

South-Central California Coast Steelhead DPS Recovery Action Tables Identification Key, Big Sur Coast BPG (Tables 11-4 to 11-10).

Recovery Action Number Key: XXXX – SCCCS – 1.2		XXXX ID Table		Threat Source Legend	
XXXX	Watershed	SJC	San Jose Creek	1	Agricultural Development
SCCCS	Species Identifier – South Central California Steelhead	Gar	Garrapata Creek	2	Agricultural Effluents
1	Threat Source	Bix	Bixby Creek	3	Culverts and Road Crossings (Passage Barriers)
2	Action Identity Number	LS	Little Sur River	4	Dams and Surface Water Diversions
Action Rank		BS	Big Sur River	5	Flood Control Maintenance
A	Action addresses the first listing factor regarding the destruction or curtailment of the species' habitat	WC	Willow Creek	6	Groundwater Extraction
B	Action addresses one of the other four listing factors	SC	Salmon Creek	7	Levees and Channelization
				8	Mining and Quarrying
				9	Non-Native Species
				10	Recreational Facilities
				11	Roads
				12	Upslope/Upstream Activities
				13	Urban Development
				14	Urban Effluents
				15	Wildfires

See Chapter 8, Table 8-1 for Detailed Description of Recovery Actions, Chapter 6, Section 6.4, for a discussion of Recovery Action Ranks, and Chapter 3, Section 3.0, for a description of Listing Factors. See Appendix E for a discussion of recovery action cost estimates.

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Table 11-4. South-Central California Steelhead DPS Recovery Action Table for the San Jose Creek Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)						
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100	
San Jose Creek													
SJC-SCCC S-1.1	Develop, adopt, and implement agricultural land-use planning policies and standards	NRCS, BLM, NMFS, CCON, MC, RCDMC, MPWMD, TWI, TBSLT, VWA, TU	Agricultural Development	1, 3, 4	2B	20	0	0	0	0	0	0	0
SJC-SCCC S-1.2	Develop and implement plan to minimize runoff from agricultural activities	NRCS, BLM, NMFS, MC, RCDMC, MPWMD, CCON, CDFW, TWI, TBSLT, VWA, TU	Agricultural Effluents	1, 3, 4	2B	100	0	0	0	0	0	0	0
SJC-SCCC S-3.1	Conduct watershed-wide fish passage barrier assessment (or review and update)	NMFS, CDFW, CCON, MPWMD, TWI, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2B	5	96690	0	0	0	0	0	96690
SJC-SCCC S-3.2	Develop and implement plan to remove or modify fish passage barriers within the watershed	NMFS, CDFW, CCON, MPWMD, TWI, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	0	0	0	0	0	0	0
SJC-SCCC S-4.1	Develop and implement water management plan for diversion operations	NMFS, CDFW, CCON, MPWMD, TWI, TBSLT, VWA	Dams and Surface Water Diversions	1, 3, 4	1A	5	91850	0	0	0	0	0	91850
SJC-SCCC S-4.2	Provide fish passage around dams and diversions	NMFS, CDFW, CCON, MPWMD, TWI, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	2A	5	0	0	0	0	0	0	0
SJC-SCCC S-6.1	Conduct groundwater extraction analysis and assessment (or review and update)	MC, MCWRA, MPWMD, NMFS, USGS, CDFW, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	1A	5	91850	0	0	0	0	0	91850
SJC-SCCC S-6.2	Develop and implement a groundwater monitoring and management program (or review and update)	MC, MCWRA, MPWMD, NMFS, USGS, CDFW, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	1A	10	254350	39775	0	0	0	0	294125

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
SJC-SCCC S-9.1	Develop and implement a watershed-wide plan to assess the impacts of non-native species and develop control measures	USFWS, USFS, NMFS, CDFW, CDPR, CNPS, TWI, TBSLT, VWA	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
SJC-SCCC S-9.2	Develop and implement non-native species monitoring program	USFWS, USFS, NMFS, CDFW, CDPR, CNPS, TWI, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
SJC-SCCC S-9.3	Develop and implement a public educational program on non-native species impacts	USFWS, USFS, NMFS, CDFW, CDPR, CNPS, TWI, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	20	76140	76140	76140	76140	0	304560
SJC-SCCC S-10.1	Review and modify development and management plans for recreational areas and national forest (e.g., Santa Lucia Preserve Management Plan)	CDPR, CDFW, NMFS, MC, CRA, MBNMS, MRPD, TWI, TBSLT, VWA	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0
SJC-SCCC S-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, NMFS, MC, CRA, MBNMS, MRPD, TWI, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560
SJC-SCCC S-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways	USDOT, CD, TBSLT, VWA OT, MC, MCPWD, NMFS, CDPR, CDFW, AMBAG TWI, TBSLT, VWA, TU	Roads	1, 4	1A	20	0	0	0	0	0	0
SJC-SCCC S-11.2	Retrofit storm drains to filter runoff from roadways	USDOT, CDOT, MC, MCPWD, NMFS, CDPR, CDFW, AMBAG TWI, TBSLT, VWA, TU	Roads	1, 4	1A	20	32260	32260	32260	32260	0	129040
SJC-SCCC S-11.3	Develop and implement a plan to remove or reduce approach-fill for railroad lines and	USDOT, CDOT, MC, MCPWD, NMFS, CDPR, CDFW, AMBAG TWI, TBSLT, VWA, TU	Roads	1, 4	1B	20	0	0	0	0	0	0

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)						
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100	
	roads												
SJC-SCCC S-12.1	Develop and implement an estuary restoration and management plan	USDOT, CDOT, MC, MCPWD, NMFS, C DPR, CDFW, AMBAG TW, TBSLT, VWA I, TU	Upslope/Upstream Activities	1, 4, 5	1A	5	670000	0	0	0	0	0	670000
SJC-SCCC S-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, COC, NMFS, CDFW, MCPWD,TWI, TBSLT, VWA	Upslope/Upstream Activities	1, 2, 3, 4, 5	2B	5	62400	0	0	0	0	0	62400
SJC-SCCC S-13.1	Develop and implement riparian restoration plan to replace artificial bank stabilization structures	CCCOM, MC, NMFS, CDFW, AMBAG, MCPWD, TWI, TBSLT, VWA, TU	Urban Development	1, 4, 5	2B	5	398000	0	0	0	0	0	398000
SJC-SCCC S-14.1	Review California Regional Water Quality Control Board Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, MCPWD, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0	0
SJC-SCCC S-14.2	Review, assess and modify if necessary all NPDES wastewater discharge permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, MCPWD, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	3B	20	0	0	0	0	0	0	0
SJC-SCCC S-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, MPWMD, MRPD, TBSLT, VWA, TU	Wildfires	1, 4, 5	2B	100	0	0	0	0	0	0	0

Table 11-5. South-Central California Steelhead DPS Recovery Action Table for the Garrapata Creek Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Garrapata Creek												
Gar-SCCC S-3.1	Conduct watershed-wide fish passage barrier assessment (or periodically update Garrapata Creek Watershed Assessment and Restoration Plan, 2006)	NMFS, CDFW, CCON, MC, TWI, GCWC, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	96690	0	0	0	0	96690
Gar-SCCC S-3.2	Develop and implement plan to remove or modify fish passage barriers within the watershed (e.g., Garrapata Creek Watershed Barrier Assessment, 2005)	NMFS, CDFW, CCON, MC, TWI, GCWC, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	0	0	0	0	0	0
Gar-SCCC S-4.1	Develop and implement water management plan for diversion operations	NMFS, USFS, CDFW, CCON, MC, GCWC, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	1A	5	0	0	0	0	0	0
Gar-SCCC S-4.2	Provide fish passage around any future dams and diversions	NMFS, USFS, CDFW, CCON, MC, GCWC, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	1A	5	0	0	0	0	0	0
Gar-SCCC S-6.1	Conduct groundwater extraction analysis and assessment (or review and update)	NMFS, USGS, CDFW, CCON, MC, GCWC, TBSLT, VWA	Groundwater Extraction	1, 4	1A	5	91850	0	0	0	0	91850
Gar-SCCC S-6.2	Develop and implement a groundwater monitoring and management program (or review and update)	NMFS, USGS, CDFW, CCON, MC, GCWC, TU	Groundwater Extraction	1, 4	1A	10	254350	39775	0	0	0	294125
Gar-SCCC S-9.1	Develop and implement a non-native species monitoring program	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, GCWC, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
Gar-SCCC S-9.2	Develop and implement a watershed-wide plan to assess the impacts of non-native species and develop control measures	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, GCWC, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
	(or periodically review and update Garrapata Creek Watershed Assessment and Restoration Plan, 2006)											
Gar-SCCC S-9.3	Develop and implement a public educational program on non-native species impacts	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, GCWC, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	20	76140	76140	76140	76140	0	304560
Gar-SCCC S-10.1	Review and modify development and management plans for recreational areas and national forests (e.g., U.S. Forest Service Los Padres National Forest Land Management Plan)	CDPR, CDFW, WCB, NMFS, USFS, USFWS, MC, GCWC, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0
Gar-SCCC S-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, WCB, NMFS, USFS, USFWS, MC, GCWC, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560
Gar-SCCC S-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways (or periodically review and update Garrapata Creek Watershed Assessment and Restoration Plan, 2006)	USDOT, NMFS, CDOT, MC, CDPR, CDFW, AMBAG TWI, GCWC, TBSLT, VWA, TU	Roads	1, 4	2B	20	0	0	0	0	0	0
Gar-SCCC S-12.1	Develop and implement an estuary restoration and management plan (or periodically update (e.g., Garrapata Creek Lagoon, Central Coast, California: A Preliminary Assessment, 2006)	USDOT, CDOT, MC, NMFS, CDPR, CDFW, AMBAG TWI, GCWC, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	1A	100		0	0	0	0	0
Gar-SCCC S-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, NMFS, CDFW, TWI, GCWC, TBSLT, VWA, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	2B	5	62400	0	0	0	0	62400

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Gar-SCCC S-14.1	Review California Regional Water Quality Control Boards Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, GCWC, TBSLT, VWA, TU	Urban Effluents	1, 4, 5	2B	20	0	0	0	0	0	0
Gar-SCCC S-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, GCWC, TBSLT, VWA, TU	Wildfires	1, 4, 5	1B	100	0	0	0	0	0	0

Table 11-6. South-Central California Steelhead DPS Recovery Action Table for the Bixby Creek Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Bixby Creek												
Bix-SCCCS-3.1	Conduct a watershed-wide fish passage barrier assessment	NMFS, CDFW, CCON , MC, TWI, CCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2A	5	96690	0	0	0	0	96690
Bix-SCCCS-3.2	Develop and implement a plan to remove or modify fish passage barriers within the watershed	NMFS, USF, CDFW, CCON, MC, TWI, CCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2A	5	0	0	0	0	0	0
Bix-SCCCS-4.2	Provide fish passage around dams and diversions	NMFS, USF, CDFW, CCON, MC, TWI, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	1A	5	0	0	0	0	0	0
Bix-SCCCS-6.1	Conduct groundwater extraction analysis and assessment (or review and update)	NMFS, USGS, CDFW, CCON, MC, TWI, TU	Groundwater Extraction	1, 4	3B	5	91850	0	0	0	0	91850
Bix-SCCCS-6.2	Develop and implement a groundwater monitoring and management program (or review and update)	NMFS, USGS, CDFW, CCON, CCORP, MC, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	3B	10	254350	39775	0	0	0	294125
Bix-SCCCS-9.1	Develop and implement a non-native species monitoring program	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
Bix-SCCCS-9.2	Develop and implement a watershed-wide plan to assess the impacts of non-native species and develop control measures	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, CCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
Bix-SCCCS-9.3	Develop and implement a public educational program on non-native species impacts	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, TU	Non-Native Species	1, 3, 5	3B	20	76140	76140	76140	76140	0	304560

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Bix-SCCCS-10.1	Review and modify development and management plans for recreational areas and national forests (e.g., U.S. Forest Service Los Padres National Forest Land Management Plan)	CDPR, CDFW, WCB, NMFS, USFS, USFWS, MC, TWI, CCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0
Bix-SCCCS-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, WCB, NMFS, USFS, USFWS, MC, TWI, CCORP, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560
Bix-SCCCS-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways	USDOT, NMFS, CDOT, MC, CDPR, CDFW, AMBAG TWI, CCORP, TBSLT, VWA, TU	Roads	1, 4	2A	20	0	0	0	0	0	0
Bix-SCCCS-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, NMFS, CDFW, CCORP, TWI	Upslope/Upstream Activities	1, 2, 3, 4, 5	2B	5	62400	0	0	0	0	62400
Bix-SCCCS-14.2	Review California Regional Water Quality Control Boards Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0
Bix-SCCCS-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, TBSLT, VWA	Wildfires	1, 4, 5	1B	100	0	0	0	0	0	0

Table 11-7. South-Central California Steelhead DPS Recovery Action Table for the Little Sur River Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-26	FY 1-100
Little Sur River												
LS-SCCCS-1.1	Manage livestock grazing to maintain or restore aquatic habitat functions	NRCS, BLM, NMFS, CCON, MC, RCDMC, TWI, TBSLT, VWA, TU	Agricultural Development	1, 4	2B	5	47520	0	0	0	0	47520
LS-SCCCS-3.1	Conduct a watershed-wide fish passage barrier assessment	NMFS, CDFW, CCCON, MC, TWI, CCCORP, TBSLT, VWA	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	96690	0	0	0	0	96690
LS-SCCCS-3.2	Develop and implement a plan to remove or modify fish passage barriers within the watershed	NMFS, CDFW, CCCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	0	0	0	0	0	0
LS-SCCCS-4.1	Develop and implement water management plan for diversion operations	NMFS, USFS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	2A	5	91850	0	0	0	0	91850
LS-SCCCS-4.2	Develop and implement water management plan for dam operations	NMFS, USFS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	1A	5	91850	0	0	0	0	91850
LS-SCCCS-4.3	Provide fish passage around dams and diversions	NMFS, USFS, CDFW, CCCORP, TBSLT, VWA, CCCON, MC, TWI, TU	Dams and Surface Water Diversions	1, 3, 4	1A	5	0	0	0	0	0	0
LS-SCCCS-6.1	Conduct groundwater extraction analysis and assessment (or review and update)	NMFS, USGS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	3B	5	91850	0	0	0	0	91850
LS-SCCCS-6.2	Develop and implement a groundwater monitoring and management program (or review and update)	NMFS, USGS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	3B	10	254350	39775	0	0	0	294125

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-26	FY 1-100
LS-SCCCS-9.1	Develop and implement a non-native species monitoring program	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
LS-SCCCS-9.2	Develop and implement a watershed-wide plan to assess the impacts of non-native species and develop control measures	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
LS-SCCCS-9.3	Develop and implement a public educational program on non-native species impacts	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	20	76140	76140	76140	76140	0	304560
LS-SCCCS-10.1	Review and modify development and management plans for recreational areas and national forests (e.g., U.S. Forest Service Los Padres National Forest Land Management Plan)	CDPR, CDFW, WCB, NMFS, USFW, MC, TWI, CCCORP, TWI, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0
LS-SCCCS-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, WCB, NMFS, USFS, USFWS, MC, TWI, CCCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560
LS-SCCCS-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Roads	1, 4	3B	20	0	0	0	0	0	0
LA-SCCCS 11.2	Retrofit storm drains to filter runoff from roadways (e.g., Old Coast Highway)	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA	Roads	1, 4	1B	20	0	00	0	0	0	0
LS-SCCCS-12.1	Develop and implement an estuary management plan (or periodically update)	USDOT, CDOT, MC, NMFS, USFS, CDFW, AMBAG, TWI, CCCORP,	Upslope/Upstream Activities	1, 2, 3, 4, 5	1A	5	0	0	0	0	0	0

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-26	FY 1-100
		TBSLT, VWA, TU										
LS-SCCCS-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, NMFS, CDFW, CCCORP, TWI, TBSLT, VWA, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	1A	5	62400	0	0	0	0	62400
LS-SCCCS-13.1	Develop and implement riparian restoration plan to replace artificial bank stabilization structures	CCCON, MC, NMFS, CDFW, AMBAG, TWI, CCCORP, TU	Urban Development	1, 4, 5	2B	5	398000	0	0	0	0	398000
LS-SCCCS-14.1	Review, assess and modify if necessary all NPDES wastewater discharge permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0
LS-SCCCS-14.2	Review California Regional Water Quality Control Board Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	3B	20	0	0	0	0	0	0
LS-SCCCS-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, TBSLT, VWA, TU	Wildfires	1, 4, 5	1B	100	0	0	0	0	0	0

Table 11-8. South-Central California Steelhead DPS Recovery Action Table for the Big Sur River Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Big Sur River												
BS-SCCC S-1.1	Manage livestock grazing to maintain or restore aquatic habitat functions	NRCS, BLM, NMFS, CCON, MC, RCDMC, TWI, TBSLT, VWA, TU	Agricultural Development	1, 3, 4	3B	5	47520	0	0	0	0	47520
BS-SCCC S-3.1	Conduct a watershed-wide fish passage barrier assessment	CDOT, NMFS, CDFW, CCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2A	5	96690	0	0	0	0	96690
BS-SCCC S-3.2	Develop and implement plan to remove or modify fish passage barriers within the watershed	CDOT, NMFS, CDFW, CCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2A	5	0	0	0	0	0	0
BS-SCCC S-4.1	Develop and implement water management plan for diversion operations	NMFS, USFS, CDFW, CCON, MC, TWI, TBSLT, VWA	Dams and Surface Water Diversions	1, 3, 4	1A	5	91850	0	0	0	0	91850
BS-SCCC S-4.2	Provide fish passage around dams and diversions	NMFS, USFS, CDFW, CCON, MC, TWI, TBSLT, VWA, TU	Dams and Surface Water Diversions	1, 3, 4	2A	5	0	0	0	0	0	0
BS-SCCC S-6.1	Conduct groundwater extraction analysis and assessment (or review and update)	NMFS, USGS, CDFW, CCON, MC, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	1A	5	91850	0	0	0	0	91850
BS-SCCC S-6.2	Develop and implement a groundwater monitoring and management program (or review and update)	NMFS, USGS, CDFW, CCON, MC, TWI, TBSLT, VW, TUA	Groundwater Extraction	1, 4	1A	10	254350	39775	0	0	0	294125
BS-SCCC S-9.1	Develop and implement a non-native species monitoring program	USFWS, USFS, NMFS, CDFW, CNPS, CDP, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
BS-SCCC S-9.2	Develop and implement a watershed-wide plan to assess the impacts of non-native species and develop control measures	USFWS, USFS, NMFS, CDFW, CNPS, CDP, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
BS-SCCC S-9.3	Develop and implement a public educational program on non-native species impacts	USFWS, USFS, NMFS, CDFW, CNPS, CDP, MC, TWI, CCCORP,	Non-Native Species	1, 3, 5	3B	20	76140	76140	76140	76140	0	304560

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)						
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100	
		TBSLT, VWA, TU											
BS-SCCC S-10.1	Review and modify development and management plans for recreational areas and national forests (e.g., Pfeiffer Big Sur and Andrew Molera State Park General Plan, U.S. Forest Service Los Padres National Forest Land Management Plan)	CDPR, CDFW, CCCON, WCB, NMFS, USFS, USFWS, MC, TWI, CCCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0	0
BS-SCCC S-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, CCCON, WCB, NMFS, USFS, USFWS, MC, TWI, CCCORP, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560	
BS-SCCC S-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Roads	1,4	2B	20	0	0	0	0	0	0	0
BS-SCCC S-11.2	Develop and implement plan to remove or reduce approach-fill road and roads	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Roads	1,4	3B	20	0	0	0	0	0	0	0
BS-SCCC S-12.1	Develop and implement an estuary restoration and management plan	CDOT, MC, NMFS, USFS, CDFW, AMBAG, TWI, CCCORP, TBSLT, VWA, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	1A	5	1340000	0	0	0	0	0	1340000
BS-SCCC S-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, NMFS, USFS, CDFW, CCCORP, TWI, TBSLT, VWA, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	2B	5	62400	0	0	0	0	0	62400
BS-SCCC S-14.1	Review, assess and modify residential and commercial wastewater septic treatment facilities	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TW, TBSLT, VWA, TUI	Urban Effluents	1, 4, 5	2B	100	0	0	0	0	0	0	0
BS-SCCC S-14.2	Review, assess and modify if necessary all NPDES wastewater discharge permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0	0

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
BS-SCCC S-14.3	Review California Regional Water Quality Control Board Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0
BS-SCCC S-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, TBSLT, VWA, TU	Wildfires	1, 4, 5	1B	100	0	0	0	0	0	0

Table 11-9. South-Central California Steelhead DPS Recovery Action Table for the Willow Creek Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Willow Creek												
WC-SCCCS-3.1	Conduct a watershed-wide fish passage barrier assessment	CDOT, NMFS, CDFW, CCCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2A	5	96690	0	0	0	0	96690
WC-SCCCS-3.2	Develop and implement plan to remove or modify fish passage barriers within the watershed	CDOT, NMFS, CDFW, CCCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	2A	5	0	0	0	0	0	0
WC-SCCCS-4.1	Develop and implement water management plan for diversion operations	NMFS, USFS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Dams and Surface Water Diversions			5	91850	0	0	0	0	91850
WC-SCCCS-6.1	Conduct groundwater extraction analysis and assessment (or review and update)	NMFS, USGS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	3B	5	91850	0	0	0	0	91850
WC-SCCCS-6.2	Develop and implement a groundwater monitoring and management program (or review and update)	NMFS, USGS, CDFW, CCCON, MC, TWI, TBSLT, VWA, TU	Groundwater Extraction	1, 4	3B	10	254350	39775	0	0	0	294125
WC-SCCCS-9.1	Develop and implement a non-native species monitoring program	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TBSLT, VWA C, TWI, CCCORP, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
WC-SCCCS-9.2	Develop and implement a watershed-wide plan to assess the impacts of non-native species and develop control measures	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	100	0	0	0	0	0	0
WC-SCCCS-9.3	Develop and implement a public educational program on non-native species impacts	USFWS, USFS, NMFS, CDFW, CNPS, CDPR, MC, TWI, CCCORP, TBSLT, VWA, TU	Non-Native Species	1, 3, 5	3B	20	76140	76140	76140	76140	0	304560
WC-SCCCS-10.1	Review and modify development and management plans for recreational areas and national forests (e.g., U.S. Forest Service Los Padres National Forest Land Management Plan)	CDPR, CDFW, CCCON, WCB, NMFS, USFS, USFWS, MC, TWI, CCCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
WC-SCCCS-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, CCCON, WCB, NMFS, USFW, MC, TWI, CCCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560
WC-SCCCS-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Roads	1, 4	2B	20	0	0	0	0	0	0
WC-SCCCS-11.2	Develop and implement a plan to remove or reduce approach-fill for railroad lines and roads	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA	Roads	1, 4	3B	20	0	0	0	0	0	0
WC-SCCCS-12.1	Develop and implement an estuary restoration and management plan	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	1A	5	335000	0	0	0	0	335000
WC-SCCCS-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, NMFS, USFS, CDFW, CCCORP, TWI, TBSLT, VWA, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	2B	5	62400	0	0	0	0	62400
WC-SCCCS-14.2	Review California Regional Water Quality Control Board Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0
WC-SCCCS-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, TBSLT, VWA, TU	Wildfires	1, 4, 5	1B	100	0	0	0	0	0	0

Table 11-10. South-Central California Steelhead DPS Recovery Action Table for the Salmon Creek Watershed (Big Sur Coast BPG).

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
Salmon Creek												
SC-SCCCS-3.1	Conduct a watershed-wide fish passage barrier assessment	CDOT, NMFS, CDFW, CCCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	96690	0	0	0	0	96690
SC-SCCCS-3.2	Develop and implement plan to remove or modify fish passage barriers within the watershed	CDOT, NMFS, CDFW, CCCON, MC, TWI, CCCORP, TBSLT, VWA, TU	Culverts and Road Crossings (Passage Barriers)	1, 3, 4	1A	5	0	0	0	0	0	0
SC-SCCCS-10.1	Review and modify development and management plans for recreational areas and national forests (e.g., U.S. Forest Service Los Padres National Forest Land Management Plan)	CDPR, CDFW, CCCON, WCB, NMFS, USFS, USFWS, MC, TWI, CCCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	0	0	0	0	0	0
SC-SCCCS-10.2	Develop and implement a public educational program on watershed processes	CDPR, CDFW, CCCON, WCB, NMFS, UFS, USFWS, MC, TWI, CCCORP, TBSLT, VWA, TU	Recreational Facilities	1, 2, 3, 4, 5	2B	20	76140	76140	76140	76140	0	304560
SC-SCCCS-11.1	Manage roadways and adjacent riparian corridor and restore abandoned roadways	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA	Roads	1, 4	2B	20	0	0	0	0	0	0
SC-SCCCS-11.2	Develop and implement plan to remove or reduce approach-fill for railroad lines and roads	CDOT, MC, CDPR, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Roads	1, 4	2B	20	0	0	0	0	0	0
SC-SCCCS-12.2	Review and modify applicable County and/or City Local Coastal Plans	CCCOM, MC, NMFS, USFS, CDFW, CCCORP, TWI, TBSLT, VWA, TU	Upslope/Upstream Activities	1, 2, 3, 4, 5	2B	5	62400	0	0	0	0	62400
SC-SCCCS-14.2	Review California Regional Water Quality Control Board Watershed Plans and modify applicable Stormwater Permits	RWQCD, SWRCB, MC, NMFS, CDFW, AMBAG, TWI, TBSLT, VWA, TU	Urban Effluents	1, 4	2B	20	0	0	0	0	0	0

Action #	Recovery Action Description	Potential Collaborators	Threat Source	Listing Factors (1 - 5)	Action Rank (1A, 1B, 2A, 2B, 3A, 3B)	Task Duration	Fiscal Year Costs (\$K)					
							FY 1-5	FY 6-10	FY 11-15	FY 16-20	FY 21-25	FY 1-100
SC-SCCCS-15.1	Develop and implement an integrated wildland fire and hazardous fuels management plan	CDF&FP, USFS, USFWS, MC, NMFS, CDFW, TBSLT, VWA, TU	Wildfires	1, 4, 5	1B	100	0	0	0	0	0	0