

Table B are also included in Table A; there are no features subject to Section 10 jurisdiction that are not also subject to CWA Section 404 jurisdiction. Table C quantifies all mapped features that are determined by LSA to either not meet Corps jurisdictional criteria, or to be exempt from CWA regulation.

## PROJECT IMPACTS

Activities proposed to be authorized under this RGP are described below. Also provided are estimates of the total impacts from each activity over the course of the RGP’s 5-year term of authorization. Estimates are provided for each Plan Participant as applicable, based on the following: (1) LSA’s historical analysis of permitted work within the RGP Plan Area, (2) the number of facilities maintained/operated by each Plan Participant, and (3) anticipated operation and maintenance tasks provided to LSA by Plan Participants during the course of the RGP development process.

### A. Bank Protection and Stabilization

This activity will consist of bank stabilization activities conducted within stream channels and ditches as needed for erosion prevention, including: replacement of existing bank protection on bank slopes and repair or replacement of existing artificial channel linings. Work will include the placement of riprap and/or the use of bio-engineering techniques along channel banks and temporary structures and fills necessary to construct the bank stabilization. The bank protection and stabilization activities will not cumulatively exceed Five Year Limits by feature type per jurisdiction, as listed below in Tables A1 through A3.

**Table A1: Five Year Limits<sup>1</sup> – Bank Protection & Stabilization, *Unmodified (Natural) Streams***

	Total Existing Unmodified Streams (linear feet)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 500 cy, 500 lf)		
			Acres	Cubic Yards	Linear Feet
City of Fairfield	62,900	20	0.60	10,000	10,000
City of Vacaville	105,000	35	1.05	17,500	17,500
City of Vallejo	21,400	10	0.30	5,000	5,000
City of Rio Vista	8,200	5	0.15	2,500	2,500
Solano County Water Agency	25,100	10	0.30	5,000	5,000
Vallejo Sanitation & Flood Control District	12,500	5	0.15	2,500	2,500
<b>Totals</b>	<b>235,100 lf</b>	<b>85 projects</b>	<b>2.55 ac</b>	<b>42,500 cy</b>	<b>42,500 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table A2: Five Year Limits<sup>1</sup> – Bank Protection & Stabilization, *Channelized Streams***

	Total Existing Channelized Streams (linear feet)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 500 cy, 500 lf)		
			Acres	Cubic Yards	Linear Feet
City of Fairfield	51,000	25	0.75	12,500	12,500
City of Suisun City	17,400	10	0.30	5,000	5,000
City of Vacaville	69,100	35	1.05	17,500	17,500
City of Rio Vista	14,400	10	0.30	5,000	5,000
Solano County Water Agency	285,400	50	1.50	25,000	25,000
Vallejo Sanitation & Flood Control District	32,500	15	0.45	7,500	7,500
<b>Totals</b>	<b>469,800 lf</b>	<b>145 projects</b>	<b>4.35 ac</b>	<b>72,500 cy</b>	<b>72,500 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table A3: Five Year Limits<sup>1</sup> – Bank Protection & Stabilization, *Jurisdictional Ditches***

	Total Existing Ditches (linear feet)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 500 cy, 500 lf)		
			Acres	Cubic Yards	Linear Feet
City of Fairfield	65,700	30	0.90	15,000	15,000
City of Suisun City	20,900	10	0.30	5,000	5,000
City of Vacaville	230,800	60	1.80	30,000	30,000
City of Dixon	12,500	5	0.15	2,500	2,500
City of Rio Vista	9,000	5	0.15	2,500	2,500
Vallejo Sanitation & Flood Control District	10,600	5	0.15	2,500	2,500
Dixon Regional Watershed JPA	33,800	15	0.45	7,500	7,500
<b>Totals</b>	<b>383,300 lf</b>	<b>130 projects</b>	<b>3.90 ac</b>	<b>65,000 cy</b>	<b>65,000 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**B. Silt, Sediment and Flow Obstruction Removal**

This activity will consist of sediment removal from culverts, ditches, streams, flood control channels, basins, and reservoirs as needed to maintain proper drainage, water management and water storage functions. Work will include removal of appurtenant leaf litter, thatch, and debris, including beaver

dams, to eliminate flow obstructions. The silt and sediment removal activities will not cumulatively exceed the Five Year Limits by feature type per jurisdiction, as listed below in Tables B1 through B4.

**Table B1: Five Year Limits<sup>1</sup> – Sediment Removal, *Unmodified (Natural) Streams***

	Total Existing Unmodified Streams (linear feet)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 25 cy)		
			Acres	Cubic Yards	Linear Feet
City of Fairfield	62,900	15	0.3	375	3,000
City of Vacaville	105,000	20	0.4	500	4,000
City of Vallejo	21,400	5	0.1	125	1,000
City of Rio Vista	8,200	5	0.1	125	1,000
Solano County Water Agency	25,100	5	0.1	125	1,000
Vallejo Sanitation & Flood Control District	12,500	5	0.1	125	1,000
<b>Totals</b>	<b>235,100 lf</b>	<b>55 projects</b>	<b>1.1 ac</b>	<b>1,375 cy</b>	<b>11,000 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table B2: Five Year Limits<sup>1</sup> – Sediment Removal, *Channelized Streams***

	Total Existing Channelized Streams (linear feet)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 25 cy)		
			Acres	Cubic Yards	Linear Feet
City of Fairfield	51,000	20	0.4	500	4,000
City of Suisun City	17,400	5	0.1	125	1,000
City of Vacaville	69,100	25	0.5	625	5,000
City of Rio Vista	14,400	5	0.1	125	1,000
Solano County Water Agency	285,400	70	1.4	1,750	14,000
Vallejo Sanitation & Flood Control District	32,500	10	0.2	250	2,000
<b>Totals</b>	<b>469,800 lf</b>	<b>135 projects</b>	<b>2.7 ac</b>	<b>3,375 cy</b>	<b>27,000 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table B3: Five Year Limits<sup>1</sup> – Sediment Removal, *Jurisdictional Ditches***

	Total Existing Ditches (linear feet)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 25 cy)		
			Acres	Cubic Yards	Linear Feet
City of Fairfield	65,700	25	0.5	625	5,000
City of Suisun City	20,900	10	0.2	250	2,000
City of Vacaville	230,800	60	1.2	1,500	12,000
City of Dixon	12,500	5	0.1	125	1,000
City of Rio Vista	9,000	5	0.1	125	1,000
Vallejo Sanitation & Flood Control District	10,600	5	0.1	125	1,000
Dixon Regional Watershed JPA	33,800	15	0.3	375	3,000
<b>Totals</b>	<b>383,300 lf</b>	<b>125 projects</b>	<b>2.5 ac</b>	<b>3,125 cy</b>	<b>25,000 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table B4: Five Year Limits<sup>1</sup> – Sediment Removal, *Retention/Detention Basins***

	Total Existing Detention Basin Area (acres)	Expected No. of Projects	Five Year Activity Limits (Per Project Limit: 25 cy)	
			Acres	Cubic Yards
City of Fairfield	130.0	25	0.5	625
City of Vacaville	126.8	25	0.5	625
City of Vallejo	2.7	5	0.1	125
City of Dixon	182.4	35	0.7	875
City of Rio Vista	18.0	5	0.1	125
Vallejo Sanitation & Flood Control District	80.4	15	0.3	375
<b>Totals</b>	<b>540.3 ac</b>	<b>110 projects</b>	<b>2.2 ac</b>	<b>2,750 cy</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

### C. Maintenance Activities

This activity will consist of general maintenance activities involving existing structures or facilities, including: replacement, maintenance, or repairs of existing outfalls and intake structures, culverts, bridges, dams, undercrossings, and other appurtenant in-water facilities in order to maintain design functions and capacities. Associated work will include sediment and vegetation removal for maintaining flow capacity, construction site dewatering, and excavation and backfilling of banks as needed for repair or replacement work. Other associated work will include replacement, maintenance, or repair of utility lines<sup>1</sup> owned or managed by Plan Participants, (including associated excavation, backfill, or bedding for the utility lines) provided that there will be no change in pre-construction contours and no seasonal wetlands or vernal pools will be permanently impacted. The general maintenance activities will not cumulatively exceed the Five Year Limits by feature type per jurisdiction, as listed below in Tables C1 through C4.

**Table C1: Five Year Limits<sup>1</sup> – Structure Maintenance, Repair, and Replacement Activities, Unmodified (Natural) Streams**

	Total Existing Unmodified Streams (linear feet)	Expected No. of Projects	Five Year Activity Limits	
			Acres	Linear Feet
City of Fairfield	62,900	25	1.15	4,750
City of Vacaville	105,000	20	1.10	4,500
City of Vallejo	21,400	5	0.50	2,000
City of Rio Vista	8,200	10	0.55	2,250
Solano County Water Agency	25,100	10	1.00	4,000
Vallejo Sanitation & Flood Control District	12,500	10	0.55	2,250
Fairfield-Suisun Sewer District	—	1	0.01	50
<b>Totals</b>	<b>235,100 lf</b>	<b>81 projects</b>	<b>4.86 ac</b>	<b>19,800 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

<sup>1</sup> A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area.

**Table C2: Five Year Limits<sup>1</sup> – Structure Maintenance, Repair, and Replacement Activities, Channelized Streams**

	Total Existing Channelized Streams (linear feet)	Expected No. of Projects	Five Year Activity Limits	
			Acres	Linear Feet
City of Fairfield	51,000	30	1.20	5,000
City of Suisun City	17,400	15	0.60	2,500
City of Vacaville	69,100	20	1.10	4,500
City of Rio Vista	14,400	10	0.55	2,250
Solano County Water Agency	285,400	15	1.50	6,000
Vallejo Sanitation & Flood Control District	32,500	20	1.55	6,250
<b>Totals</b>	<b>469,800 lf</b>	<b>110 projects</b>	<b>6.50 ac</b>	<b>26,500 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table C3: Five Year Limits<sup>1</sup> – Structure Maintenance, Repair, and Replacement Activities, Jurisdictional Ditches**

	Total Existing Ditches (linear feet)	Expected No. of Projects	Five Year Activity Limits	
			Acres	Linear Feet
City of Fairfield	65,700	25	0.65	4,750
City of Suisun City	20,900	15	0.35	2,500
City of Vacaville	230,800	20	0.60	4,500
City of Dixon	12,500	10	0.30	2,250
City of Rio Vista	9,000	10	0.30	2,250
Vallejo Sanitation & Flood Control District	10,600	10	0.30	2,250
Dixon Regional Watershed JPA	33,800	15	0.55	4,250
<b>Totals</b>	<b>383,300 lf</b>	<b>105 projects</b>	<b>3.05 ac</b>	<b>22,750 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

**Table C4: Five Year Limits<sup>1</sup> - Utility Line Maintenance, Repair, and Replacement, Wetlands and Other Waters of the U.S.**

	Total Mapped Utility Lines <sup>2</sup> (linear feet)	Expected No. of Projects	Five Year Activity Limits	
			Acres	Linear Feet
City of Fairfield	778,720	5	0.25	1,000
City of Vacaville	45,800	5	0.25	1,000
City of Vallejo	177,700	5	0.25	1,000
City of Dixon	40,600	5	0.25	1,000
Vallejo Sanitation & Flood Control District	83,500	5	0.25	1,000
Fairfield-Suisun Sewer District	196,060	5	0.25	1,000
<b>Totals</b>	<b>1,322,380 lf</b>	<b>30 projects</b>	<b>1.50 ac</b>	<b>6,000 lf</b>

<sup>1</sup> The activity limits for the facilities within each jurisdiction include impacts to wetlands (temporary only) and other waters of the U.S.

<sup>2</sup> Underground utility lines maintained by Solano HCP Plan Participants were not mapped extensively. Therefore, total lengths are greater than amounts shown here.

## **PROPOSED RESTORATION, PRESERVATION, AND ENHANCEMENT**

All proposed projects authorized under this RGP will be required to implement all applicable habitat restoration, preservation, and/or enhancement requirements included in Attachment C. A Restoration and Enhancement Plan shall be prepared for restoration or enhancement activities, as described in Section 7.3.2.1 of the Solano HCP. The performance criteria referenced in the Plan shall be consistent with applicable performance criteria contained in Section 7.4 of the HCP. In general, acceptable Restoration and Enhancement Plans for projects covered under this RGP will be required to comply with the following guidelines:

1. All temporarily-disturbed habitats shall be restored to original conditions at a minimum 1:1 ratio or as specified in Tables A through D of RGP Attachment C. Additional woody vegetation replacement or habitat preservation requirements may apply for temporary impacts, as detailed in Tables A through D.
2. For permanent impacts to riparian and stream habitat, additional restoration/enhancement shall occur onsite or within the affected watershed in similar soil types or in soil types typically associated with the applicable natural community.
3. The size, shape, and depth of the target community/vegetation shall be of similar size, shape, and relative density as natural communities on similar soil types.
4. Plans shall describe, as applicable, site grading, erosion control, channel stabilization, preservation methods, fishery enhancement, exotic species removal, and revegetation. Any revegetation program shall use plants indigenous to the watershed.