-122.984848	Soda Cr	28.5	8308446	1631	Isolated Pool		1
UE	ERRP	Welch_AB_Soda	WELCH CREEK/WELSH CREEK	39.439907	-122.985977	Welch Cr	6.2	8308410	1651			1
UE	ERRP	WILLITS	WILLITS CREEK/NA	39.430663	-123.379166	Willits Cr	19.1	8307006	1663			1
UE	ERRP	Willits_12	WILLITS CREEK/NA	39.430663	-123.379166	Willits Cr	19.1	8307006	1663			1
UE	HCRCD	1439	EEL RIVER/EEL RIVER (MAINSTEM BELOW OUTLET CREEK)	39.628062	-123.344165	Eel R	1789.3	8303440	1439			1
UE	HCRCD	1452	EEL RIVER/EEL RIVER (ABOVE OUTLET)	39.624871	-123.341482	Eel R	1369.6	8303456	1403			5
UE	HCRCD	1455	EEL RIVER/EEL RIVER@BLOODY ROCK	39.470756	-122.833636	Eel R	296.2	8308196	1455			5
UE	HCRCD	1515	BUCKNELL CREEK/BUCKNEL CREEK	39.376023	-123.049434	Bucknell Cr	47.2	8307168	1515			4
UE	HCRCD	1517	BROADDUS CREEK/BROADDUS CREEK	39.419581	-123.341320	Broaddus Cr	20.3	8307038	1517			5
UE	HCRCD	1519	OUTLET CREEK/BECHTEL CREEK	39.418775	-123.340495	Baechtel Cr	39.3	8307024	1519			4
UE	HCRCD	1521	BENMORE CREEK/BENMORE CREEK	39.400380	-122.991748	Benmore Cr	14.0	8308558	1521			5
UE	HCRCD	1529	CORBIN CREEK/CORBIN CREEK	39.528972	-122.848897	Corbin Cr	113.0	8305428	1529			5
UE	HCRCD	1544	EEL RIVER/EEL @INLET OF LK PILSBURY	39.394830	-122.882620	Eel R	364.9	8308586	1544			5
UE	HCRCD	1546	EEL RIVER/EEL @ CABLEXING SCOTT DAM	39.407753	-122.970505	Eel R	751.0	8309952	1546			5
UE	HCRCD	1547	EEL RIVER/EEL @ MONKEY ROCK	39.410870	-123.022935	Eel R	814.3	8307070	1547			5
UE	HCRCD	1548	EEL RIVER/EEL RIVER ABOVE VANARSDALE	39.382276	-123.109453	Eel R	898.0	8307566	1548			3
UE	HCRCD	1549	EEL RIVER/EEL UPSTRM OF MF	39.712327	-123.354365	Eel R	1836.4	8303364	1549			4
UE	HCRCD	1574	LONG VALLEY CREEK/LONG VALLEY	39.552857	-123.426816	Long Valley Cr	69.1	8303600	1574			3
UE	HCRCD	1602	OUTLET CREEK/OUTLET (LOWER)	39.626006	-123.346203	Outlet Cr	419.5	8303446	1602			4
UE	HCRCD	1603	OUTLET CREEK/OUTLET (MIDDLE)	39.554491	-123.421686	Outlet Cr	335.2	8303598	1603			5
UE	HCRCD	1605	PANTHER CREEK/PANTHER CREEK	39.438463	-122.986628	Panther Cr	20.8	8308412	1605			5
UE	HCRCD	1618	RICE FORK EEL RIVER/RICE CRK (LOWER)	39.382848	-122.930088	Rice Fork	226.9	8308650	1618			5
UE	HCRCD	1619	RICE FORK EEL RIVER (LAKE PILLSBURY)/RICE CRK (UPPER SITE)	39.327816	-122.871026	Rice Fork	141.7	8308986	1619			5
UE	HCRCD	1627	RYAN CREEK/RYAN CREEK	39.480526	-123.365405	Ryan Cr	6.5	8306784	1626			5
UE	HCRCD	1631	SODA CREEK/SODA CREEK	39.438895	-122.984848	Soda Cr	28.5	8308446	1631			5
UE	HCRCD	1648	TOMKI CREEK/TOMKI CREEK (LOWER)	39.424213	-123.142901	Tomki Cr	166.5	8307018	1648			5
UE	HCRCD	1649	TOMKI CREEK/TOMKI CREEK	39.514982	-123.306729	Tomki Cr	40.8	8303706	1649			1
UE	HCRCD	1651	WELCH CREEK/WELSH CREEK	39.439907	-122.985977	Welch Cr	6.2	8308410	1651			5
UE	HCRCD	1662	MILL CREEK/NA	39.416692	-123.350328		25.4	8307020	1662			4
UE	HCRCD	1663	WILLITS CREEK/NA	39.430663	-123.379166	Willits Cr	19.1	8307006	1663			5
UE	HCRCD	1664	WILLITS CREEK/NA	39.449424	-123.398508	Willits Cr	10.2	8306880	1664			4
UE	HCRCD	8005	EEL RIVER/EMANDEL	39.493360	-123.210043	Eel R	1208.0	8306718	8005			5
UE	HCRCD	8007	EEL RIVER/EEL	39.431505	-123.143700	Eel R	1102.0	8306976	8007			3
UE	HCRCD	8008	EEL RIVER/EEL	39.431256	-123.144100	Eel R	1102.0	8306976	8008			4
UE	HCRCD	8009	EEL RIVER/EEL	39.425043	-123.139537	Eel R	933.2	8307004	1545			4
UE	HCRCD	8010	EEL RIVER/EEL	39.425049	-123.138253	Eel R	933.2	8307004	1545			4
UE	HCRCD	8011	EEL RIVER/VAN ARSDALE	39.386129	-123.116240	Eel R	906.6	8307546	8011			4
UE	HCRCD	8017	TOMKI CREEK/TOMKI CREEK	39.422162	-123.233032	Tomki Cr	114.0	8306996	8017			1
UE	HCRCD	8018	WILLITS CREEK/WILLITS CREEK	39.435018	-123.383337	Willits Cr	13.8	8306918	8018			4

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID		
UE	HCRC	8020	EEL RIVER/EEL RIVER	39.627748	-123.344345	Eel R	1789.3	8303440	1439	3
UE	HCRC	8025	EEL RIVER/EEL RIVER	39.626833	-123.344971	Eel R	1789.3	8303440	8025	2
UE	HCRC	8030	EEL RIVER/EEL RIVER @ EMANDAL,POOL	39.495663	-123.207465	Eel R	1208.0	8306718	8030	3
UE	HSU FSP	1403	EEL RIVER @162 BRIDGE/HTER0980/HTER990.981	39.625223	-123.342064	Eel R	1369.6	8303456	1403	2
UE	HSU FSP	1439	EEL RIVER (MAINSTEM BELOW OUTLET CREEK)/HTER980.971/HTER980.981	39.628062	-123.344165	Eel R	1789.3	8303440	1439	2
UE	HSU FSP	1452	EEL RIVER (ABOVE OUTLET)/HTER1070.971	39.624871	-123.341482	Eel R	1369.6	8303456	1403	1
UE	HSU FSP	1454	EEL RIVER @ HEARST RIFFLE/HTER1320.971	39.492795	-123.176586	Eel R	1200.0	8306724	1454	1
UE	HSU FSP	1515	BUCKNEL CREEK/HTBN1560.961/HTBN1560.971/HTBN1560.981	39.376023	-123.049434	Bucknell Cr	47.2	8307168	1515	2
UE	HSU FSP	1517	BROADDUS CREEK/HTBR1330.961	39.419581	-123.341320	Broaddus Cr	20.3	8307038	1517	1
UE	HSU FSP	1519	BECHTEL CREEK/HTBT1330.961	39.418775	-123.340495	Baechtel Cr	39.3	8307024	1519	1
UE	HSU FSP	1521	BENMORE CREEK/HTBX1680.961/HTBX1680.971/HTBX1680.981	39.400380	-122.991748	Benmore Cr	14.0	8308558	1521	2
UE	HSU FSP	1545	EEL ABOVE TOMKI CRK/HTER1200.961/HTER1200.971/HTER1200.981	39.425094	-123.138772	Eel R	933.2	8307004	1545	3
UE	HSU FSP	1546	EEL @ CABLEXING SCOTT DAM/HTER1720.961/HTER1720.971	39.407753	-122.970505	Eel R	751.0	8309952	1546	2
UE	HSU FSP	1547	EEL @ MONKEY ROCK/HTER1910.961/HTER1910.981	39.410870	-123.022935	Eel R	814.3	8307070	1547	1
UE	HSU FSP	1548	EEL RIVER ABOVE VANARSDALE/HTER1470.961	39.382276	-123.109453	Eel R	898.0	8307566	1548	1
UE	HSU FSP	1549	EEL UPSTRM OF MF/HTER0885.961/HTER885.971/HTER885.981	39.712327	-123.354365	Eel R	1836.4	8303364	1549	3
UE	HSU FSP	1574	LONG VALLEY/HTLV1100.961/HTLV1100.971	39.552857	-123.426816	Long Valley Cr	69.1	8303600	1574	2
UE	HSU FSP	1602	OUTLET (LOWER)/HTOU1000.961/HTOU1000.971/HTOU1000.981	39.626006	-123.346203	Outlet Cr	419.5	8303446	1602	3
UE	HSU FSP	1603	OUTLET (MIDDLE)/HTOU1001.971/HTOU1200.981	39.554491	-123.421686	Outlet Cr	335.2	8303598	1603	2
UE	HSU FSP	1604	OUTLET (UPPER)/HTOU1320.961	39.462778	-123.350722	Outlet Cr	183.1	8306866	1604	1
UE	HSU FSP	1605	PANTHER CREEK/HTPA1870/HTPA1870.961/HTPA1870.971	39.438463	-122.986628	Panther Cr	20.8	8308412	1605	2
UE	HSU FSP	1626	RYAN CREEK/HTRY1350.961/HTRY1350.971	39.480010	-123.364423	Ryan Cr	3.5	8306776	1626	2
UE	HSU FSP	1627	RYAN CREEK/HTRY1340.961	39.480526	-123.365405	Ryan Cr	6.5	8306784	1626	2
UE	HSU FSP	1631	SODA CREEK/HTSD1810.961/HTSD1810.971/HTSD1810.981	39.438895	-122.984848	Soda Cr	28.5	8308446	1631	2
UE	HSU FSP	1648	TOMKI CREEK (LOWER)/HTTO1440.961/HTTO1440.971/HTTO1440.981	39.424213	-123.142901	Tomki Cr	166.5	8307018	1648	3
UE	HSU FSP	1649	TOMKI CREEK/HTTO1860.961/HTTO1860.981	39.514982	-123.306729	Tomki Cr	40.8	8303706	1649	2
UE	HSU FSP	1651	WELSH CREEK/HTWE1870/HTWE1870.961/HTWE1870.971	39.439907	-122.985977	Welch Cr	6.2	8308410	1651	1
UE	HSU FSP	1652	WILLITS CREEK/HTWI1500.961/HTWI1500.971	39.441291	-123.386351	Willits Cr	13.8	8306918	1652	2
UE	HSU FSP	1660	HTBR1330.981	39.414305	-123.346323	Broaddus Cr	20.3	8307038	1660	1
UE	HSU FSP	1661	HTBT1335.981	39.412637	-123.340027	Baechtel Cr	39.3	8307024	1661	1
UE	HSU FSP	1662	HTWI1400.981	39.416692	-123.350328		25.4	8307020	1662	1
UE	HSU FSP	1663	HTWI1290.981	39.430663	-123.379166	Willits Cr	19.1	8307006	1663	1
UE	HSU FSP	1664	HTWI1580.981	39.449424	-123.398508	Willits Cr	10.2	8306880	1664	1
UE	HSU FSP	1666	HTCV1630.981	39.419266	-123.240164	Cave Cr	20.0	8307012	1666	1
UE	HSU FSP	1676	HTER1320.981	39.493056	-123.170221	Eel R	1200.0	8306724	1676	1
UE	HSU FSP	1685	HTER1470.971	39.381888	-123.095323	Eel R	898.0	8307566	1685	1
UE	HSU FSP	1698	OUTLET CREEK/HTOU1200.961/HTOU1200.971	39.532811	-123.405562	Outlet Cr	254.5	8303680	1698	2
UE	HSU FSP	2060	BRUSHY CREEK/58-1	39.619101	-123.314457	Brushy Cr	4.9	8303460	2060	1
UE	NorWeST CAState CDFW PSWRegion	6f214747-3efc-4350-a13f-	H2O_temp_CDFW_111WER159	39.429653	-122.844976	Copper Butte Cr	7.4	8308468	9839	1

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI Reach COMID	Site ID Stnd.	Special	Yrs
	NRIS	1cfc419e1420									
UE	NorWeST CAState SWRCB NC Region	10119	Eel River	39.712290	-123.354268	Eel R	1836.4	8303364	1549		
UE	NorWeST CAState SWRCB NC Region	10169	Outlet Creek	39.625837	-123.346102	Outlet Cr	419.5	8303446	1602		1
UE	NorWeST CAState SWRCB NC Region	10231	Eel River	39.628056	-123.344302	Eel R	1789.3	8303440	1403		
UE	NorWeST CAState SWRCB NC Region	10276	Eel River	39.625251	-123.342055	Eel R	1369.6	8303456	1439		
UE	NorWeST CAState SWRCB NC Region	10368	TOMKI CREEK	39.419220	-123.240021	Cave Cr	20.0	8307012	1666		1
UE	NorWeST CAState SWRCB NC Region	10380	Eel River	39.493438	-123.210129	Eel R	1208.0	8306718	8005		1
UE	NorWeST NPO HCRCD	HCRCD_1403	EEL RIVER	39.625251	-123.342055	Eel R	1369.6	8303456	1403		
UE	NorWeST NPO HCRCD	HCRCD_1414	Outlet Creek (Lower)	39.626349	-123.345223	Outlet Cr	419.5	8303446			
UE	NorWeST NPO HCRCD	HCRCD_1439	EEL RIVER	39.628056	-123.344302	Eel R	1789.3	8303440	1439		
UE	NorWeST NPO HCRCD	HCRCD_1452	EEL RIVER	39.624947	-123.341419	Eel R	1369.6	8303456	1403		
UE	NorWeST NPO HCRCD	HCRCD_1454	EEL RIVER	39.492665	-123.176612	Eel R	1200.0	8306724	1454		
UE	NorWeST NPO HCRCD	HCRCD_1455	EEL RIVER	39.470814	-122.833682	Eel R	296.2	8308196	1455		
UE	NorWeST NPO HCRCD	HCRCD_1515	BUCKNELL CREEK	39.376049	-123.049368	Bucknell Cr	47.2	8307168	1515		
UE	NorWeST NPO HCRCD	HCRCD_1517	BROADDUS CREEK	39.419587	-123.341338	Broaddus Cr	20.3	8307038	1517		
UE	NorWeST NPO HCRCD	HCRCD_1519	OUTLET CREEK	39.418789	-123.340120	Baechtel Cr	39.3	8307024	1519		
UE	NorWeST NPO HCRCD	HCRCD_1521	BENMORE CREEK	39.400386	-122.991840	Benmore Cr	14.0	8308558	1521		
UE	NorWeST NPO HCRCD	HCRCD_1529	CORBIN CREEK	39.528820	-122.848767	Corbin Cr	113.0	8305428	1529		
UE	NorWeST NPO HCRCD	HCRCD_1544	EEL RIVER	39.394804	-122.882604	Eel R	364.9	8308586	1544		
UE	NorWeST NPO HCRCD	HCRCD_1545	EEL RIVER	39.425144	-123.138772	Eel R	933.2	8307004	1545		
UE	NorWeST NPO HCRCD	HCRCD_1546	EEL RIVER	39.407857	-122.970459	Eel R	751.0	8309952	1546		
UE	NorWeST NPO HCRCD	HCRCD_1547	EEL RIVER	39.410683	-123.022629	Eel R	814.3	8307070	1547		
UE	NorWeST NPO HCRCD	HCRCD_1548	EEL RIVER	39.382320	-123.109473	Eel R	898.0	8307566	1548		
UE	NorWeST NPO HCRCD	HCRCD_1549	EEL RIVER	39.712290	-123.354268	Eel R	1836.4	8303364	1549		
UE	NorWeST NPO HCRCD	HCRCD_1574	LONG VALLEY CREEK	39.552883	-123.426788	Long Valley Cr	69.1	8303600	1574		
UE	NorWeST NPO HCRCD	HCRCD_1602	OUTLET CREEK	39.625837	-123.346102	Outlet Cr	419.5	8303446	1602		
UE	NorWeST NPO HCRCD	HCRCD_1603	OUTLET CREEK	39.554309	-123.421672	Outlet Cr	335.2	8303598	1603		
UE	NorWeST NPO HCRCD	HCRCD_1605	PANTHER CREEK	39.438567	-122.986680	Panther Cr	20.8	8308412	1605		
UE	NorWeST NPO HCRCD	HCRCD_1618	RICE FORK EEL RIVER	39.382825	-122.930116	Rice Fork	226.9	8308650	1618		
UE	NorWeST NPO HCRCD	HCRCD_1619	RICE FORK EEL RIVER (LAKE PILLSBURY)	39.327814	-122.871086	Rice Fork	141.7	8308986	1619		
UE	NorWeST NPO HCRCD	HCRCD_1626	RYAN CREEK	39.480096	-123.364024	Ryan Cr	3.5	8306776	1626		
UE	NorWeST NPO HCRCD	HCRCD_1627	RYAN CREEK	39.480792	-123.365404	Ryan Cr	6.5	8306784	1626		
UE	NorWeST NPO HCRCD	HCRCD_1631	SODA CREEK	39.438965	-122.984838	Soda Cr	28.5	8308446	1631		
UE	NorWeST NPO HCRCD	HCRCD_1648	TOMKI CREEK	39.424103	-123.142783	Tomki Cr	166.5	8307018	1648		
UE	NorWeST NPO HCRCD	HCRCD_1649	TOMKI CREEK	39.514850	-123.306754	Tomki Cr	40.8	8303706	1649		
UE	NorWeST NPO HCRCD	HCRCD_1651	WELCH CREEK	39.439911	-122.985919	Welch Cr	6.2	8308410	1651		
UE	NorWeST NPO HCRCD	HCRCD_1652	WILLITS CREEK	39.441175	-123.386746	Willits Cr	13.8	8306918	1652		
UE	NorWeST NPO HCRCD	HCRCD_1662	MILL CREEK	39.416704	-123.350332		25.4	8307020	1662		
UE	NorWeST NPO HCRCD	HCRCD_1663	WILLITS CREEK	39.430653	-123.379193	Willits Cr	19.1	8307006	1663		
UE	NorWeST NPO HCRCD	HCRCD_1664	WILLITS CREEK	39.449037	-123.398689	Willits Cr	10.2	8306880	1664		
UE	NorWeST NPO HCRCD	HCRCD_2060	Brushy Creek	39.619516	-123.314758	Brushy Cr	4.9	8303460	2060		
UE	NorWeST NPO HCRCD	HCRCD_8005	EEL RIVER	39.493438	-123.210129	Eel R	1208.0	8306718	8005		
UE	NorWeST NPO HCRCD	HCRCD_8007	EEL RIVER	39.431516	-123.143713	Eel R	1102.0	8306976	8007		
UE	NorWeST NPO HCRCD	HCRCD_8008	EEL RIVER	39.431239	-123.144056	Eel R	1102.0	8306976	8008		
UE	NorWeST NPO HCRCD	HCRCD_8009	EEL RIVER	39.425012	-123.139523	Eel R	933.2	8307004	1545		
UE	NorWeST NPO HCRCD	HCRCD_8010	EEL RIVER	39.425056	-123.138246	Eel R	933.2	8307004	1545		
UE	NorWeST NPO HCRCD	HCRCD_8011	EEL RIVER	39.386138	-123.116289	Eel R	906.6	8307546	8011		
UE	NorWeST NPO HCRCD	HCRCD_8017	TOMKI CREEK	39.422222	-123.233000	Tomki Cr	114.0	8306996	8017		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs	
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID			ID Stnd.
UE	NorWeST NPO HCRCD	HCRCD_8018	WILLITS CREEK	39.434906	-123.383687	Willits Cr	13.8	8306918	8018		
UE	NorWeST NPO HCRCD	HCRCD_8020	EEL RIVER	39.627719	-123.344295	Eel R	1789.3	8303440	1439		
UE	NorWeST NPO HCRCD	HCRCD_8025	EEL RIVER	39.626833	-123.344931	Eel R	1789.3	8303440	8025		
UE	NorWeST NPO HCRCD	HCRCD_8030	EEL RIVER	39.495552	-123.207345	Eel R	1208.0	8306718	8030		
UE	NorWeST NPO HCRCD NRIS	0dcad499-86c8-4f6e-8eda-35aa98e1a475	H2O_Temp_RCD_Rice_1618_1996	39.382790	-122.930069	Rice Fork	226.9	8308650	1618	1	
UE	NorWeST NPO HCRCD NRIS	3d95c5c6-8c03-4464-99a5-8678473770b7	H2O_Temp_RCD_Eel_1544_2004	39.394805	-122.882602	Eel R	364.9	8308586	1544	2	
UE	NorWeST NPO HCRCD NRIS	42c77064-93d9-4d73-a8a3-db63d9cb8085	H2O_Temp_RCD_Benmore_1521_1996	39.400432	-122.991836	Benmore Cr	14.0	8308558	1521	1	
UE	NorWeST NPO HCRCD NRIS	4cda0f8e-40c2-4e0e-98d8-30d92af7950e	H2O_Temp_RCD_Rice_1619_1998	39.327813	-122.871086	Rice Fork	141.7	8308986	1619	2	
UE	NorWeST NPO HCRCD NRIS	5abdbc2f-df97-44de-b194-4dd557fb46fd	H2O_Temp_RCD_Welch_1651_1997	39.439907	-122.985918	Welch Cr	6.2	8308410	1651	2	
UE	NorWeST NPO HCRCD NRIS	8e5a1b12-bdb9-4ee9-99d7-3fcf232e7c33	H2O_Temp_RCD_Soda_1631_1996	39.438928	-122.984740	Soda Cr	28.5	8308446	1631	1	
UE	NorWeST NPO HCRCD NRIS	95cec2a0-2636-4445-98a3-224984a656dd	H2O_Temp_RCD_Corbin_1529_1996	39.528819	-122.848769	Corbin Cr	113.0	8305428	1529	2	
UE	NorWeST NPO HCRCD NRIS	9b0b01be-f89b-4295-9089-7a8680d0fff6	H2O_Temp_RCD_Bucknell_1515_1996	39.376046	-123.049366	Bucknell Cr	47.2	8307168	1515	2	
UE	NorWeST NPO HCRCD NRIS	9e9ba2b1-95a1-4473-b2a7-c4f1326d3274	H2O_Temp_RCD_Eel_1546_1996	39.407854	-122.970447	Eel R	751.0	8309952	1546	1	
UE	NorWeST NPO HCRCD NRIS	ab4d6fb6-5751-4d7b-bb42-f16f17c0b878	H2O_Temp_RCD_Panther_1605_1996	39.438569	-122.986675	Panther Cr	20.8	8308412	1605	1	
UE	NorWeST NPO HCRCD NRIS	cde78dc4-04ef-4b70-b662-faf3b29e57b0	H2O_Temp_RCD_Smkhouse_2067_1996	39.516811	-123.015781	Smokehouse Cr	1.5	8303714		1	
UE	NorWeST NPO HCRCD NRIS	fdb7d8a-2b88-4042-823e-c3ac84f4ee04	H2O_Temp_RCD_Eel_1547_1996	39.410654	-123.022657	Eel R	814.3	8307070	1547	3	
UE	NorWeST USFS MendocinoNF NRIS	6939a138-0ebd-4fe1-bb9d-3e942ca8b177	H2O_Temp_Eel_BloodyRock_1455_2004	39.470790	-122.833732	Eel R	296.2	8308196	1455	2	
UE	PGE	1	Eel above L. Pillsbury (Bloody Rock) / Bottom of water column	39.467574	-122.842500	Eel R	301.2	8309934	9802	10	
UE	PGE	2	Eel below Scott Dam (PG&E E2 gage site) / Bottom of water column	39.408069	-122.971590	Eel R	751.0	8309952	1546	10	
UE	PGE	3	Eel between the dams (Monkey Rock) / Bottom of water column	39.411122	-123.022408	Eel R	814.3	8307070	1547	10	
UE	PGE	4	Eel above Cape Horn Dam / Bottom of water column	39.382989	-123.103593	Eel R	898.0	8307566	1685	9	
UE	PGE	8	Eel above Tomki Creek confluence / Bottom of water column	39.425138	-123.141257	Eel R	933.2	8307004	1545	10	
UE	PGE	9	Tomki Creek near mouth / Bottom of water column	39.423941	-123.143404	Tomki Cr	166.5	8307018	1648	9	
UE	PGE	10	Eel below Tomki Creek confluence / Bottom of water column	39.431334	-123.144413	Eel R	1102.0	8306976	8008	10	
UE	PGE	12	Eel above Garcia Creek confluence / Bottom of water column	39.492260	-123.169137	Eel R	1165.9	8306762	9826	10	
UE	PGE	13	Eel below Garcia Creek confluence / Bottom of water column	39.492760	-123.169913	Eel R	1200.0	8306724	1676	10	
UE	PGE	14	Eel below Emandal / Bottom of water column	39.495011	-123.192466	Eel R	1208.0	8306718	9825	10	
UE	PGE	17	Eel at Ramsing Ranch / Bottom of water column	39.515531	-123.213166	Eel R	1235.7	8303720	9821	10	
UE	PGE	19	Eel above Outlet Creek / Bottom of water column	39.625003	-123.341755	Eel R	1369.6	8303456	1403	10	
UE	PGE	20	Outlet Creek near mouth / Bottom of water column	39.626006	-123.346203	Outlet Cr	419.5	8303446	1602	10	
UE	PGE	21	Eel below Outlet Creek / Bottom of water column	39.628026	-123.344254	Eel R	1789.3	8303440	1439	9	
UE	PGE	24	Eel above Middle Fork Eel / Bottom of water column	39.713079	-123.353543	Eel R	1836.4	8303364	1549	7	
UE	PGE	11-P-(1_3 depth pool array)	Eel below Thomas Creek (pool) / 1/3 depth pool array	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- 1/3	9

Wat. shed	Source Entity	Site Code	Site Description	Original Latitude NAD83	Original Longitude NAD83	NSI Reach GNIS Name	Drain. Area (km <sup>2</sup> )	NSI Reach COMID	Site ID Stnd.	Special	Yrs
UE	PGE	11-P-(1_4 depth pool array)	Eel below Thomas Creek (pool) / 1/4 depth pool array	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- 1/4 depth pool array	1
UE	PGE	11-P-(2_3 depth pool array)	Eel below Thomas Creek (pool) / 2/3 depth pool array	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- 2/3 depth pool array	9
UE	PGE	11-P-(3_4 depth pool array)	Eel below Thomas Creek (pool) / 3/4 depth pool array	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- 3/4 depth pool array	1
UE	PGE	11-P-(Bottom of water column)	Eel below Thomas Creek (pool) / Bottom of water column	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- Bottom of water column	9
UE	PGE	11-P-(Bottom pool array)	Eel below Thomas Creek (pool) / Bottom pool array	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- Bottom pool array	9
UE	PGE	11-P-(Uppermost pool array)	Eel below Thomas Creek (pool) / Uppermost pool array	39.477174	-123.151784	Eel R	1160.9	8306804	9827	Pool- Uppermost pool array	10
UE	PGE	11-R	Eel below Thomas Creek (riffle) / Bottom of water column	39.476104	-123.150763	Eel R	1160.9	8306804	9828		10
UE	PGE	15-P-(Bottom of water column)	Eel near Hearst Bridge (pool) / Bottom of water column	39.494362	-123.209388	Eel R	1208.0	8306718	9824	Pool- Bottom of water column	8
UE	PGE	15-R	Eel near Hearst Bridge (riffle) / Bottom of water column	39.493218	-123.210189	Eel R	1208.0	8306718	8005		10
UE	PGE	16-P-(Bottom of water column)	Eel below Hearst (pool) / Bottom of water column	39.501036	-123.215179	Eel R	1231.3	8303764	9822	Pool- Bottom of water column	10
UE	PGE	16-R	Eel below Hearst (riffle) / Bottom of water column	39.497475	-123.216622	Eel R	1229.0	8306720	9823		10
UE	PGE	18-P-(1_3 depth pool array)	Eel above Fish Creek (pool) / 1/3 depth pool array	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool- 1/3 depth pool array	9
UE	PGE	18-P-(1_4 depth pool array)	Eel above Fish Creek (pool) / 1/4 depth pool array	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool- 1/4 depth pool array	1
UE	PGE	18-P-(2_3 depth pool array)	Eel above Fish Creek (pool) / 2/3 depth pool array	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool- 2/3 depth pool array	9
UE	PGE	18-P-(3_4 depth pool array)	Eel above Fish Creek (pool) / 3/4 depth pool array	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool- 3/4 depth pool array	1
UE	PGE	18-P-(Bottom of water column)	Eel above Fish Creek (pool) / Bottom of water column	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool- Bottom of water column	10



Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs	
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID			ID Stnd.
UE	PGE	18-P-(Bottom pool array)	Eel above Fish Creek (pool) / Bottom pool array	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool-Bottom pool array	10
UE	PGE	18-P-(Uppermost pool array)	Eel above Fish Creek (pool) / Uppermost pool array	39.555741	-123.285763	Eel R	1294.3	8303616	9819	Pool-Uppermost pool array	10
UE	PGE	18-R	Eel above Fish Creek (riffle) / Bottom of water column	39.553940	-123.286045	Eel R	1294.3	8303616	9820		10
UE	PGE	22-P-(Bottom of water column)	Eel between Outlet Creek and Middle Fork Eel (pool) / Bottom of water column	39.665972	-123.347206	Eel R	1807.9	8303384	9817	Pool-Bottom of water column	9
UE	PGE	22-R	Eel between Outlet Creek and Middle Fork Eel (riffle) / Bottom of water column	39.666324	-123.347370	Eel R	1807.9	8303384	9818		10
UE	PGE	23-P-(Bottom of water column)	Eel above Dos Rios (pool) / Bottom of water column	39.708338	-123.355428	Eel R	1836.4	8303364	9816	Pool-Bottom of water column	9
UE	PGE	23-R	Eel above Dos Rios (riffle) / Bottom of water column	39.709339	-123.355436	Eel R	1836.4	8303364	9815		10
UE	PGE	5-(Bottom of water column)	Eel at VAFS (pool) / Bottom of water column	39.386800	-123.116238	Eel R	906.6	8307546	9812	Pool-Bottom of water column	10
UE	PGE	6-P-(Bottom of water column)	Eel below Cape Horn Dam (pool) / Bottom of water column	39.398415	-123.117108	Eel R	913.3	8307082	9830	Pool-Bottom of water column	10
UE	PGE	6-R	Eel below Cape Horn Dam (riffle) / Bottom of water column	39.399856	-123.116484	Eel R	913.3	8307082	9814		10
UE	PGE	7-(1_3 depth pool array)	Eel above Whitney Cr. (pool) / 1/3 depth pool array	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-1/3 depth pool array	8
UE	PGE	7-(1_4 depth pool array)	Eel above Whitney Cr. (pool) / 1/4 depth pool array	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-1/4 depth pool array	1
UE	PGE	7-(2_3 depth pool array)	Eel above Whitney Cr. (pool) / 2/3 depth pool array	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-2/3 depth pool array	9
UE	PGE	7-(3_4 depth pool array)	Eel above Whitney Cr. (pool) / 3/4 depth pool array	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-3/4 depth pool array	1
UE	PGE	7-(Bottom of water column)	Eel above Whitney Cr. (pool) / Bottom of water column	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-Bottom of water column	8
UE	PGE	7-(Bottom pool array)	Eel above Whitney Cr. (pool) / Bottom pool array	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-Bottom pool array	10
UE	PGE	7-(Uppermost pool array)	Eel above Whitney Cr. (pool) / Uppermost pool array	39.418206	-123.129246	Eel R	920.0	8307030	9829	Pool-Uppermost	9

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain. NSI	Site	Special	Yrs	
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID			ID Stnd.
UE	PGE	BCHD	Eel R. Below CHD	39.399856	-123.116484	Eel R	913.3	8307082	9814	pool array	3
UE	PGE	BTMK	Eel R. Below Tomki Cr.	39.431256	-123.144100	Eel R	1102.0	8306976	8008		1
UE	PGE	DOSR	Eel R. Above Dos Rios	39.712327	-123.354365	Eel R	1836.4	8303364	1549		1
UE	PGE	EELM	Eel R. Ab. Monkey Rock	39.410870	-123.022935	Eel R	814.3	8307070	1547		8
UE	PGE	EELO	Eel R. Above Outlet Cr.	39.624871	-123.341482	Eel R	1369.6	8303456	1403		14
UE	PGE	EELP	Eel R. Ab. Lk. Pillsbury	39.394830	-122.882620	Eel R	364.9	8308586	1544		10
UE	PGE	EELT	Eel R. Above Tomki Cr.	39.425043	-123.139537	Eel R	933.2	8307004	1545		6
UE	PGE	HRST	Eel R. Bl. Hearst Riffle	39.493360	-123.210043	Eel R	1208.0	8306718	8005		3
UE	PGE	OSPR	Eel R. Ab. Van Arsdale	39.381888	-123.095323	Eel R	898.0	8307566	1685		11
UE	PGE	OUTL	Outlet Cr. near Eel River	39.626006	-123.346203	Outlet Cr	419.5	8303446	1602		2
UE	PGE	SALM	Tomki Cr. Bl. Salmon Cr.	39.419220	-123.175410	Tomki Cr	159.0	8307014	9811		4
UE	PGE	SCOT	Eel R. Below Scott Dam	39.407753	-122.970505	Eel R	751.0	8309952	1546		14
UE	PGE	TOMK	Tomki Cr. Near Eel R.	39.424213	-123.142901	Tomki Cr	166.5	8307018	1648		12
UE	PGE	TROU	Eel R. Below Trout Cr.	39.381888	-123.095323	Eel R	898.0	8307566	1685		2
UE	PGE	VRSD	Eel R. in CHD Fish Ladder	39.386129	-123.116240	Eel R	906.6	8307546	8011		11
VD	BLM Arcata	Butte_creek	Butte DS Horse	40.432590	-123.671140	Butte Cr	32.5	2705729	9809		1
VD	ERRP	Bridgeville_VD	Van Duzen at Bridgeville	40.468675	-123.800008	Van Duzen R	523.0	2705575	9750		1
VD	ERRP	bridgvl	Van Duzen at Bridgeville	40.468675	-123.800008	Van Duzen R	523.0	2705575	9750		1
VD	ERRP	butte	BUTTE CREEK/BUTTE CREEK	40.440449	-123.670144	Butte Cr	32.5	2705729	1432		1
VD	ERRP	CMMNGS_12	Cummings Middle	40.526233	-124.001650	Cummings Cr	17.9	2702277	9710		1
VD	ERRP	coal	Coal Creek VD	40.496470	-123.999320		3.5	2705375	9711		1
VD	ERRP	COAL_VD_14	Coal Creek VD	40.496470	-123.999320		3.5	2705375	9711		1
VD	ERRP	CUM_VD_14	Cummings Middle	40.526233	-124.001650	Cummings Cr	17.9	2702277	9710		1
VD	ERRP	cummings	Cummings Middle	40.526233	-124.001650	Cummings Cr	17.9	2702277	9710		1
VD	ERRP	fish	Fish VD Low at Bridgeville	40.458640	-123.844359	Fish Cr	5.6	2705741	9784		1
VD	ERRP	Fish_VD	Fish VD Low at Bridgeville	40.458640	-123.844359	Fish Cr	5.6	2705741	9784		1
VD	ERRP	Fish_VD_12	Fish VD Low at Bridgeville	40.458640	-123.844359	Fish Cr	5.6	2705741	9784		1
VD	ERRP	fox	FOX CREEK/FOX CREEK	40.520815	-123.997494	Fox Cr	2.5	2703363	1561		1
VD	ERRP	FOX_VD_12	FOX CREEK/FOX CREEK	40.520815	-123.997494	Fox Cr	2.5	2703363	1561		1
VD	ERRP	FOX_VD_14	FOX CREEK/FOX CREEK	40.520815	-123.997494	Fox Cr	2.5	2703363	1561		1
VD	ERRP	FoxCreek_VD_Trim_2013	FOX CREEK/FOX CREEK	40.520815	-123.997494	Fox Cr	2.5	2703363	1561		1
VD	ERRP	grizzly	GRIZZLEY CREEK/GRIZZLEY CREEK	40.487936	-123.906751	Grizzly Cr	49.2	2705443	1465		1
VD	ERRP	GrizzlyCreek	GRIZZLEY CREEK/GRIZZLEY CREEK	40.487936	-123.906751	Grizzly Cr	49.2	2705443	1465		1
VD	ERRP	GRZ_VD_14	GRIZZLEY CREEK/GRIZZLEY CREEK	40.487936	-123.906751	Grizzly Cr	49.2	2705443	1465		1
VD	ERRP	GRZZ_VD_12	GRIZZLEY CREEK/GRIZZLEY CREEK	40.487936	-123.906751	Grizzly Cr	49.2	2705443	1465	DRY	1
VD	ERRP	hely	HEL Y CREEK/HEL Y	40.500595	-123.974592	Hely Cr	9.4	2703435	1312		1
VD	ERRP	Hely_VD	HEL Y CREEK/HEL Y	40.500595	-123.974592	Hely Cr	9.4	2703435	1312		1
VD	ERRP	HEL Y_VD_12	HEL Y CREEK/HEL Y	40.500595	-123.974592	Hely Cr	9.4	2703435	1312		1
VD	ERRP	HLY_VD_14	HEL Y CREEK/HEL Y	40.500595	-123.974592	Hely Cr	9.4	2703435	1312		1
VD	ERRP	little_gldn_gate	Van Duzen Little Golden Gate	40.459615	-123.841708	Van Duzen R	547.0	2705607	9715		1
VD	ERRP	little_larabee	LITTLE LARABEE CREEK/LITTLE LARABEE CREEK	40.478346	-123.781479	Little Larabee Cr	34.5	2705489	1573		1
VD	ERRP	LittleLarabee	LITTLE LARABEE CREEK/LITTLE LARABEE CREEK	40.478346	-123.781479	Little Larabee Cr	34.5	2705489	1573		1
VD	ERRP	lttl_vdr	LITTLE VAN DUZEN RIVER/LITTLE VAN DUZEN/S.F. VDR	40.444691	-123.656926	Little Van Duzen R	94.1	2705701	1406		1
VD	ERRP	ms_rainbow	Van Duzen at Rainbow Bridge`	40.481570	-123.893380	Van Duzen R	574.7	2705477	9714		1
VD	ERRP	pip	Pip Creek Low Bridgeville	40.460194	-123.855215	Pip Cr	2.7	2705679	9793		1
VD	ERRP	SFVD	LITTLE VAN DUZEN RIVER/LITTLE VAN DUZEN/S.F. VDR	40.444691	-123.656926	Little Van Duzen R	94.1	2705701	1406		1
VD	ERRP	suntanglen	VD at Suntan Glen	40.460780	-123.851890	Van Duzen R	553.6	2705601	9705		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
VD	ERRP	Upper_VD_36	Van Duzen River/VDR@Dinsmore	40.488957	-123.625956	Van Duzen R	210.3	2705437	8070		1
VD	ERRP	VanD	VD southwest of Riverside Pk, it is Bauma-Gregson's Carlotta SPATT	40.491944	-123.993888	Van Duzen R	673.0	2705411	9808		2
VD	ERRP	VD_Dinsmore_STHS	Van Duzen So Trinity HS	40.455400	-123.533450	Van Duzen R	168.5	2705675	9716		1
VD	ERRP	VD_RBBR_14	Van Duzen at Rainbow Bridge`	40.481570	-123.893380	Van Duzen R	574.7	2705477	9714		1
VD	ERRP	VD_Runburg	VD southwest of Riverside Pk, it is Bauma-Gregson's Carlotta SPATT	40.491944	-123.993888	Van Duzen R	673.0	2705411	9808		1
VD	ERRP	VD_RUNE_14	VD southwest of Riverside Pk, it is Bauma-Gregson's Carlotta SPATT	40.491944	-123.993888	Van Duzen R	673.0	2705411	9808		1
VD	ERRP	VD_Suntan_Glen	VD at Suntan Glen	40.460780	-123.851890	Van Duzen R	553.6	2705601	9705		1
VD	ERRP	VD_SWD_12	VD at Swimmers Delight	40.486105	-123.972050	Van Duzen R	656.5	2705469	9782		1
VD	ERRP	VD_Swimmers	VD at Swimmers Delight	40.486105	-123.972050	Van Duzen R	656.5	2705469	9782		1
VD	ERRP	VD_UP2_14	Van Duzen So Trinity HS	40.455400	-123.533450	Van Duzen R	168.5	2705675	9716		1
VD	ERRP	vdr_algae	VD southwest of Riverside Pk, it is Bauma-Gregson's Carlotta SPATT	40.491944	-123.993888	Van Duzen R	673.0	2705411	9808		1
VD	ERRP	vdr_at36	Van Duzen River/VDR@Dinsmore	40.488957	-123.625956	Van Duzen R	210.3	2705437	8070		1
VD	ERRP	vdr_riverside	Van Duzen Riverside Dr	40.494817	-123.986600	Van Duzen R	673.0	2705411	9713		1
VD	ERRP	vdr_school	Van Duzen So Trinity HS	40.455400	-123.533450	Van Duzen R	168.5	2705675	9716		1
VD	ERRP	vdr_westfork	WB Van Duzen	40.296220	-123.461500	West Fork Van Duzen R	37.8	2706387	9717		1
VD	ERRP	VDRNBWBR12	Van Duzen at Rainbow Bridge`	40.481570	-123.893380	Van Duzen R	574.7	2705477	9714		1
VD	ERRP	VDRVRS_12	Van Duzen Riverside Dr	40.494817	-123.986600	Van Duzen R	673.0	2705411	9713		1
VD	ERRP	WG_VD_14	Wolverton Gulch	40.562375	-124.101738		7.3	2702195	9707		1
VD	ERRP	WLVRTGL_12	Wolverton Gulch	40.562375	-124.101738		7.3	2702195	9707		1
VD	ERRP	wolverton	Wolverton Gulch	40.562375	-124.101738		7.3	2702195	9707		1
VD	ERRP	WolvertonGulch	Wolverton Gulch	40.562375	-124.101738		7.3	2702195	9707		1
VD	ERRP	yager_hrc	Yager below Allen Cr	40.572800	-124.046790	Yager Cr	332.3	2702157	9708		1
VD	ERRP	yager_hwy36	Yager at Hwy 36	40.537667	-124.063617	Yager Cr	349.6	2702217	9709		1
VD	ERRP	Yager_L_12	Yager at Hwy 36	40.537667	-124.063617	Yager Cr	349.6	2702217	9709		1
VD	ERRP	YCL_VD_14	Yager at Hwy 36	40.537667	-124.063617	Yager Cr	349.6	2702217	9709		1
VD	ERRP	YCU_VD_14	Yager below Allen Cr	40.572800	-124.046790	Yager Cr	332.3	2702157	9708		1
VD	FOVD	Cummings	Cummings	40.526233	-124.001650	Cummings Cr	17.9	2702277	9710		2
VD	FOVD	Cummings 2	Cummings 2	40.526233	-124.001650	Cummings Cr	17.9	2702277	9710		1
VD	FOVD	Grizzly	Grizzly	40.487430	-123.906550	Grizzly Cr	49.2	2705443	1465		2
VD	FOVD	Grizzly 2	Grizzly 2	40.487430	-123.906550	Grizzly Cr	49.2	2705443	1465		1
VD	FOVD	Hely	Hely	40.499483	-123.975000	Hely Cr	9.5	2705341	1312		2
VD	FOVD	Hely 2	Hely 2	40.499483	-123.975000	Hely Cr	9.5	2705341	1312		1
VD	FOVD	Lower Yager	Lower Yager	40.537385	-124.062816	Yager Cr	349.6	2702217	9709		2
VD	FOVD	Lower Yager 2	Lower Yager 2	40.537385	-124.062816	Yager Cr	349.6	2702217	9709		2
VD	FOVD	VD Rainbow Bridge	VD Rainbow Bridge	40.481570	-123.893380	Van Duzen R	574.7	2705477	9714		2
VD	FOVD	VD Weares	VD Weares	40.508880	-123.992980	Van Duzen R	678.7	2703433	9838		2
VD	FOVD	VD Weares 2	VD Weares 2	40.508880	-123.992980	Van Duzen R	678.7	2703433	9838		2
VD	FOVD	Wolverton	Wolverton	40.562375	-124.101738		7.3	2702195	9707		2
VD	FOVD	Wolverton 2	Wolverton 2	40.562375	-124.101738		7.3	2702195	9707		1
VD	HCRCD	209	VAN DUZEN RIVER/VAN DUZEN	40.535370	-124.138832	Van Duzen R	1109.5	2702205	208		1
VD	HCRCD	219	VAN DUZEN RIVER/VAN DUZEN	40.528454	-124.048379	Van Duzen R	716.4	2702245	219		1
VD	HCRCD	220	VAN DUZEN RIVER/VAN DUZEN	40.530708	-124.050989	Van Duzen R	716.4	2702245	219		1
VD	HCRCD	231	VAN DUZEN RIVER/VAN DUZEN	40.524994	-124.095982	Van Duzen R	1087.1	2702255	231		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
VD	HCRCD	1126	LITTLE LARABEE CREEK/LITTLE LARABEE	40.471230	-123.741505	Little Larabee Cr	25.0	2708429	1126		2
VD	HCRCD	1127	TRIB TO LITTLE LARABEE CREEK/LITTLE LARABEE	40.465359	-123.740217		4.6	2705687	1127		3
VD	HCRCD	1128	TRIB TO LITTLE LARABEE CREEK/LITTLE LARABEE	40.463007	-123.709483		6.6	2705711	1128		3
VD	HCRCD	1203	ROOT CREEK/ROOT CR	40.474019	-123.941821	Root Cr	16.0	2705515	1203		5
VD	HCRCD	1209	LAWRENCE CREEK/LAWRENCE	40.583316	-123.987081	Lawrence Cr	109.3	2703219	1209		3
VD	HCRCD	1240	SHAW CREEK/SHAW	40.621608	-123.990981	Shaw Cr	14.0	2703133	1240		4
VD	HCRCD	1247	LAWRENCE CREEK/LAWRENCE	40.673385	-123.957453	Lawrence Cr	30.3	2703063	1247		2
VD	HCRCD	1268	SOUTH FORK YAGER CREEK/SF YAGER	40.566253	-123.940340	Yager Cr	27.8	2703273	1268		1
VD	HCRCD	1288	CORNER CREEK/CORNER CR	40.618502	-123.991732	Corner Cr	5.6	2703143	1288		4
VD	HCRCD	1308	CUMMINGS CREEK/CUMMINGS	40.526242	-123.995264	Cummings Cr	9.5	2703333	1308		3
VD	HCRCD	1311	GRIZZLEY CREEK/GRIZZLEY CREEK	40.491929	-123.905691	Grizzly Cr	28.9	2705381	1311		4
VD	HCRCD	1312	HELY CREEK/HELY	40.500595	-123.974592	Hely Cr	9.4	2703435	1312		4
VD	HCRCD	1317	BELL CREEK/BELL CR	40.685664	-123.969588	Bell Cr	12.4	2703065	1317		5
VD	HCRCD	1355	LAWRENCE CREEK/LAWRENCE	40.660980	-123.978754	Lawrence Cr	68.2	2703093	1355		1
VD	HCRCD	1362	BOOTHES RUN/BOOTHES RUN	40.662291	-123.967627	Booths Run	15.4	2703077	1362		3
VD	HCRCD	1363	TRIB TO YAGER CREEK/Strawberry Creek	40.578533	-123.975443		4.8	2703229	1363		1
VD	HCRCD	1404	ROOT CREEK/ROOT CREEK	40.473194	-123.947279	Root Cr	16.0	2705515	1404		5
VD	HCRCD	1405	VAN DUZEN RIVER/VAN DUZEN @ ROOTCREEK	40.475224	-123.950456	Van Duzen R	647.5	2705481	1405		4
VD	HCRCD	1406	LITTLE VAN DUZEN RIVER/LITTLE VAN DUZEN/S.F. VDR	40.444691	-123.656926	Little Van Duzen R	94.1	2705701	1406		5
VD	HCRCD	1432	BUTTE CREEK/BUTTE CREEK	40.440449	-123.670144	Butte Cr	32.5	2705729	1432		5
VD	HCRCD	1465	GRIZZLEY CREEK/GRIZZLEY CREEK	40.487936	-123.906751	Grizzly Cr	49.2	2705443	1465		5
VD	HCRCD	1530	CUMMINGS CREEK/CUMMINGS CREEK	40.514426	-124.012889	Cummings Cr	17.9	2702277	1530		5
VD	HCRCD	1573	LITTLE LARABEE CREEK/LITTLE LARABEE CREEK	40.478346	-123.781479	Little Larabee Cr	34.5	2705489	1573		5
VD	HCRCD	8069	Hoagland Creek/Hoagland Ck	40.462754	-123.806767	Hoagland Cr	12.2	2705631	8069		1
VD	HCRCD	8070	Van Duzen River/VDR@Dinsmore	40.488957	-123.625956	Van Duzen R	210.3	2705437	8070		1
VD	HCRCD	9607	LAWRENCE CREEK/LAWRENCE CREEK	40.625403	-123.992998	Lawrence Cr	74.6	2703135	1249		1
VD	HCRCD	9608	CORNER CREEK/CORNER CREEK	40.618766	-123.992394	Corner Cr	5.6	2703143	1288		1
VD	HCRCD	9615	YAGER CREEK/YAGER CREEK	40.550399	-124.061301	Yager Cr	349.6	2702217	9615		2
VD	HCRCD	9616	NORTH FORK YAGER CREEK/NF YAGER CREEK	40.607256	-123.907497	NF Yager Cr	109.1	2703179	9616		1
VD	HCRCD	9617	OWL CREEK/SF YAGER	40.565692	-123.940142	Yager Cr	27.8	2703273	1268		4
VD	HCRCD	9618	FISH CREEK/LAWRENCE CREEK	40.624546	-123.993305	Lawrence Cr	74.6	2703135	1249		4
VD	HCRCD	9619	FISH CREEK/FISH CREEK	40.631909	-123.993377	Fish Cr	4.5	2703095	9619		3
VD	HCRCD	9642	BLANTON CREEK/Blanton Creek	40.576774	-124.011496	Blanton Cr	8.5	2702125	9642		3
VD	HCRCD	9643	COOPER CREEK/Cooper Mill Creek	40.560677	-124.061366	Cooper Mill Cr	10.2	2702159	1266		3
VD	HCRCD	9649	NORTH FORK YAGER CREEK/North Fork Yager Creek	40.583105	-123.930098	NF Yager Cr	121.6	2703233	1211		3
VD	HCRCD	9653	NA/NA	40.579575	-123.974637		4.8	2703229	1363		2
VD	HCRCD	9655	NA/NA	40.573201	-124.040086	Yager Cr	326.4	2702153	9655		2
VD	HCRCD	9656	NA/NA	40.579619	-123.988699	Yager Cr	195.6	2703231	1360		1
VD	HCRCD	9659	MIDDLE FORK YAGER CREEK/NA	40.576782	-123.928556	Middle Fork Yager Cr	24.4	2703235	9659		1
VD	HSU FSP	208	VAN DUZEN/LELAND A	40.534494	-124.135636	Van Duzen R	1109.5	2702205	208		1
VD	HSU FSP	209	VAN DUZEN/LELAND B/LELAND DOWNSTREAM	40.535370	-124.138832	Van Duzen R	1109.5	2702205	208		3
VD	HSU FSP	219	VAN DUZEN/BESS - UPSTREAM	40.528454	-124.048379	Van Duzen R	716.4	2702245	219		2
VD	HSU FSP	220	VAN DUZEN/BESS - DOWNSTREAM	40.530708	-124.050989	Van Duzen R	716.4	2702245	219		2
VD	HSU FSP	226	VAN DUZEN/LELAND UPSTREAM	40.535517	-124.141430	Van Duzen R	1109.5	2702205	208		1
VD	HSU FSP	231	VAN DUZEN/NOBLE	40.524994	-124.095982	Van Duzen R	1087.1	2702255	231		2
VD	HSU FSP	959	WILSON (VAN DUZEN)/WILSVD1	40.541530	-124.041850	Wilson Cr	3.3	2702201	959		2
VD	HSU FSP	969	CUDDEBACK/CUDE1	40.537249	-124.034643	Cuddeback Cr	3.4	2702215	969		1

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
VD	HSU FSP	1126	LITTLE LARABEE/BR1	40.471230	-123.741505	Little Larabee Cr	25.0	2708429	1126		2
VD	HSU FSP	1203	ROOT CR/ROOT 1/STA_3	40.474019	-123.941821	Root Cr	16.0	2705515	1203		3
VD	HSU FSP	1209	LAWRENCE/LAWRENCE 1/STA_9	40.583316	-123.987081	Lawrence Cr	109.3	2703219	1209		2
VD	HSU FSP	1211	N FK YAGER/STA_11	40.582406	-123.929399	NF Yager Cr	121.6	2703233	1211		2
VD	HSU FSP	1240	SHAW/SHAW F&G 3/STA_40	40.621608	-123.990981	Shaw Cr	14.0	2703133	1240		2
VD	HSU FSP	1247	LAWRENCE/PL80/STA_47	40.673385	-123.957453	Lawrence Cr	30.3	2703063	1247		2
VD	HSU FSP	1248	LAWRENCE/STA_48	40.634091	-123.994164	Lawrence Cr	68.2	2703093	1248		1
VD	HSU FSP	1249	LAWRENCE/STA_49	40.623076	-123.992978	Lawrence Cr	74.6	2703135	1249		1
VD	HSU FSP	1250	LAWRENCE/STA_50	40.618114	-123.990687	Lawrence Cr	94.4	2703145	1250		1
VD	HSU FSP	1251	LAWRENCE/STA_51	40.615393	-123.988792	Lawrence Cr	102.1	2703183	1251		1
VD	HSU FSP	1252	LAWRENCE/STA_52	40.612992	-123.989662	Lawrence Cr	102.1	2703183	1251		1
VD	HSU FSP	1253	LAWRENCE/STA_53	40.606335	-123.984678	Lawrence Cr	102.1	2703183	1253		1
VD	HSU FSP	1266	COOPER MILL/COOPER MILL 1/STA_66	40.563038	-124.061744	Cooper Mill Cr	10.2	2702159	1266		3
VD	HSU FSP	1285	YAGER/STA_85/YAGER - AT CAMP	40.563102	-124.057452	Yager Cr	332.3	2702157	1285		2
VD	HSU FSP	1288	CORNER CR/CORNER CR/STA_88	40.618502	-123.991732	Corner Cr	5.6	2703143	1288		2
VD	HSU FSP	1308	CUMMINGS/CUMMINGS 1	40.526242	-123.995264	Cummings Cr	9.5	2703333	1308		1
VD	HSU FSP	1311	GRIZZLEY CREEK/STA_111	40.491929	-123.905691	Grizzly Cr	28.9	2705381	1311		2
VD	HSU FSP	1312	HELY/STA_112	40.500595	-123.974592	Hely Cr	9.4	2703435	1312		2
VD	HSU FSP	1317	BELL CR/BELL 1/STA_117	40.685664	-123.969588	Bell Cr	12.4	2703065	1317		2
VD	HSU FSP	1342	LAWRENCE/STA_142	40.620133	-123.991960	Lawrence Cr	74.6	2703135	1342		1
VD	HSU FSP	1343	BELL CR/STA_143	40.673518	-123.957941	Bell Cr	12.4	2703065	1343		1
VD	HSU FSP	1344	LAWRENCE/STA_144	40.618672	-123.990950	Lawrence Cr	88.6	2703141	1344		1
VD	HSU FSP	1347	LAWRENCE/STA_147	40.619594	-123.991521	Lawrence Cr	88.6	2703141	1347		1
VD	HSU FSP	1349	LAWRENCE/STA_149	40.673120	-123.957564	Lawrence Cr	45.2	2703073	1349		1
VD	HSU FSP	1351	LAWRENCE/STA_151	40.697850	-123.937062	Lawrence Cr	18.8	2703045	1351		1
VD	HSU FSP	1353	LAWRENCE/STA_153	40.662381	-123.967531	Lawrence Cr	45.2	2703073	1353		1
VD	HSU FSP	1354	LAWRENCE/STA_154	40.662718	-123.968023	Lawrence Cr	68.2	2703093	1354		1
VD	HSU FSP	1355	LAWRENCE/STA_155	40.660980	-123.978754	Lawrence Cr	68.2	2703093	1355		1
VD	HSU FSP	1360	LAWRENCE/STA_160	40.580278	-123.991934	Yager Cr	195.6	2703231	1360		1
VD	HSU FSP	1361	LAWRENCE/STA_161	40.580087	-123.992783	Yager Cr	307.3	2703955	1361		1
VD	HSU FSP	1404	ROOT CREEK/HTRO310.971/HTRO310.981/HTRT0310	40.473194	-123.947279	Root Cr	16.0	2705515	1404		3
VD	HSU FSP	1405	VAN DUZEN @ ROOTCREEK/HTVD0310/HTVD310.971/HTVD310.981	40.475224	-123.950456	Van Duzen R	647.5	2705481	1405		3
VD	HSU FSP	1406	LITTLE VAN DUZEN/S.F. VDR/HTLX2320/HTLX2320.971/HTLX2320.981	40.444691	-123.656926	Little Van Duzen R	94.1	2705701	1406		3
VD	HSU FSP	1432	BUTTE CREEK/HTBZ2350.971/HTBZ2350.981	40.440449	-123.670144	Butte Cr	32.5	2705729	1432		2
VD	HSU FSP	1465	GRIZZLEY CREEK/HTGZ349.971/HTGZ349.981	40.487936	-123.906751	Grizzly Cr	49.2	2705443	1465		2
VD	HSU FSP	1530	CUMMINGS CREEK/HTCU0180.961/HTCU180.971/HTCU180.981	40.514426	-124.012889	Cummings Cr	17.9	2702277	1530		3
VD	HSU FSP	1531	CUMMINGS CREEK/HTCU0178.961	40.513941	-124.013333	Cummings Cr	17.9	2702277	1530		1
VD	HSU FSP	1561	FOX CREEK/HTFX0200.961	40.520815	-123.997495	Fox Cr	2.5	2703363	1561		1
VD	HSU FSP	1573	LITTLE LARABEE CREEK/HTLL0640.961/HTLL640.971/HTLL640.981	40.478346	-123.781479	Little Larabee Cr	34.5	2705489	1573		3
VD	HSU FSP	1650	VAN DUZEN @ DINSMORE/HTVD2660.961	40.414801	-123.519404	Van Duzen R	150.6	2705821	1650		1
VD	NorWeST CAState SWRCB NC Region	10011	Van Duzen River	40.535387	-124.138829	Van Duzen R	1109.5	2702205	208		
VD	NorWeST CAState SWRCB NC Region	10012	Van Duzen River	40.526939	-124.049442	Van Duzen R	716.4	2702245	219		
VD	NorWeST CAState SWRCB NC Region	10013	Van Duzen River	40.528674	-124.051527	Van Duzen R	716.4	2702245	219		
VD	NorWeST CAState SWRCB NC Region	10018	Van Duzen River	40.525179	-124.095926	Van Duzen R	1087.1	2702255	231		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID Stnd.		
VD	NorWeST CAState SWRCB NC Region	10036	Little Larabee Creek	40.471185	-123.741537	Little Larabee Cr	25.0	2708429	1126		
VD	NorWeST CAState SWRCB NC Region	10037	Little Larabee Creek	40.465352	-123.740194		4.6	2705687	1127		1
VD	NorWeST CAState SWRCB NC Region	10038	Little Larabee Creek	40.463009	-123.709523		6.6	2705711	1128		1
VD	NorWeST CAState SWRCB NC Region	10043	Root Creek	40.474037	-123.941771	Root Cr	16.0	2705515	1203		
VD	NorWeST CAState SWRCB NC Region	10044	Yager Creek - North Fork	40.582331	-123.929439	NF Yager Cr	121.6	2703233	1211		
VD	NorWeST CAState SWRCB NC Region	10045	Corner Creek	40.618461	-123.991753	Corner Cr	5.6	2703143	1288		
VD	NorWeST CAState SWRCB NC Region	10054	Bell Creek	40.685639	-123.969748	Bell Cr	12.4	2703065	1317		
VD	NorWeST CAState SWRCB NC Region	10256	Grizzly Creek	40.491762	-123.905626	Grizzly Cr	28.9	2705381	1311		
VD	NorWeST CAState SWRCB NC Region	10257	Hely Creek	40.500596	-123.974555	Hely Cr	9.4	2703435	1312		
VD	NorWeST CAState SWRCB NC Region	10575	Owl Creek	40.565685	-123.940269	Yager Cr	27.8	2703273	1268		
VD	NorWeST CAState SWRCB NC Region	10577	Fish Creek	40.631794	-123.993348	Fish Cr	4.5	2703095	9619		1
VD	NorWeST CAState SWRCB NC Region	10607	Yager Creek Trib	40.579579	-123.974643		4.8	2703229	1363		
VD	NorWeST CAState SWRCB NC Region	10609	Yager Creek	40.573284	-124.040021	Yager Cr	326.4	2702153	9655		
VD	NorWeST CAState SWRCB NC Region	10610	Yager Creek	40.579639	-123.988741	Yager Cr	195.6	2703231	1360		
VD	NorWeST NPO HCRCD	HCRCD_1126	LITTLE LARABEE CREEK	40.471185	-123.741537	Little Larabee Cr	25.0	2708429	1126		
VD	NorWeST NPO HCRCD	HCRCD_1127	TRIB TO LITTLE LARABEE CREEK	40.465352	-123.740194		4.6	2705687	1127		
VD	NorWeST NPO HCRCD	HCRCD_1128	TRIB TO LITTLE LARABEE CREEK	40.463009	-123.709523		6.6	2705711	1128		
VD	NorWeST NPO HCRCD	HCRCD_1203	ROOT CREEK	40.474037	-123.941771	Root Cr	16.0	2705515	1203		
VD	NorWeST NPO HCRCD	HCRCD_1209	LAWRENCE CREEK	40.583280	-123.987013	Lawrence Cr	109.3	2703219	1209		
VD	NorWeST NPO HCRCD	HCRCD_1211	NORTH FORK YAGER CREEK	40.582331	-123.929439	NF Yager Cr	121.6	2703233	1211		
VD	NorWeST NPO HCRCD	HCRCD_1240	SHAW CREEK	40.621594	-123.991046	Shaw Cr	14.0	2703133	1240		
VD	NorWeST NPO HCRCD	HCRCD_1247	LAWRENCE CREEK	40.673409	-123.957459	Lawrence Cr	30.3	2703063	1247		
VD	NorWeST NPO HCRCD	HCRCD_1248	LAWRENCE CREEK	40.634075	-123.994262	Lawrence Cr	68.2	2703093	1248		
VD	NorWeST NPO HCRCD	HCRCD_1249	LAWRENCE CREEK	40.623093	-123.993030	Lawrence Cr	74.6	2703135	1249		
VD	NorWeST NPO HCRCD	HCRCD_1250	LAWRENCE CREEK	40.618126	-123.990653	Lawrence Cr	94.4	2703145	1250		
VD	NorWeST NPO HCRCD	HCRCD_1251	LAWRENCE CREEK	40.615282	-123.988764	Lawrence Cr	102.1	2703183	1251		
VD	NorWeST NPO HCRCD	HCRCD_1252	LAWRENCE CREEK	40.612990	-123.989593	Lawrence Cr	102.1	2703183	1251		
VD	NorWeST NPO HCRCD	HCRCD_1253	LAWRENCE CREEK	40.606340	-123.984652	Lawrence Cr	102.1	2703183	1253		
VD	NorWeST NPO HCRCD	HCRCD_1266	COOPER MILL CREEK	40.563044	-124.061783	Cooper Mill Cr	10.2	2702159	1266		
VD	NorWeST NPO HCRCD	HCRCD_1285	YEAGER CREEK	40.563125	-124.057617	Yager Cr	332.3	2702157	1285		
VD	NorWeST NPO HCRCD	HCRCD_1288	CORNER CREEK	40.618461	-123.991753	Corner Cr	5.6	2703143	1288		
VD	NorWeST NPO HCRCD	HCRCD_1308	CUMMINGS CREEK	40.526154	-123.995299	Cummings Cr	9.5	2703333	1308		
VD	NorWeST NPO HCRCD	HCRCD_1311	GRIZZLEY CREEK	40.491762	-123.905626	Grizzly Cr	28.9	2705381	1311		
VD	NorWeST NPO HCRCD	HCRCD_1312	HELY CREEK	40.500596	-123.974555	Hely Cr	9.4	2703435	1312		
VD	NorWeST NPO HCRCD	HCRCD_1317	BELL CREEK	40.685639	-123.969748	Bell Cr	12.4	2703065	1317		
VD	NorWeST NPO HCRCD	HCRCD_1342	LAWRENCE CREEK	40.620117	-123.992085	Lawrence Cr	74.6	2703135	1342		
VD	NorWeST NPO HCRCD	HCRCD_1343	BELL CREEK	40.673490	-123.957973	Bell Cr	12.4	2703065	1343		
VD	NorWeST NPO HCRCD	HCRCD_1344	LAWRENCE CREEK	40.618665	-123.991001	Lawrence Cr	88.6	2703141	1344		
VD	NorWeST NPO HCRCD	HCRCD_1347	LAWRENCE CREEK	40.619549	-123.991618	Lawrence Cr	88.6	2703141	1347		
VD	NorWeST NPO HCRCD	HCRCD_1349	LAWRENCE CREEK	40.673116	-123.957636	Lawrence Cr	45.2	2703073	1349		
VD	NorWeST NPO HCRCD	HCRCD_1351	LAWRENCE CREEK	40.697876	-123.937237	Lawrence Cr	18.8	2703045	1351		
VD	NorWeST NPO HCRCD	HCRCD_1353	LAWRENCE CREEK	40.662442	-123.967514	Lawrence Cr	45.2	2703073	1353		
VD	NorWeST NPO HCRCD	HCRCD_1354	LAWRENCE CREEK	40.662623	-123.968232	Lawrence Cr	68.2	2703093	1354		
VD	NorWeST NPO HCRCD	HCRCD_1355	LAWRENCE CREEK	40.660965	-123.978733	Lawrence Cr	68.2	2703093	1355		
VD	NorWeST NPO HCRCD	HCRCD_1360	YEAGER CREEK	40.580134	-123.991927	Yager Cr	195.6	2703231	1360		
VD	NorWeST NPO HCRCD	HCRCD_1361	YEAGER CREEK	40.580005	-123.992632	Yager Cr	307.3	2703955	1361		
VD	NorWeST NPO HCRCD	HCRCD_1362	BOOTHUS RUN	40.662208	-123.967774	Booths Run	15.4	2703077	1362		
VD	NorWeST NPO HCRCD	HCRCD_1363	TRIB TO YAGER CREEK	40.578523	-123.975419		4.8	2703229	1363		

Wat. shed	Source Entity	Site Code	Site Description	Original	Original	NSI	Drain.	NSI	Site	Special	Yrs
				Latitude NAD83	Longitude NAD83	Reach GNIS Name	Area (km <sup>2</sup> )	Reach COMID	ID		
VD	NorWeST NPO HCRCD	HCRCD_1404	ROOT CREEK	40.473023	-123.947208	Root Cr	16.0	2705515	1404		
VD	NorWeST NPO HCRCD	HCRCD_1405	VAN DUZEN RIVER	40.476268	-123.950619	Van Duzen R	647.5	2705481	1405		
VD	NorWeST NPO HCRCD	HCRCD_1406	LITTLE VAN DUZEN RIVER	40.444682	-123.656888	Little Van Duzen R	94.1	2705701	1406		
VD	NorWeST NPO HCRCD	HCRCD_1432	BUTTE CREEK	40.440466	-123.670178	Butte Cr	32.5	2705729	1432		
VD	NorWeST NPO HCRCD	HCRCD_1465	GRIZZLEY CREEK	40.487984	-123.906702	Grizzly Cr	49.2	2705443	1465		
VD	NorWeST NPO HCRCD	HCRCD_1530	CUMMINGS CREEK	40.514373	-124.012725	Cummings Cr	17.9	2702277	1530		
VD	NorWeST NPO HCRCD	HCRCD_1531	CUMMINGS CREEK	40.513932	-124.013326	Cummings Cr	17.9	2702277	1530		
VD	NorWeST NPO HCRCD	HCRCD_1573	LITTLE LARABEE CREEK	40.478320	-123.781478	Little Larabee Cr	34.5	2705489	1573		
VD	NorWeST NPO HCRCD	HCRCD_1650	VAN DUZEN RIVER	40.414830	-123.519486	Van Duzen R	150.6	2705821	1650		
VD	NorWeST NPO HCRCD	HCRCD_208	VAN DUZEN RIVER	40.534637	-124.135564	Van Duzen R	1109.5	2702205	208		
VD	NorWeST NPO HCRCD	HCRCD_209	VAN DUZEN RIVER	40.535387	-124.138829	Van Duzen R	1109.5	2702205	208		
VD	NorWeST NPO HCRCD	HCRCD_219	VAN DUZEN RIVER	40.526939	-124.049442	Van Duzen R	716.4	2702245	219		
VD	NorWeST NPO HCRCD	HCRCD_220	VAN DUZEN RIVER	40.528674	-124.051527	Van Duzen R	716.4	2702245	219		
VD	NorWeST NPO HCRCD	HCRCD_226	VAN DUZEN RIVER	40.535533	-124.141428	Van Duzen R	1109.5	2702205	208		
VD	NorWeST NPO HCRCD	HCRCD_231	VAN DUZEN RIVER	40.525179	-124.095926	Van Duzen R	1087.1	2702255	231		
VD	NorWeST NPO HCRCD	HCRCD_8069	Hoagland Creek	40.462733	-123.806683	Hoagland Cr	12.2	2705631	8069		
VD	NorWeST NPO HCRCD	HCRCD_8070	Van Duzen River	40.488894	-123.625953	Van Duzen R	210.3	2705437	8070		
VD	NorWeST NPO HCRCD	HCRCD_9607	LAWRENCE CREEK	40.625403	-123.993064	Lawrence Cr	74.6	2703135	1249		
VD	NorWeST NPO HCRCD	HCRCD_9608	CORNER CREEK	40.618673	-123.992443	Corner Cr	5.6	2703143	1288		
VD	NorWeST NPO HCRCD	HCRCD_9615	YAGER CREEK	40.551348	-124.062297	Yager Cr	349.6	2702217	9615		
VD	NorWeST NPO HCRCD	HCRCD_9616	NORTH FORK YAGER CREEK	40.607261	-123.907512	NF Yager Cr	109.1	2703179	9616		
VD	NorWeST NPO HCRCD	HCRCD_9619	FISH CREEK	40.631794	-123.993348	Fish Cr	4.5	2703095	9619		
VD	NorWeST NPO HCRCD	HCRCD_9642	BLANTON CREEK	40.576738	-124.011516	Blanton Cr	8.5	2702125	9642		
VD	NorWeST NPO HCRCD	HCRCD_9643	COOPER CREEK	40.560797	-124.061209	Cooper Mill Cr	10.2	2702159	1266		
VD	NorWeST NPO HCRCD	HCRCD_9649	NORTH FORK YAGER CREEK	40.583094	-123.930125	NF Yager Cr	121.6	2703233	1211		
VD	NorWeST NPO HCRCD	HCRCD_9659	MIDDLE FORK YAGER CREEK	40.576623	-123.928607	Middle Fork Yager Cr	24.4	2703235	9659		
VD	UCB KBG	SPATT_2015_Carlotta	VD southwest of Riverside Pk, it is Bauma-Gregson's Carlotta SPATT	40.491944	-123.993888	Van Duzen R	673.0	2705411	9808		1
VD	UCB KBG	SPATT_2015_Runeburg	VD hyporheic side-channel at Runeburg	40.489167	-123.990278			[Not in network]	9804	Hyporheic off-channel pool	1