COASTAL MULTISPECIES PLAN

APPENDIX H: PRIORITIZING POPULATIONS FOR RESTORATION AND FOCUS

2016

Upper Grape Creek Project Photos

Pre-Project Construction Site

Existing On-Stream Flashboard Dam and Pond

Plant Relocation

Earthwork

Compaction

Offstream Pond Taking Shape

Liner Installation

Installed Liner

Completed Offstream Pond

Photo Credit 1: Upper Grape Creek Offstream Pond Construction. *Photo: Sonoma RCD*

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Prioritizing Populations for Restoration and Focus

Introduction

While immediately working to restore and recover all populations simultaneously would be preferable, the cost to implement such an effort is prohibitive. Instead, initially focusing efforts in fewer watersheds provides the best chance for species recovery. Decisions to focus efforts and funding to specific areas do not imply other areas are less important or not needed for recovery. Rather, decisions to prioritize populations are necessary to ensure efforts are optimizing benefits to fisheries and ecosystem processes across each of the ESU/DPSs. This prioritization protocol was used to identify essential populations, based on a consistent protocol, that are closest to achieving recovery and that are important to the recovery of the overall Diversity Strata.

NOAA Fisheries evaluated all the essential (i.e. must meet low viability criteria) CCC and NC steelhead and CC Chinook salmon populations within the recovery plans using a prioritization framework based on Bradbury *et al.* (1995). Oregon State Senate President, Bill Bradbury, asked the Pacific Rivers Council for help in assembling a diverse group to create a prioritization process for effective and scientifically-sound watershed protection and restoration. The framework developed provides a common basis from which diverse groups can develop mutually agreed-upon restoration priorities reflecting a strong scientific basis (Bradbury *et al.* 1995).

Prioritizing Framework

The prioritization framework uses three criteria groupings for ranking populations:

1. biological and ecological resources (Biological Importance);
2. watershed integrity and risk (Integrity and Risk); and
3. potential for restoration (Optimism and Potential).

Methods

For essential populations only, we identified parameters relevant to the Bradbury criteria and information in the recovery plan to describe those parameters. Table 1, outlines the criteria, parameters, information and specific data used.

Table 1: Linking the Bradbury framework criteria, prioritization parameters and the sources of this information.

Bradbury Criteria	Prioritization Parameters	Information	Data Source
Biological Importance	Biological Viability	CC Chinook: Adult Density, Adult Spatial Structure, Pre Smolt Spatial Structure, Smolts Abundance NC steelhead: Winter Adult Density, Summer Adults Abundance, Summer Rearing Juvenile Density, Summer Rearing Juvenile Spatial Structure, Smolt Abundance CCC steelhead: Adult Density, Summer Rearing Juvenile Density, Summer Rearing Juvenile Spatial Structure, Smolt Abundance	CAP Current Conditions Tables: See Chapter 4 (Methods), Appendix D: CAP Methods, Individual Population Results
Biological Importance	Biological Viability	Hatcheries and Aquaculture	CAP Threats Tables: See Chapter 4 (Methods), Appendix D: CAP Methods, Individual Population Results
Biological Importance	Number of Anadromous Salmonids	The amount of ESA listed anadromous salmonids in the same watershed	The ESA listed salmonids that potentially overlap with the salmonids in this plan are: SONCC coho salmon, CCC coho salmon, NC steelhead, CCC steelhead and CC Chinook salmon.
Biological Importance	Habitat Potential for Spawning and Rearing	The amount of intrinsic potential rated as High in the population in kilometers	Intrinsic Potential; See Chapter 4 (Methods), Appendix G: Intrinsic Potential Updates
Integrity and Risk	Watershed Characterization	The current amount of: Impervious Surfaces, Agriculture, Timber Harvest, Urbanization, Riparian Species Composition, Road Density, Streamside Road Density	CAP Current Conditions Tables: See Chapter 4 (Methods), Appendix D: CAP Methods, Individual Population Results

Bradbury Criteria	Prioritization Parameters	Information	Data Source
Integrity and Risk	CAP Threats	The future threat of: Agriculture, Channel Modification, Disease, Predation, and Competition, Fire, Fuel Management and Fire Suppression, Fishing and Collecting, Livestock Farming and Ranching, Logging and Wood Harvesting, Mining, Recreational Areas and Activities, Residential and Commercial Development, Roads and Railroads, Severe Weather Patterns, and Water Diversion and Impoundments.	CAP Threats Tables: See Chapter 4 (Methods), Appendix D: CAP Methods, Individual Population Results
Optimism and Potential	Public Lands	The percentage of the watershed area (*i.e.* population) that is protected in public lands.	Data was obtained from a GIS query of the California Protected Areas Database, 2009
Optimism and Potential	CCC Coho Salmon "Focus" Population	Focusing efforts in watersheds that are also a focus in another federal recovery plan.	CCC Coho Salmon Recovery Plan[1]
Optimism and Potential	SONCC Coho Salmon "Core 1" Population	Focusing efforts in watersheds that are also a focus in another federal recovery plan.	SONCC Coho Salmon Recovery Plan[2]
Optimism and Potential	Coastal Monitoring Plan	The population is a priority to establish and/or continue Life Cycle Monitoring Station. California Coastal Monitoring Program, Management Group	California Coastal Monitoring Program[3]

[1] http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/north_central_california_coast/central_california_coast_coho_recovery_plan.html

[2] http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/south_central_southern_california_coast/south_central_southern_california_salmon_recovery_domain.html

[3] http://www.calfish.org/ProgramsData/ConservationandManagement/CaliforniaCoastalMonitoring.aspx

Bradbury Criteria	Prioritization Parameters	Information	Data Source
Other Considerations	Alternative Life Histories	NC steelhead summer-run	Watersheds that have extant NC steelhead summer-run receive extra consideration in restoration prioritization (+). Watersheds that support multiple lifehistory strategies are a priority for recovery.

Turning CAP Ratings Parameters into Numbers

The CAP workbooks include ratings applied for current conditions: Poor, Fair, Good, Very Good, and for threats: Low, Medium, High and Very High. These ratings were converted to a numbering system for further analyses. Since this prioritization scheme is focusing on populations that are most recovery ready then the better current conditions and lesser threats identified the higher the number value.

Table 2: CAP workbook ratings and their associated numerical scores. When the threat does not exist in a population is it scored "-"and given the same numerical score as a low threat.

CAP Current Conditions	Numerical Score
Very Good	4
Good	3
Fair	2
Poor	1

CAP Threats	Numerical Score
Low or "-"	4
Medium	3
High	2
Very High	1

Parameter Data Analysis

A total score was generated for each population by summing the numerical scores across each parameter. For each parameter, population scores were ranked against each other within the entire ESU/DPS using the Microsoft Excel Percent Rank (inclusive) formula. The formula returns the rank of a score as a percentage of the data set. It is used to evaluate the relative standing of each population within the ESU/DPS for that prioritization parameter. For each parameter, the populations' percentage was then binned into three percentile groups; 1, 2, 3. The populations that scored within the top 100-66% received a final score for that criteria of a 3. The populations that scored within the 65-33% received a final score for that criteria of a 2, and the populations that scored less than 33% received a final score of 1. The final scores for the biological viability parameter were then weighted by doubling the final values, because we want to initially focus efforts in populations that are relatively closer to recovery (*i.e.* those with more abundant extant populations). The total population score is the sum of the parameter final scores for that population. See the example below (Table 3) and the subsequent tables associated with each species.

Table 3: An example of the CCC steelhead CAP Biological Viability scores for the Northern Coastal Diversity Stratum.

Biological Viability	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek
Adults Density	F	P	F	F	G
Summer Rearing Juveniles Density	F	F	F	G	F
Summer Rearing Juveniles Spatial Structure	G	G	G	F	G
Smolts Abundance	F	P	F	G	G
Hatcheries and Aquaculture	L	L	-	-	-

Biological Viability	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek
Adults Density	2	1	2	2	3
Summer Rearing Juveniles Density	2	2	2	3	2
Summer Rearing Juveniles Spatial Structure	3	3	3	2	3
Smolts Abundance	2	1	2	3	3
Hatcheries and Aquaculture	4	4	4	4	4
Total	13	11	13	14	15
Percentile Rank	78	37	78	96	100
Rank	3	2	3	3	3
Rank Weighted (Bins)	6	4	6	6	6

Prioritization Categories

For each species, the final criteria scores from all the essential populations are totaled and compared to the other population scores within the same diversity stratum. The final ranking and assignment to priority categories followed the rules below:

- Populations were grouped into three categories: Priority A, Priority B, and Priority C,
- Final scores were only ranked against other populations within the same diversity stratum,
- Essential (*Independent*) populations were grouped into the Priority A and B groups,
- Priority A populations generally had the highest scores, and
- Supporting (*non-essential Independent/all dependent*) populations were automatically assigned to Priority C

Table 4: An example of CCC steelhead prioritization results for the Santa Cruz Mountains Diversity Stratum. Populations listed in red are the recovery plan supporting populations.

Central California Coast Steelhead Populations		Biological & Ecological			Integrity & Risk		Optimism & Potential				
		Biological Viability (Weighted)	Number of Listed Species	High IP	Watershed Characterization	CAP Threats	Public Lands	CCC Coho Focus Pop.	Monitoring (LCM) Priority	Total	Priority #
Santa Cruz Mountains Diversity Stratum	Pilarcitos Creek	2	1	1	2	1	3	0		10	B
	Tunitas Creek										C
	San Gregorio Creek	4	2	2	3	1	2	1		15	B
	Pescadero Creek	6	2	2	3	1	3	1	1	19	A
	Gazos Creek										C
	Waddell Creek	4	2	1	3	3	3	1		17	A
	Scott Creek	4	2	2	3	3	1	1	1	17	A
	San Vicente Creek										C
	Laguna Creek										C
	San Lorenzo River	4	2	3	2	1	2	1		15	B
	Soquel Creek	6	2	3	2	2	2	1		18	A
	Aptos Creek	4	2	2	2	1	3	1		15	B

California Coastal Chinook Salmon Results

The following tables represent supporting data and information used to calculate final scores and restoration priority ranking (i.e., A, B, or C) for essential CC Chinook salmon populations.

Table 5: Numerical representation of the Biological Viability CAP current condition and threat of Hatcheries and Aquaculture parameter scores for CC Chinook salmon essential populations. A CAP current condition numerical score of Poor = 1, Fair = 2, Good = 3, Very Good = 4. A CAP threat numerical score of Very High = 1, High = 2, Medium = 3, Low or "-" = 4

	Diversity Strata and Populations													
	North Coastal							North Mountain Interior			North-Central Coastal		Central Coastal	
CAP Biological Viability	Redwood Creek	Little River	Mad River	Humboldt Bay Tributaries	S. F. and Lower Mainstem Eel	Bear River	Mattole River	Van Duzen River	Larabee Creek	Upper Eel River	Noyo River	Big River	Garcia River	Russian River
Adults Density	2	1	2	1	2	2	2	2	2	2	1	1	1	2
Adults Spatial Structure	3	2	4	3	3	4	4	3	3	2	1	1	1	2
Pre Smolt Spatial Structure	3	2	4	3	3	4	4	3	3	2	1	1	1	2
Smolts Abundance	2	1	3	2	2	2	2	2	2	2	1	1	1	2
Hatcheries and Aquaculture	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total	14	10	17	13	14	16	16	14	14	12	8	8	8	12
Percentile Rank	53.8	23	100	46.1	53.8	84.6	84.6	53.8	53.8	30.7	0	0	0	30.7
Rank	2	1	3	2	2	3	3	2	2	1	1	1	1	1
Rank Weighted (Bins)	4	2	6	4	4	6	6	4	4	2	2	2	2	2

Table 6: Amount of high value historic intrinsic potentail (IP-km) parameter scores for CC Chinook salmon essential populations.

High Historic Intrinsic Potential for Spawning and Rearing	Diversity Strata and Populations													
	North Coastal							North Mountain Interior			North-Central Coastal		Central Coastal	
	Redwood Creek	Little River	Mad River	Humboldt Bay Tributaries	S. F. and Lower Mainstem Eel	Bear River	Mattole River	Van Duzen River	Larabee Creek	Upper Eel River	Noyo River	Big River	Garcia River	Russian River
High Intrinsic Potential (IP-km)	97.4	13.7	80	53.8	284.5	32.1	135	96.3	28	344.7	49.6	79.9	44.9	328.4
Percentile Rank	69.2	0	53.8	38.4	84.6	15.3	76.9	61.5	7.6	100	30.7	46.1	23	92.3
Rank (Bins)	3	1	2	2	3	1	3	2	1	3	1	2	1	3

Table 7: Numerical representation of the Watershed Characterization CAP current condition parameter scores for CC Chinook salmon essential populations. A CAP current condition numerical score of Poor = 1, Fair = 2, Good = 3, Very Good = 4.

CAP Watershed Characterization	Diversity Strata and Population													
	North Coastal							North Mountain Interior			North-Central Coastal		Central Coastal	
	Redwood Creek	Little River	Mad River	Humboldt Bay Tributaries	S. F. and Lower Mainstem Eel	Bear River	Mattole River	Van Duzen River	Larabee Creek	Upper Eel River	Noyo River	Big River	Garcia River	Russian River
Impervious Surfaces	4	4	4	2	4	4	4	4	4	4	4	4	4	4
Agriculture	4	4	4	4	4	4	4	3	3	4	4	4	4	4
Timber Harvest	4	1	3	1	3	3	4	1	1	4	2	4	3	4
Urbanization	4	4	4	1	4	4	4	4	4	4	4	4	4	2
Riparian Species Composition	3	2	2	3	2	1	2	4	3	2	2	2	3	2
Road Density	1	1	1	1	1	1	2	1	1	3	1	3	3	2
Streamside Road Density (100 m)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	21	17	19	13	19	18	21	18	17	22	18	22	22	19
Percentile Rank	69.2	7.6	46.1	0	46.1	23	69.2	23	7.6	84.6	23	84.6	84.6	46.1
Rank (Bins)	3	1	2	1	2	1	3	1	1	3	1	3	3	2

Table 8: CAP Threat parameter scores for CC Chinook salmon essential populations. The total is the count of High and Very High threats for each population.

CAP Threats	Diversity Strata and Population													
	North Coastal							North Mountain Interior			North-Central Coastal		Central Coastal	
	Redwood Creek	Little River	Mad River	Humboldt Bay Tributaries	S. F. and Lower Mainstem Eel	Bear River	Mattole River	Van Duzen River	Larabee Creek	Upper Eel River	Noyo River	Big River	Garcia River	Russian River
Agriculture	M	M	M	M	M	M	L	M	M	L	L	-	M	M
Channel Modification	VH	H	H	H	H	M	M	H	M	L	L	L	M	H
Disease, Predation and Competition	H	M	M	M	M	M	M	H	H	M	-	-	M	M
Fire, Fuel Management and Fire Suppression	M	M	M	L	M	M	M	M	M	M	L	L	L	L
Fishing and Collecting	M	M	M	M	M	M	M	M	M	H	M	M	H	M
Livestock Farming and Ranching	M	M	M	M	M	H	M	M	M	L	-	-	M	L
Logging and Wood Harvesting	H	H	M	H	M	H	M	M	M	M	M	M	H	L
Mining	H	-	H	L	M	M	M	M	M	L	-	-	L	M
Recreational Areas and Activities	M	M	M	L	M	M	M	M	M	L	L	L	L	L
Residential and Commercial Development	M	M	M	M	M	M	M	M	M	L	L	L	M	H
Roads and Railroads	H	H	H	M	H	H	M	M	M	H	M	M	H	H
Severe Weather Patterns	H	M	M	H	H	M	H	M	M	M	M	M	M	M
Water Diversion and Impoundments	M	M	M	M	H	M	H	H	M	L	L	L	M	H
Total	7	10	10	10	9	10	11	10	12	11	13	13	10	9
Percentile Rank	0	23	23	23	7.6	23	69.2	23	84.6	69.2	92.3	92.3	23	7.6
Rank (Bins)	1	1	1	1	1	1	3	1	3	3	3	3	1	1

Table 9: Percentage of the watershed area that is in public lands for CC Chinook salmon essential populations.

Public Lands (% of watershed area)	Diversity Strata and Populations													
	North Coastal							North Mountain Interior			North-Central Coastal		Central Coastal	
	Redwood Creek	Little River	Mad River	Humboldt Bay Tributaries	S. F. and Lower Mainstem Eel	Bear River	Mattole River	Van Duzen River	Larabee Creek	Upper Eel River	Noyo River	Big River	Garcia River	Russian River
State	0	0	0	0	0	0	0	0	0	0	0	0	0	1
State, Fish & Game	0	0	0	8	1	0	1	1	0	0	0	0	0	0
State, Parks & Recreation	4	0	0	0	10	0	1	0	0	0	0	9	0	2
State (Forestry)	0	0	0	0	0	0	0	0	0	0	19	20	0	0
State (University)	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Federal, ACOE	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Federal, BLM	4	0	0	7	6	0	19	1	1	5	0	1	1	3
Federal, NPS	37	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, USFS	1	0	37	0	0	0	0	17	0	38	0	0	0	0
Federal, USFWS	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Federal, BIA	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Local (City/ County Park/Parks & Rec.)	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total (% of watershed area)	46	0	37	17	17	0	21	19	1	44	19	30	1	10
Percentile Rank	100	0	84.6	38.4	38.4	0	69.2	53.8	15.3	92.3	53.8	76.9	15.3	30.7
Rank (Bins)	3	1	3	2	2	1	3	2	1	3	2	3	1	1

Table 10: CC Chinook Restoration and Focus Prioritization Results

Diversity Strata	California Coastal Chinook Salmon Populations	Biological & Ecological			Integrity & Risk		Optimism & Potential				Total	Priority #
		CAP Biological Viability (Weighted)	Number of Listed Species	High IP-km	CAP Watershed Characterization	CAP Threats	Public Lands	CCC Coho Focus Population	SONCC Core 1 Population	Monitoring (LCM) Priority		
North Coastal	Redwood Creek	4	3	3	3	1	3	0	1	1	19	A
	Little River	2	3	1	1	1	1	0	0	0	9	B
	Mad River	6	3	2	2	1	3	0	0	0	17	A
	Humboldt Bay Tributaries	4	3	2	1	1	2	0	1	1	15	B
	South Fork/ Lower Mainstem Eel River	4	3	3	2	1	2	0	1	1	17	A
	Bear River	6	3	1	1	1	1	0	0	0	13	B
	Mattole River	6	3	3	3	3	3	0	0	0	21	A
North Mountain Interior	Van Duzen River	4	3	2	1	1	2	0	1	1	15	B
	Larabee Creek	4	3	1	1	3	1	0	1	0	14	B
	Upper Eel River	2	3	3	3	3	3	0	0	0	17	A
North-Central Coastal	Ten Mile River											C
	Noyo River	2	3	1	1	3	2	1	0	1	14	B
	Big River	2	3	2	3	3	3	1	0	0	17	A
	Albion River											C
Central Coastal	Navarro River											C
	Garcia River	2	3	1	3	1	1	1	0	1	13	B
	Gualala River											C
	Russian River	2	3	3	2	1	1	1	0	1	14	A

Northern California Steelhead Results

The following tables represent supporting data and information used to calculate final scores and restoration priority ranking (i.e., A, B, or C) for essential NC steelhead populations.

Table 11: Numerical representation of the Biological Viability CAP current condition and threat of Hatcheries and Aquaculture parameter scores for NC steelhead essential populations. A CAP current condition numerical score of Poor = 1, Fair = 2, Good = 3, Very Good = 4. A CAP threat numerical score of Very High = 1, High = 2, Medium = 3, Low or "-" = 4

	Diversity Strata and Populations																									
	Northern Coastal								Lower Interior				North Mountain Interior					North Central Coastal						Central Coastal		
Biological Viability	Redwood Creek	Maple Creek/Big Lagoon	Little River	Mad River	Humboldt Bay Tribs	South Fork Eel River	Bear River	Mattole River	Chamise Creek	Woodman Creek	Outlet Creek	Tomki Creek	Van Duzen River	Larabee Creek	North Fork Eel River	Middle Fork Eel River	Upper Mainstem Eel River	Usal Creek	Wages Creek	Ten Mile River	Noyo River	Caspar Creek	Big River	Navarro River	Garcia River	Gualala River
Winter Adults Density	2	3	1	2	2	2	3	2	1	2	2	1	2	2	3	2	1	2	1	2	2	2	1	2	2	2
Summer Adults Abundance	1			1		1		1					2		1	2	1									
Summer Rearing Juveniles Density	2	3	1	2	2	2	2	3	1	1	2	1	2	2	2	2	2	3	2	2	2	3	2	2	2	1
Summer Rearing Juveniles Spatial Structure	3	4	2	2	3	4	4	4	4	3	2	1	3	4	3	2	1	4	3	4	3	3	3	2	3	3
Smolts Abundance	2	3	1	2	2	3	2	2	2	1	2	1	2	2	2	2	1	2	1	2	2	1	2	2	2	2
Hatcheries and Aquaculture	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total	14	17	9	11	13	16	15	16	12	11	12	8	15	14	15	14	10	15	11	14	13	13	12	12	13	12
Percentile Rank	63	10	4.1	13	46	92	75	92	25	13	25	0	75	63	75	63	8.3	75	13	63	46	46	25	25	46	25
Rank (Bins)	2	3	1	1	2	3	3	3	1	1	1	1	3	2	3	2	1	3	1	2	2	2	1	1	2	1
Rank Weighted (Bins)	4	6	2	2	4	6	6	6	2	2	2	2	6	4	6	4	2	6	2	4	4	4	2	2	4	2

Table 12: Amount of high value historic intrinsic potentail (IP-km) parameter scores for NC steelhead essential populations.

High Historic Intrinsic Potential for Spawning and Rearing	Diversity Strata and Populations																										
	Northern Coastal								Lower Interior				North Mountain Interior					North Central Coastal						Central Coastal		
	Redwood Creek	Maple Creek/Big Lagoon	Little River	Mad River	Humboldt Bay Tribs	South Fork Eel River	Bear River	Mattole River	Chamise Creek	Woodman Creek	Outlet Creek	Tomki Creek	Van Duzen River	Larabee Creek	North Fork Eel River	Middle Fork Eel River	Upper Mainstem Eel River	Usal Creek	Wages Creek	Ten Mile River	Noyo River	Caspar Creek	Big River	Navarro River	Garcia River	Gualala River
High Intrinsic Potential (IP-km)	182	36	28	246	90	628	88	402	29	28	81	44	228	57	235	343	149	21	12	120	89	5.6	154	214	64	236
Percentile Rank	68	24	12	88	52	100	44	96	20	16	40	28	76	32	80	92	60	8	4	56	48	0	64	72	36	84
Rank (Bins)	3	1	1	3	2	3	2	3	1	1	2	1	3	1	3	3	2	1	1	2	2	1	2	3	2	3

Table 13: Numerical representation of the Watershed Characterization CAP current condition parameter scores for NC steelhead essential populations. A CAP current condition numerical score of Poor = 1, Fair = 2, Good = 3, Very Good = 4.

CAP Watershed Characterization	Diversity Strata and Populations																									
	Northern Coastal								Lower Interior				North Mountain Interior					North Central Coastal						Central Coastal		
	Redwood Creek	Maple Creek/Big Lagoon	Little River	Mad River	Humboldt Bay Tribs	South Fork Eel River	Bear River	Mattole River	Chamise Creek	Woodman Creek	Outlet Creek	Tomki Creek	Van Duzen River	Larabee Creek	North Fork Eel River	Middle Fork Eel River	Upper Mainstem Eel River	Usal Creek	Wages Creek	Ten Mile River	Noyo River	Caspar Creek	Big River	Navarro River	Garcia River	Gualala River
Impervious Surfaces	4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Agriculture	4	4	4	4	4	4	4	4	4	4	2	4	2	3	4	4	4	4	4	4	4	4	4	2	4	4
Timber Harvest	4	2	1	3	1	3	3	4	4	4	3	4	1	1	4	4	4	3	2	1	2	4	2	3	3	2
Urbanization	4	4	4	4	1	4	4	4	4	4	2	2	4	4	4	4	4	4	4	4	4	4	4	3	4	4
Riparian Species Composition	2	2	2	2	3	2	1	2	2	2	2	2	4	3	2	3	2	4	4	3	3	3	2	1	2	3
Road Density	1	1	1	1	1	1	1	2	3	3	2	3	1	1	2	4	2	1	1	1	1	1	1	1	3	3
Streamside Road Density (100 m)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Total	20	18	17	19	13	19	18	21	22	22	16	20	17	17	21	24	21	21	20	18	19	21	18	15	21	22
Percentile Rank	52	24	12	40	0	40	24	64	88	88	8	52	12	12	64	100	64	64	52	24	40	64	24	4	64	88
Rank (Bins)	2	1	1	2	1	2	1	2	3	3	1	2	1	1	2	3	2	2	2	1	2	2	1	1	2	3

Table 14: CAP Threat parameter scores for NC steelhead essential populations. The total is the count of High and Very High threats for each population.

CAP Threats	Diversity Strata and Populations																									
	Northern Coastal								Lower Interior				North Mountain Interior					North Central Coastal						Central Coastal		
	Redwood Creek	Maple Creek/Big Lagoon	Little River	Mad River	Humboldt Bay Tribs	South Fork Eel River	Bear River	Mattole River	Chamise Creek	Woodman Creek	Outlet Creek	Tomki Creek	Van Duzen River	Larabee Creek	North Fork Eel River	Middle Fork Eel River	Upper Mainstem Eel River	Usal Creek	Wages Creek	Ten Mile River	Noyo River	Caspar Creek	Big River	Navarro River	Garcia River	Gualala River
Agriculture	M	M	M	M	L	M	M	M	M	L	M	L	M	M	M	M	L	-	L	M	-	M	-	M	M	H
Channel Modification	VH	M	M	H	H	H	M	L	M	M	M	-	H	M	M	M	L	L	L	L	L	M	M	L	M	M
Disease, Predation and Competition	H	M	L	L	M	M	M	M	M	M	-	M	H	M	M	M	M	L	L	L	-	M	-	-	L	L
Fire, Fuel Management and Fire Suppression	M	M	L	M	M	M	M	L	L	L	L	L	M	M	M	H	M	M	M	H	L	M	L	L	L	L
Fishing and Collecting	H	M	M	M	M	M	M	M	L	L	L	L	H	M	M	H	M	M	M	M	M	M	M	M	H	M
Livestock Farming and Ranching	M	M	M	M	H	M	H	M	L	L	M	L	M	M	M	M	L	-	L	L	-	L	-	M	H	M
Logging and Wood Harvesting	H	VH	H	H	M	M	H	H	L	L	M	M	M	M	M	M	L	M	M	H	M	M	M	M	H	H
Mining	H	M	-	H	-	M	M	L	L	L	L	-	M	L	M	L	L	L	L	M	-	-	-	-	L	L
Recreational Areas and Activities	M	M	L	M	L	M	M	L	L	L	-	L	M	L	M	L	L	L	L	L	L	M	L	-	L	L
Residential and Commercial Development	M	M	L	M	M	M	M	M	M	M	M	M	M	L	M	L	L	L	M	L	L	M	-	L	L	L
Roads and Railroads	H	VH	H	H	H	M	VH	VH	H	H	M	M	H	H	H	H	H	H	H	H	M	H	M	M	H	H
Severe Weather Patterns	M	M	M	M	M	H	M	VH	M	M	M	M	M	M	M	M	H	H	M	H	M	M	M	M	M	M
Water Diversion and Impoundments	H	M	M	M	M	H	M	VH	M	M	H	H	H	M	M	M	VH	L	M	M	L	M	L	H	H	H
Total	6	11	11	9	10	10	10	9	12	12	12	12	8	12	12	10	10	11	12	9	13	12	13	12	8	9
Percentile Rank	0	48	48	12	28	28	28	12	60	60	60	60	4	60	60	28	28	48	60	12	96	60	96	60	4	12
Rank (Bins)	1	2	2	1	1	1	1	1	2	2	2	2	1	2	2	1	1	2	2	1	3	2	3	2	1	1
Rank (Bins) (Values)	1	2	2	1	1	1	1	1	2	2	2	2	1	2	2	1	1	2	2	1	3	2	3	2	1	1

Table 15: Percentage of the watershed area that is in public lands for NC steelhead essential populations.

Public Land (% of watershed area)	Diversity Strata and Populations																									
	Northern Coastal								Lower Interior				North Mountain Interior					North Central Coastal						Central Coastal		
	Redwood Creek	Maple Creek/Big Lagoon	Little River	Mad River	Humboldt Bay Tribs	South Fork Eel River	Bear River	Mattole River	Chamise Creek	Woodman Creek	Outlet Creek	Tomki Creek	Van Duzen River	Larabee Creek	North Fork Eel River	Middle Fork Eel River	Upper Mainstem Eel River	Usal Creek	Wages Creek	Ten Mile River	Noyo River	Caspar Creek	Big River	Navarro River	Garcia River	Gualala River
State	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State, Fish & Game	0	0	0	0	8	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
State, Parks & Recreation	4	1	0	0	0	13	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	1	9	1	0	0
State (Forestry)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	90	20	0	0	0
State (University)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, ACOE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, BLM	4	0	0	0	7	8	0	19	16	0	2	8	1	1	9	7	0	0	0	0	0	0	1	2	1	0
Federal. FWS	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, NPS	37	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, USFS	1	0	0	37	0	0	0	0	0	22	0	0	17	0	40	55	90	0	0	0	0	0	0	0	0	0
Federal, BIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0
Total (% of watershed area)	46	2	0	37	17	22	0	21	17	22	2	9	19	1	51	65	90	2	0	0	19	91	30	3	1	0
Percentile Rank	84	28	0	80	48	68	0	64	48	68	28	44	56	20	88	92	96	28	0	0	56	100	76	40	20	0
Rank (Bins)	3	1	1	3	2	3	1	2	2	3	1	2	2	1	3	3	3	1	1	1	2	3	3	2	1	1

Table 16: NC steelhead Restoration and Focus Prioritization Results

Diversity Strata	Northern California Steelhead Populations	Biological & Ecological			Integrity & Risk		Optimism & Potential				Total	Extant Summer Steelhead (+)	Priority #
		CAP Biological Viability (Weighted)	Number of Listed Species	High IP-km	CAP Watershed Characterization	CAP Threats	Public Lands	CCC Coho Focus Population	SONCC Core 1 Population	Monitoring (LCM) Priority			
Northern Coastal	Redwood Creek	4	3	3	2	1	3	0	1	1	18	+	A
	Maple Creek/Big Lagoon	6	2	1	1	2	1	0	0	0	13		B
	Little River	2	3	1	1	2	1	0	0	0	10		B
	Mad River	2	3	3	2	1	3	0	0	1	15	+	A
	Humboldt Bay Tributaries	4	3	2	1	1	2	0	1	1	15		A
	Lower Mainstem Eel River												C
	Howe Creek												C
	Guthrie Creek												C
	Oil Creek												C
	South Fork Eel River	6	3	3	2	1	3	0	1	1	20		A
	Bear River	6	3	2	1	1	1	0	0	0	14		B
	McNutt Gulch												C
	Mattole River	6	3	3	2	1	2	0	0	1	18	+	A
	Spanish Creek												C
	Big Creek												C
	Big Flat Creek												C
	Shipman Creek												C
	Telegraph Creek												C
	Jackass Creek												C
Lower Interior	Jewett Creek												C
	Chamise Creek	2	3	1	3	2	2	0	1	0	14		A
	Bell Springs Creek												C
	Woodman Creek	2	3	1	3	2	3	0	1	0	15		A
	Outlet Creek	2	3	2	1	2	1	0	1	1	13		B
	Garcia Creek												C
	Tomki Creek	2	3	1	2	2	2	0	1	0	13		B
	Soda Creek												C
	Bucknell Creek												C
North Mountain Interior	Van Duzen River	6	3	3	1	1	2	0	1	1	18	+	A
	Larabee Creek	4	3	1	1	2	1	0	1	0	13		B
	Dobbyn Creek												C
	North Fork Eel River	6	3	3	2	2	3	0	0	0	19		A
	Middle Fork Eel River	4	3	3	3	1	3	0	0	1	18	+	A
	Upper Mainstem Eel River	2	3	2	2	1	3	0	0	0	13		B

North Central Coastal	Usal Creek	6	2	1	2	2	1	1	0	0	15		B
	Cottaneva Creek												C
	Wages Creek	2	2	1	2	2	1	1	0	0	11		B
	Pudding Creek												C
	Ten Mile River	4	3	2	1	1	1	1	0	1	14		A
	Noyo River	4	3	2	2	3	2	1	0	1	18		A
	Caspar Creek	4	2	1	2	2	3	1	0	0	15		B
	Big River	2	3	2	1	3	3	1	0	0	15		A
	Albion River												C
Central Coastal	Navarro River	2	3	3	1	2	2	1	0	1	15		A
	Elk Creek												C
	Brush Creek												C
	Garcia River	4	3	2	2	1	1	1	0	1	15		A
	Schooner Gulch												C
	Gualala River	2	3	3	3	1	1	1	0	0	14		B

Central California Coast Steelhead Results

The following tables represent supporting data and information used to calculate final scores and restoration priority ranking (i.e., A, B, or C) for essential CCC steelhead populations.

Table 17: Numerical representation of the Biological Viability CAP current condition and threat of Hatcheries and Aquaculture parameter scores for CCC steelhead essential populations. A CAP current condition numerical score of Poor = 1, Fair = 2, Good = 3, Very Good = 4. A CAP threat numerical score of Very High = 1, High = 2, Medium = 3, Low or "-" = 4

Diversity Strata	North Coastal					Interior				Santa Cruz Mountains								Coastal San Francisco Bay					Interior San Francisco Bay					
Biological Viability	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek	Mark West Creek	Dry Creek	Maacama Creek	Upper Russian River	Pilarcitos Creek	San Gregorio Creek	Pescadero Creek	Waddell Creek	Scott Creek	San Lorenzo River	Soquel Creek	Aptos Creek	Corte Madera Creek	Novato Creek	Guadalupe River	Stevens Creek	San Francisquito Creek	Petaluma River	Sonoma Creek	Napa River	Green Valley/Suisun Creek	Alameda Creek	Coyote Creek
Adults Density	2	1	2	2	3	1	2	2	2	1	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	1	1	2
Summer Rearing Juveniles Density	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	3	1	1	1	1	1	1	1	2	2	1	1	1
Summer Rearing Juveniles Spatial Structure	3	3	3	2	3	3	1	3	2	2	3	4	2	4	4	3	3	2	2	1	1	3	3	2	2	3	1	1
Smolts Abundance	2	1	2	3	3	2	2	2	2	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1
Hatcheries and Aquaculture	4	4	4	4	4	4	4	4	4	4	4	4	4	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4
Total	13	11	13	14	15	12	11	13	12	10	12	13	12	12	12	13	11	9	9	8	8	10	10	11	12	10	8	9
Percentile Rank	78	37	78	96	100	52	37	78	52	22	52	78	52	52	52	78	37	11	11	0	0	22	22	37	52	22	0	11
Rank	3	2	3	3	3	2	2	3	2	1	2	3	2	2	2	3	2	1	1	1	1	1	1	2	2	1	1	1
Rank Weighted (Bins)	6	4	6	6	6	4	4	6	4	2	4	6	4	4	4	6	4	2	2	2	2	2	2	4	4	2	2	2

Table 18: Amount of high value historic intrinsic potentail (IP-km) parameter scores for CCC steelhead essential populations.

Diversity Strata	North Coastal					Interior				Santa Cruz Mountains								Coastal San Francisco Bay					Interior San Francisco Bay					
High Historic Intrinsic Potential for Spawning and Rearing	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek	Mark West Creek	Dry Creek	Maacama Creek	Upper Russian River	Pilarcitos Creek	San Gregorio Creek	Pescadero Creek	Waddell Creek	Scott Creek	San Lorenzo River	Soquel Creek	Aptos Creek	Corte Madera Creek	Novato Creek	Guadalupe River	Stevens Creek	San Francisquito Creek	Petaluma River	Sonoma Creek	Napa River	Green Valley/Suisun Creek	Alameda Creek	Coyote Creek
High Intrinsic Potential (IP-km)	62	0	6	12	12	36	34	24	227	4	10	21	5	8	58	28	13	1	0	14	8	2	4	27	54	4	42	41
Percentile Rank	96	4	30	44	48	78	74	63	100	19	41	59	26	33	93	70	52	7	0	56	37	11	22	67	89	15	85	81
Rank (Bins)	3	1	1	2	2	3	3	2	3	1	2	2	1	2	3	3	2	1	1	2	2	1	1	3	3	1	3	3

Table 19: Numerical representation of the Watershed Characterization CAP current condition parameter scores for CCC steelhead essential populations. A CAP current condition numerical score of Poor = 1, Fair = 2, Good = 3, Very Good = 4.

Diversity Strata	North Coastal					Interior				Santa Cruz Mountains								Coastal San Francisco Bay					Interior San Francisco Bay					
CAP Watershed Characterization	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek	Mark West Creek	Dry Creek	Maacama Creek	Upper Russian River	Pilarcitos Creek	San Gregorio Creek	Pescadero Creek	Waddell Creek	Scott Creek	San Lorenzo River	Soquel Creek	Aptos Creek	Corte Madera Creek	Novato Creek	Guadalupe River	Stevens Creek	San Francisquito Creek	Petaluma River	Sonoma Creek	Napa River	Green Valley/Suisun Creek	Alameda Creek	Coyote Creek
Impervious Surfaces	4	4	4	4	4	2	4	4	4	4	4	4	4	4	3	2	4	1	1	1	1	2	2	3	3	4	3	1
Agriculture	4	2	4	4	4	3	1	4	4	1	4	4	4	4	4	4	4	4	2	4	4	4	3	3	3	3	4	4
Timber Harvest	2	3	3	4	4	3	4	3	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	3	4	4	4	4
Urbanization	4	1	1	4	3	1	4	4	3	1	4	4	4	4	1	1	1	1	1	1	1	1	1	1	1	3	2	1
Riparian Species Composition	3	2	2	2	2	1	3	2	1	2	3	3	4	3	3	3	3	2	1	2	2	1	2	2	1	2	2	2
Road Density	3	1	2	4	2	1	3	4	2	3	2	2	3	4	1	1	1	1	1	1	1	1	1	1	1	3	2	1
Streamside Road Density (100 m)	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	21	14	17	23	20	12	20	22	21	16	22	22	24	23	17	16	18	14	11	14	14	14	14	14	14	20	18	14
Percentile Rank	74	7	48	93	63	4	63	81	74	41	81	81	100	93	48	41	56	7	0	7	7	7	7	7	7	63	56	7
Rank	3	1	2	3	2	1	2	3	3	2	3	3	3	3	2	2	2	1	1	1	1	1	1	1	1	2	2	1

Table 20: CAP Threat parameter scores for CCC steelhead essential populations. The total is the count of High and Very High threats for each population.

Diversity Strata	North Coastal					Interior				Santa Cruz Mountains								Coastal San Francisco Bay						Interior San Francisco Bay				
CAP Threats	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek	Mark West Creek	Dry Creek	Maacama Creek	Upper Russian River	Pilarcitos Creek	San Gregorio Creek	Pescadero Creek	Waddell Creek	Scott Creek	San Lorenzo River	Soquel Creek	Aptos Creek	Corte Madera Creek	Novato Creek	Guadalupe River	Stevens Creek	San Francisquito Creek	Petaluma River	Sonoma Creek	Napa River	Green Valley/Suisun Creek	Alameda Creek	Coyote Creek
Agriculture	M	H	M	H	M	H	H	H	H	VH	M	M	M	M	M	M	M	M	H	L	L	L	M	VH	VH	VH	M	L
Channel Modification	M	H	M	H	M	H	H	M	H	VH	M	H	M	M	H	M	H	VH	VH	VH	VH	VH	H	VH	VH	M	VH	VH
Disease, Predation and Competition	L	L	L	L	L	M	L	M	M	M	M	M	M	L	M	M	L	M	M	L	L	M	L	M	M	VH	M	M
Fire, Fuel Management and Fire Suppression	M	L	L	L	L	L	L	M	M	M	H	H	H	M	H	M	H	M	M	-	-	L	L	M	M	L	M	L
Fishing and Collecting	L	L	M	M	L	L	L	L	M	L	M	M	M	M	M	M	M	M	L	L	L	L	M	M	M	M	M	M
Livestock Farming and Ranching	L	M	M	H	M	L	L	M	M	M	L	M	L	L	M	L	L	M	M	L	L	L	H	M	M	H	VH	L
Logging and Wood Harvesting	H	M	M	L	M	M	L	M	M	-	L	M	L	L	M	L	L	-	-	-	-	-	-	L	M	L	-	-
Mining	M	M	L	L	L	L	L	L	M	M	-	L	-	-	M	M	-	M	M	H	M	-	L	L	M	L	H	VH
Recreational Areas and Activities	L	-	L	L	L	M	L	L	L	H	H	M	M	L	H	M	M	M	M	M	H	M	L	L	M	L	L	H
Residential and Commercial Development	M	H	H	L	H	H	M	M	H	VH	VH	H	L	M	VH	VH	H	VH	VH	VH	VH	H	H	H	H	M	VH	VH
Roads and Railroads	H	H	H	M	H	H	M	H	H	H	VH	H	H	H	VH	H	VH	VH	VH	VH	VH	H	H	H	H	M	H	VH
Severe Weather Patterns	L	H	M	M	M	M	M	M	M	VH	H	H	H	M	VH	H	H	VH	M	M	M	L	M	H	VH	M	H	M
Water Diversion and Impoundments	M	H	M	M	M	M	H	M	H	VH	VH	H	M	M	VH	H	H	M	VH	VH	VH	M	M	VH	VH	VH	VH	VH
Total	11	7	11	10	11	9	10	11	8	6	7	7	10	12	6	9	7	9	8	8	8	10	9	7	7	9	6	7

Percentile Rank	85	11	85	70	85	52	70	85	37	0	11	11	70	100	0	52	11	52	37	37	37	70	52	11	11	52	0	11
Rank	**3**	**1**	**3**	**3**	**3**	**2**	**3**	**3**	**2**	**1**	**1**	**1**	**3**	**3**	**1**	**2**	**1**	**2**	**2**	**2**	**2**	**3**	**2**	**1**	**1**	**2**	**1**	**1**

Table 21: Percentage of the watershed area that is in public lands for CCC steelhead essential populations.

Diversity Strata	North Coastal					Interior				Santa Cruz Mountains								Coastal San Francisco Bay						Interior San Francisco Bay				
Public Land (% of acres)	Austin Creek	Green Valley Creek	Salmon Creek	Walker Creek	Lagunitas Creek	Mark West Creek	Dry Creek	Maacama Creek	Upper Russian River	Pilarcitos Creek	San Gregorio Creek	Pescadero Creek	Waddell Creek	Scott Creek	San Lorenzo River	Soquel Creek	Aptos Creek	Corte Madera Creek	Novato Creek	Guadalupe River	Stevens Creek	San Francisquito Creek	Petaluma River	Sonoma Creek	Napa River	Green Valley/Suisun Creek	Alameda Creek	Coyote Creek
State	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	10	0	0	7	0	0	0	1	2	0	0	0	0
State, Fish & Game	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	1	4	1	0	0
State, Parks & Recreation	11	0	0	0	4	3	0	4	0	8	0	13	86	3	12	12	48	0	0	0	0	0	1	6	1	0	2	16
State (Forestry)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
State (University)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Federal, ACOE	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, BLM	5	0	0	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, NPS	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
Federal, USFS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal, BIA	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal (Military)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	1	0	1	0
Federal (USAF-Hamilton)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal (Fish and Wildlife)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	1	0	0	1
Federal (NASA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0
Federal (Other)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Local (Water District)	0	0	0	2	20	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0
Local (Open Space)	0	0	0	0	5	0	0	0	0	28	13	7	0	0	0	3	0	0	22	0	24	11	0	0	0	0	0	0
Local (City/ County Park/Parks & Rec.)	0	0	0	0	0	1	0	0	0	0	4	13	0	0	1	0	0	15	3	9	0	7	2	0	0	0	8	10
Not Coded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
Total (% of acres)	16	1	0	3	52	5	11	8	10	36	17	33	86	4	14	25	48	33	33	12	34	26	8	12	7	1	12	29
Percentile Rank	56	4	0	11	96	19	37	26	33	89	59	74	100	15	52	63	93	74	74	41	85	67	26	41	22	4	41	70
Rank	2	1	1	1	3	1	2	1	2	3	2	3	3	1	2	2	3	3	3	2	3	3	1	2	1	1	2	3

Table 22: CCC steelhead Restoration and Focus Prioritization Results

Diversity Strata	Central California Coast Steelhead Populations	Biological & Ecological			Integrity & Risk		Optimism & Potential			Total	Priority #
		CAP Biological Viability (Weighted)	Number of Listed Species	Amount of High IP-km	CAP Watershed Characterization	CAP Threats	Public Lands	CCC Coho Focus Population	Monitoring (LCM) Priority		
North Coastal	Austin Creek	6	2	3	3	3	2	1		20	A
	Porter Creek										C
	Green Valley Creek	4	2	1	1	1	1	1		11	B
	Hulbert Creek										C
	Dutch Bill Creek										C
	Freezeout Creek										C
	Sheephouse Creek										C
	Willow Creek										C
	Salmon Creek	6	2	1	2	3	1	1		16	B
	Estero Americano										C
	Walker Creek	6	2	2	3	3	1	1		18	A
	Drakes Bay										C
	Lagunitas Creek	6	2	2	2	3	3	1	1	20	A
	Pine Gulch										C
	Redwood Creek (Marin Co.)										C
Interior	Crocker Creek										C
	Gill Creek										C
	Miller Creek										C
	Sausal Creek										C
	Mark West Creek	4	3	3	1	2	1	1		15	B
	Dry Creek	4	3	3	2	3	2	1	1	19	A
	Maacama Creek	6	3	2	3	3	1	1		19	A
	Upper Russian River	4	3	3	3	2	2	0		17	B
Santa Cruz Mountains	Pilarcitos Creek	2	1	1	2	1	3	0		10	B
	Tunitas Creek										C
	San Gregorio Creek	4	2	2	3	1	2	1		15	B
	Pescadero Creek	6	2	2	3	1	3	1	1	19	A
	Gazos Creek										C
	Waddell Creek	4	2	1	3	3	3	1		17	A
	Scott Creek	4	2	2	3	3	1	1	1	17	A
	San Vicente Creek										C
	Laguna Creek										C
	San Lorenzo River	4	2	3	2	1	2	1		15	B
	Soquel Creek	6	2	3	2	2	2	1		18	A
	Aptos Creek	4	2	2	2	1	3	1		15	B

Coastal San Francisco Bay	Novato Creek	2	1	1	1	2	3	0		10	B
	Miller Creek										C
	Corte Madera Creek	2	1	1	1	2	3	0		10	B
	Arroyo Corte Madera del Presidio										C
	San Mateo										C
	Guadalupe River	2	1	2	1	2	2	0		10	B
	Stevens Creek	2	1	2	1	2	3	0	1	12	A
	San Francisquito Creek	2	1	1	1	3	3	0	1	12	A
Interior San Francisco Bay	Petaluma River	2	1	1	1	2	1	0		8	B
	Sonoma Creek	4	1	3	1	1	2	0	1	13	A
	Napa River	4	1	3	1	1	1	0	1	12	A
	Green Valley/Suisun Creek	2	1	1	2	2	1	0		9	B
	Pinole Creek										C
	San Pablo Creek										C
	Wildcat Creek										C
	Codornices Creek										C
	San Leandro Creek										C
	San Lorenzo Creek										C
	Alameda Creek	2	1	3	2	1	2	0		11	A
	Coyote Creek	2	1	3	1	1	3	0		11	B

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