

# Seventh Annual Status Report on U.S. Army Corps of Engineers Construction Projects Requiring Mitigation Under Section 906 of the Water Resources Development Act of 1986

as required by section 2036(b)  
Water Resources Development Act of 2007, as amended

February 2015



US Army Corps of Engineers  
BUILDING STRONG.

## INTRODUCTION

This Seventh Annual Status Report on U.S. Army Corps of Engineers Construction Projects Requiring Mitigation was prepared in response to Section 2036(b) of the Water Resources Development Act (WRDA) of 2007, as amended. Data for this report are presented in three tables and the FY 2016 Civil Works Budget press book.

TABLE 1. – USACE Projects under Construction during Fiscal Year (FY) 2014 - Table 1 lists 275 projects and/or programs that were allotted funds in FY 2014 in the Construction Account or Mississippi River and Tributaries Construction Account. Programs such as the various environmental infrastructure authorities are represented by one line item.

TABLE 2. - Status of Projects with Incomplete Compensatory Mitigation - Table 2 outlines the status of the 76 projects with incomplete compensatory mitigation. Most of the 275 projects from Table 1 are not listed in Table 2 because physical construction may not have started, the project may not require compensatory mitigation, or the mitigation may have been completed. The number of acres listed under the column heading "Mitigation Total Acres of Land Acquired" is available to mitigate adverse project impacts. It may include lands that have been purchased in fee to provide mitigation; are within existing Corps project boundaries or mitigation banks; have been made available by other agencies; or are located below mean low water in coastal areas. For some projects, the mitigation listed includes actions required to meet the Endangered Species Act as well as section 906.

TABLE 3. – Annual Consultation on Success of Mitigation - Table 3 shows the results of the on-going ecological mitigation success consultations with Federal and state resource agencies for 32 projects. In order to initiate the success consultation, the compensatory mitigation construction features must at least in-part be accomplished, and data from the monitoring of the constructed mitigation feature must be available. Mitigation is considered complete when the Division Engineer determines the mitigation is successful based on monitoring results and the results of the consultation with the appropriate agencies regarding mitigation success as required by Section 2036 (a)(4) of WRDA 2007. Table 3 also provides an evaluation of the ecological success to date for the constructed mitigation.

Fiscal Year 2016 Civil Works Budget Press Book. - The press book contains a listing of all projects for which the President requests funding for the next fiscal year.

## 7<sup>TH</sup> ANNUAL REPORT NOTES

### 2013 Completions

The mitigation for three projects, Beach City, Ohio Dam Safety Project, Kaweah Spillway Enlargement, California, and the Sacramento Bank Protection Set Back Levee at river mile 57.2R, were completed in 2013.

1) Mitigation bank credits were acquired for the Beach City, Ohio project to compensate for 0.32 acres of non-forested wetlands.

2) The mitigation for the Kaweah Spillway Enlargement project included acquisition and preservation of 4,388 acres of woodland, 13,000 acres of waterfowl habitat, and 7.19 acres of elderberry habitat for the endangered Valley Elderberry Longhorn Beetle (VELB).

3) The mitigation for the Sacramento River Bank, Set Back Levee at river mile 57.2R involved transplanting 78 elderberry bushes to an VELB mitigation banking site, planting an additional 2,599 elderberry seedlings and 3001 associated plants, purchase of 577.6 VELB credits, and 0.65 acres of wetland credit.

### 2014 Completions

The mitigation for two projects, Columbia River Channel Improvement –the Chumbley site in Washington, and Unalaska, Alaska , were determined to be a success in 2014.

1) Chumbley is one of three sites that will provide mitigation for deepening of the Columbia River federal navigation channel. At Chumbley 71 acres of pasture land was planted with native trees and shrubs in 2009 and has been extremely successful with 95 percent survival and is now considered self-sustaining except for periodic treatment of blackberry and reed canary grass on the borders of the forested area.

2) The mitigation for the Unalaska Harbor resulted in construction of 30 rubble/boulder reef structures totaling about 0.2 acres of submerged habitat and monitoring the monitoring of post-construction populations of sea birds and mammals in the vicinity of the harbor which are now present at or above pre-construction levels.

### CONCLUSION

Based on the percentage of mitigation completed and the percentage of construction completed data in Table 2, mitigation and construction activities are generally progressing concurrently, in accordance with Section 906 of WRDA 1986, as amended.

Acronym	Division/District	Acronym	Division/District
LRD	GREAT LAKES AND OHIO RIVER DIVISION	POD	PACIFIC OCEAN DIVISION
	LRB BUFFALO	POA ALASKA	
	LRC CHICAGO	POH HONOLULU	
	LRE DETROIT		
	LRH HUNTINGTON	SAD	SOUTH ATLANTIC DIVISION
	LRL LOUISVILLE		
	LRN NASHVILLE	SAJ JACKSONVILLE	
	LRP PITTSBURGH	SAM MOBILE	
		SAS SAVANNAH	
MVD	MISSISSIPPI VALLEY DIVISION	SAW WILMINGTON	
	MVK VICKSBURG	SAC CHARLESTON	
	MVM MEMPHIS		
	MVN NEW ORLEANS	SPD	SOUTH PACIFIC DIVISION
	MVP ST PAUL DISTRICT		
	MVR ROCK ISLAND	SPA ALBUQUERQUE	
	MVS ST LOUIS	SPK SACRAMENTO	
		SPL LOS ANGELES	
		SPN SAN FRANCISCO	
NAD	NORTH ATLANTIC DIVISION	SWD	SOUTHWESTERN DIVISION
	NAB BALTIMORE		
	NAE NEW ENGLAND	SWF FT WORTH	
	NAN NEW YORK	SWG GALVESTON	
	NAO NORFOLK	SWL LITTLE ROCK	
	NAP PHILADELPHIA	SWT TULSA	
NWD	NORTHWESTERN DIVISION		
	NWK KANSAS CITY		
	NWO OMAHA		
	NWP PORTLAND		
	NWS SEATTLE		
	NWW WALLA WALLA		

Table 1. USACE Projects Under Construction During Fiscal Year 2014		January 15, 2015
MSC	DISTRICT	Project (or Program Name)
LRD	LRB	PRESQUE ISLE PENINSULA, PA (PERMANENT)
LRD	LRB	GREAT LAKES FISHERIES AND ECOSYSTEM RESTORATION, IL, IN, MN,
LRD	LRB	AQUATIC PLANT CONTROL PROGRAM
LRD	LRB	OHIO & NORTH DAKOTA ENVIRONMENTAL INFRASTRUCTURE, OH & ND (S
LRD	LRC	CHICAGO SANITARY AND SHIP CANAL DISPERSAL BARRIER, IL
LRD	LRC	GREAT LAKES FISHERIES AND ECOSYSTEM RESTORATION, IL, IN, MN,
LRD	LRC	COOK COUNTY INFRASTRUCTURE, IL
LRD	LRC	LITTLE CALUMET RIVER, IN
LRD	LRC	DES PLAINES RIVER, IL
LRD	LRC	CALUMET REGION, IN
LRD	LRC	INDIANA SHORELINE EROSION, IN
LRD	LRC	MCCOOK AND THORNTON RESERVOIRS, IL
LRD	LRC	CHICAGO SHORELINE, IL
LRD	LRE	NORTHEASTERN MINNESOTA ENVIRONMENTAL INFRASTRUCTURE, MN
LRD	LRE	GREEN BAY HARBOR, WI
LRD	LRE	OAKLAND COUNTY, MI
LRD	LRH+LRN	SOUTHERN AND EASTERN KENTUCKY ENVIRONMENTAL INFRASTRUCTURE,
LRD	LRH	BOLIVAR DAM, OH (DAM SAFETY)
LRD	LRH	DOVER DAM, MUSKINGUM RIVER, OH (DAM SAFETY)
LRD	LRH	CENTRAL WEST VIRGINIA ENVIRONMENTAL INFRASTRUCTURE, WV (SECT
LRD	LRH	ROBERT C BYRD LOCKS AND DAM, OHIO RIVER, WV & OH
LRD	LRH	BLUESTONE LAKE, WV
LRD	LRH	LEVISA AND TUG FORKS AND UPPER CUMBERLAND RIVER, VA, WV & KY
LRD	LRH	OHIO & NORTH DAKOTA ENVIRONMENTAL INFRASTRUCTURE, OH & ND (S
LRD	LRH	SOUTHERN WEST VIRGINIA ENVIRONMENTAL INFRASTRUCTURE, WV (SEC
LRD	LRL	MCALPINE LOCKS AND DAM, OHIO RIVER, KY & IN
LRD	LRL	MILL CREEK, OH
LRD	LRL	HOLES CREEK, WEST CARROLLTON, OH
LRD	LRL	ROUGH RIVER, KY (MAJOR REHAB)
LRD	LRL	OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY
LRD	LRL	OHIO RIVERFRONT, CINCINNATI, OH
LRD	LRL	ROUGH RIVER, KY (MAJOR REHAB)
LRD	LRL	INDIANAPOLIS, WHITE RIVER (NORTH), IN
LRD	LRL	OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY
LRD	LRL	MARKLAND LOCKS AND DAM, KY & IN (REHAB)
LRD	LRL	OHIO RIVERFRONT, CINCINNATI, OH
LRD	LRN	WOLF CREEK DAM, LAKE CUMBERLAND, KY
LRD	LRN	KENTUCKY LOCK AND DAM, TENNESSEE RIVER, KY
LRD	LRN	CENTER HILL LAKE, TN
LRD	LRN	CHICKAMAUGA LOCK, TENNESSEE RIVER, TN
LRD	LRN	CHICKAMAUGA LOCK, TENNESSEE RIVER, TN
LRD	LRP	LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA
LRD	LRP	LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA
LRD	LRP	EMSWORTH LOCKS AND DAM, OHIO RIVER, PA

Table 1. USACE Projects Under Construction During Fiscal Year 2014		January 15, 2015
MSC	DISTRICT	Project (or Program Name)
LRD	LRP	EAST BRANCH CLARION RIVER LAKE, PA
MVD	MVK	J BENNETT JOHNSTON WATERWAY, LA
MVD	MVK	MISSISSIPPI ENVIRONMENTAL INFRASTRUCTURE, MS
MVD	MVM	DESOTO COUNTY WASTEWATER TREATMENT, MS
MVD	MVN	COMITE RIVER, LA
MVD	MVN	LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION)
MVD	MVN	ASCENSION PARISH ENVIRONMENTAL INFRASTRUCTURE
MVD	MVN	LAKE PONTCHARTRAIN AND VICINITY, LA (HURRICANE PROTECTION)
MVD	MVN	CALCASIEU RIVER AND PASS, LA
MVD	MVN	SOUTHEAST LOUISIANA, LA
MVD	MVP	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI
MVD	MVP	GRAFTON, PARK RIVER, ND
MVD	MVP	NORTHEASTERN MINNESOTA ENVIRONMENTAL INFRASTRUCTURE, MN
MVD	MVP	NORTH DAKOTA INFRASTRUCTURE, ND
MVD	MVP	LOCK AND DAM 3, MISSISSIPPI RIVER, MN (MAJOR REHAB)
MVD	MVP	ROSEAU, MN
MVD	MVR	ILLINOIS RIVER BASIN RESTORATION , IL
MVD	MVR	ILLINOIS WATERWAY, LOCKPORT LOCK AND DAM, IL (MAJOR REHAB)
MVD	MVR	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI
MVD	MVR	DES MOINES AND RACCOON RIVERS, IA
MVD	MVR	ILLINOIS WATERWAY, LOCKPORT LOCK AND DAM, IL (MAJOR REHAB)
MVD	MVS	WOOD RIVER LEVEE, DEFICIENCY CORRECTION AND RECONSTRUCTION,
MVD	MVS	MONARCH - CHESTERFIELD, MO
MVD	MVS	MERAMEC RIVER BASIN, VALLEY PARK LEVEE, MO
MVD	MVS	STE GENEVIEVE, MO
MVD	MVS	CAPE GIRARDEAU (FLOODWALL), MO
MVD	MVS	CHAIN OF ROCKS CANAL, MISSISSIPPI RIVER, IL (DEF CORR)
MVD	MVS	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI
MVD	MVS	MELVIN PRICE LOCK AND DAM (2ND LOCK), IL & MO
MVD	MVS	ALTON TO GALE ORGANIZED LEVEE DISTRICTS, IL & MO
MVD	MVS	MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REG
MVD	MVS	ST. LOUIS, MO (COMBINED SEWER OVERFLOW)
MVD	MVS	MELVIN PRICE LOCK AND DAM, IL & MO
MVD	MVS	BOIS BRULE DRAINAGE AND LEVEE DISTRICT, MISSOURI
MVD	MVS	EAST ST LOUIS, IL
NAD	NAB	ASSATEAGUE, MD
NAD	NAB	POPLAR ISLAND, MD
NAD	NAB	WYOMING VALLEY, PA (LEVEE RAISING)
NAD	NAB	WASHINGTON, DC & VICINITY
NAD	NAB	CHESAPEAKE BAY OYSTER RECOVERY, MD & VA
NAD	NAB	CUMBERLAND, MD AND RIDGELEY, WV
NAD	NAB	ANACOSTIA RIVER AND TRIBUTARIES, MD & DC
NAD	NAB	SOUTH CENTRAL PA ENVIRONMENTAL IMPROVEMENT PROGRAM, PA
NAD	NAE	GREAT BAY OYSTER RESTORATION, NH

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MSC	DISTRICT	Project (or Program Name)
NAD	NAE	MUDDY RIVER, MA
NAD	NAE	FRENCHMAN BAY EELGRASS RESTORATION, ME
NAD	NAN	SOUTH RIVER, RARITAN RIVER BASIN, NJ
NAD	NAN	PASSAIC RIVER MAINSTEM, NJ
NAD	NAN	RARITAN BAY AND SANDY HOOK BAY, UNION BEACH, NJ
NAD	NAN	MONTAUK POINT, NY
NAD	NAN	LONG BEACH ISLAND, NY
NAD	NAN	NEW YORK AND NEW JERSEY HARBOR, NY & NJ
NAD	NAN	FIRE ISLAND INLET TO MONTAUK POINT, NY
NAD	NAN	CEDAR BEACH CREEK HABITAT RESTORATION, NY
NAD	NAN	AQUATIC PLANT CONTROL PROGRAM
NAD	NAN	ATLANTIC COAST OF NYC, ROCKAWAY INLET TO NORTON POINT, NY
NAD	NAN	EAST ROCKAWAY INLET TO ROCKAWAY INLET AND JAMAICA BAY, NY
NAD	NAN	JOSEPH G MINISH HISTORIC WATERFRONT PARK, NJ
NAD	NAN	RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ
NAD	NAN	RARITAN BAY AND SANDY HOOK BAY, PORT MONMOUTH, NJ
NAD	NAN	SANDY HOOK TO BARNEGAT INLET, NJ
NAD	NAO	WILLOUGHBY SPIT AND VICINITY, NORFOLK, VA
NAD	NAO	NORFOLK HARBOR AND CHANNELS, CRANEY ISLAND, VA
NAD	NAO	SUBMERGED AQUATIC VEGETATION, SEASIDE OF EASTERN SHORE, VA
NAD	NAO	AIWW, BRIDGES AT DEEP CREEK, VA
NAD	NAO	SANDBRIDGE BEACH, VA
NAD	NAP	DELAWARE BAY COASTLINE, DE & NJ - OAKWOOD BEACH, NJ
NAD	NAP	MANASQUAN INLET TO BARNEGAT INLET, NJ
NAD	NAP	BARNEGAT INLET TO LITTLE EGG HARBOR INLET, NJ
NAD	NAP	GREAT EGG HARBOR INLET AND PECK BEACH, NJ
NAD	NAP	BRIGANTINE INLET TO GREAT EGG INLET (ABSECON ISLAND), NJ
NAD	NAP	DELAWARE COAST PROTECTION, DE
NAD	NAP	DELAWARE RIVER MAIN CHANNEL, NJ, PA & DE
NAD	NAP	GREAT EGG HARBOR INLET TO TOWNSEND INLET, NJ
NAD	NAP	LOWER CAPE MAY MEADOWS, CAPE MAY POINT, NJ
NAD	NAP	SOUTHEASTERN PENNSYLVANIA, PA
NAD	NAP	CAPE MAY INLET TO LOWER TOWNSHIP, NJ
NWD	NWK	BLUE RIVER CHANNEL, KANSAS CITY, MO
NWD	NWK	MISSOURI RIVER LEVEE SYSTEM, IA, NE, KS & MO
NWD	NWK	TURKEY CREEK BASIN, KS & MO
NWD	NWK	SWOPE PARK INDUSTRIAL AREA, KANSAS CITY, MO
NWD	NWK	KANSAS CITYS, MO & KS
NWD	NWK	BLUE RIVER BASIN, KANSAS CITY, MO
NWD	NWK	MISSOURI RIVER FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, N
NWD	NWO	FT PECK DAM AND LAKE, MT
NWD	NWO	WESTERN SARPY COUNTY AND CLEAR CREEK
NWD	NWO	GARRISON DAM, LAKE SAKAKAWEA, ND
NWD	NWO	RURAL MONTANA, MT

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MSC	DISTRICT	Project (or Program Name)
NWD	NWO	MISSOURI RIVER FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, N
NWD	NWP	LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA
NWD	NWP	COLUMBIA RIVER CHANNEL IMPROVEMENTS, OR & WA
NWD	NWP	COLUMBIA RIVER FISH MITIGATION, WA, OR & ID
NWD	NWP	MOUNT SAINT HELENS SEDIMENT CONTROL, WA
NWD	NWP	COLUMBIA RIVER AT THE MOUTH, OR & WA
NWD	NWP	ELK CREEK LAKE, OR
NWD	NWS	MUD MOUNTAIN DAM, WA
NWD	NWS	RURAL MONTANA, MT
NWD	NWS	HOWARD HANSON DAM, WA
NWD	NWS	DUWAMISH AND GREEN RIVER BASIN, WA
NWD	NWS	PUGET SOUND AND ADJACENT WATERS RESTORATION, WA
NWD	NWS	ERA EELGRASS RESTORATION IN PUGET SOUND, WA
NWD	NWS	RURAL IDAHO, ID
NWD	NWS	SHOALWATER BAY, WA
NWD	NWW	COLUMBIA RIVER FISH MITIGATION, WA, OR & ID
NWD	NWW	LOWER SNAKE RIVER FISH AND WILDLIFE COMPENSATION, WA, OR & I
NWD	NWW	RURAL IDAHO, ID
POD	POA	MAPPING
POD	POA	FALSE PASS HARBOR, AK
POD	POA	ALASKA COASTAL EROSION, AK
POD	POA	SITKA HARBOR, AK
POD	POH	IAO STREAM FLOOD CONTROL, MAUI, HI
SAD	SAC	FOLLY BEACH, SC
SAD	SAC	MYRTLE BEACH, SC
SAD	SAC	FOLLY BEACH, SC
SAD	SAC	CHARLESTON HARBOR, SC
SAD	SAC	LAKES MARION AND MOULTRIE, SC
SAD	SAJ	RIO GRANDE DE LOIZA, PR
SAD	SAJ	TAMPA HARBOR MAIN CHANNEL, FL
SAD	SAJ	PORTUGUES AND BUCANA RIVERS, PR
SAD	SAJ	PINELLAS COUNTY, FL
SAD	SAJ	SARASOTA COUNTY, FL
SAD	SAJ	DUVAL COUNTY, FL
SAD	SAJ	SAN JUAN HARBOR, PR
SAD	SAJ	BANANA RIVER, CAPE CANAVERAL, FL
SAD	SAJ	ARECIBO RIVER, PR
SAD	SAJ	GRASSY FLATS ESTUARINE RESTORATION PROJECT, FL
SAD	SAJ	FLORIDA KEYS WATER QUALITY IMPROVEMENTS, FL
SAD	SAJ	HERBERT HOOVER DIKE, FL (SEEPAGE CONTROL)
SAD	SAJ	ST LUCIE OYSTER REEF HABITAT RESTORATION, FL
SAD	SAJ	TAMPA HARBOR, FL
SAD	SAJ	RIO DE LA PLATA, PR
SAD	SAJ	TAMPA HARBOR, BIG BEND, FL

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MSC	DISTRICT	Project (or Program Name)
SAD	SAJ	JACKSONVILLE HARBOR, FL
SAD	SAJ	CENTRAL & SOUTHERN FLORIDA, FL
SAD	SAJ	BROWARD COUNTY, FL (REIMBURSABLE)
SAD	SAJ	PALM BEACH COUNTY, FL
SAD	SAJ	RIO PUERTO NUEVO, PR
SAD	SAJ	CANAVERAL HARBOR, FL
SAD	SAJ	CENTRAL & SOUTHERN FLORIDA, FL
SAD	SAJ	FORT PIERCE BEACH, FL
SAD	SAM	PANAMA CITY HARBOR, FL
SAD	SAM	GULFPORT HARBOR, MS
SAD	SAM	JACKSON COUNTY INDUSTRIAL WATER SUPPLY, MS
SAD	SAM	TUSCALOOSA AREA OFFICE, AL
SAD	SAM	MOBILE HARBOR, AL
SAD	SAM	ATLANTA ENVIRONMENTAL INFRASTRUCTURE, GA
SAD	SAS	SAVANNAH HARBOR DISPOSAL AREAS, GA & SC
SAD	SAS	RICHARD B RUSSELL DAM AND LAKE, GA & SC
SAD	SAS	LOWER SAVANNAH RIVER BASIN, GA
SAD	SAS	TYBEE ISLAND, GA
SAD	SAS	CIVIL RE MISC ADMIN FEES
SAD	SAS	SAVANNAH HARBOR EXPANSION, GA
SAD	SAW	ROANOKE RIVER UPPER BASIN, HEADWATERS AREA, VA
SAD	SAW	LITTLE CREEK OYSTER SANCTUARY, NC
SAD	SAW	DARE COUNTY BEACHES, NC
SAD	SAW	MANTEO (SHALLOWBAG) BAY, NC
SAD	SAW	CAROLINA BEACH AND VICINITY, NC
SAD	SAW	BRUNSWICK COUNTY BEACHES, NC
SAD	SAW	WRIGHTSVILLE BEACH, NC
SPD	SPA	ACEQUIAS IRRIGATION SYSTEM, NM
SPD	SPA	MIDDLE RIO GRANDE RESTORATION
SPD	SPA	MIDDLE RIO GRANDE FLOOD PROTECTION, BERNALILLO TO BELEN, NM
SPD	SPA	EL PASO COUNTY, TX
SPD	SPA	RIO GRANDE FLOODWAY, SAN ACACIA TO BOSQUE DEL APACHE, NM
SPD	SPA	CENTRAL NEW MEXICO, NM
SPD	SPA	SOUTHWEST VALLEY FLOOD DAMAGE REDUCTION, ALBUQUERQUE, NM
SPD	SPA	NEW MEXICO ENVIRONMENTAL INFRASTRUCTURE PROGRAM
SPD	SPA	ALAMOGORDO, NM
SPD	SPA	EL PASO, TX
SPD	SPA	RESTORATION OF ABANDONED MINE SITES
SPD	SPA	ALAMOSA, CO
SPD	SPK	GUADALUPE RIVER, CA
SPD	SPK	AMERICAN RIVER WATERSHED (FOLSOM DAM MODIFICATIONS), CA
SPD	SPK	STOCKTON METROPOLITAN FLOOD CONTROL REIMBURSEMENT, CA
SPD	SPK	TULE RIVER, CA
SPD	SPK	COYOTE & BERRYESSA CREEKS, CA

Table 1. USACE Projects Under Construction During Fiscal Year 2014		January 15, 2015
MSC	DISTRICT	Project (or Program Name)
SPD	SPK	YUBA RIVER BASIN, CA
SPD	SPK	SOUTH SACRAMENTO COUNTY STREAMS, CA
SPD	SPK	CACHE CREEK SETTLING
SPD	SPK	AMERICAN RIVER WATERSHED (COMMON FEATURES), CA
SPD	SPK	HAMILTON CITY, CA
SPD	SPK	NAPA RIVER, CA
SPD	SPK	SUCCESS DAM, TULE RIVER, CA (DAM SAFETY)
SPD	SPK	ISABELLA LAKE, CA (DAM SAFETY)
SPD	SPK	KAWEAH RIVER, CA
SPD	SPK	TAHOE BASIN RESTORATION 108
SPD	SPK	SACRAMENTO RIVER BANK PROTECTION PROJECT, CA
SPD	SPK	RURAL UTAH
SPD	SPK	PLACER COUNTY SUB-REGIONAL WASTEWATER TREATMENT
SPD	SPK	MARYSVILLE/YUBA CITY LEVEE RECONSTRUCTION, CA
SPD	SPK	MID-VALLEY AREA LEVEE RECONSTRUCTION, CA
SPD	SPK	RURAL NEVADA (SECTION 595)
SPD	SPK	AMERICAN RIVER WATERSHED (FOLSOM DAM RAISE), CA
SPD	SPK	REDBANK & FANCHER CREEKS
SPD	SPL	RIO DE FLAG FLAGSTAFF, AZ
SPD	SPL	CITY OF SANTA CLARITA, CA
SPD	SPL	SANTA ANA RIVER MAINSTEM, CA
SPD	SPL	CAMBRIA SEAWATER DESALINATION, CA
SPD	SPL	SANTA MARIA LEEVES, CA
SPD	SPL	SANTA PAULA CREEK, CA
SPD	SPL	SOUTH PERRIS, CA
SPD	SPL	SAN LUIS REY RIVER, CA
SPD	SPL	RIO SALADO, PHOENIX AND TEMPE REACHES, AZ
SPD	SPL	RURAL NEVADA (SECTION 595)
SPD	SPL	SURFSIDE - SUNSET - NEWPORT BEACH, CA
SPD	SPL	MURRIETA CREEK, CA
SPD	SPL	HARBOR/SOUTH BAY WATER RECYCLING STUDY, LOS ANGELES, CA
SPD	SPL	IMPERIAL BEACH, SILVER STRAND SHORELINE, CA
SPD	SPL	CITY OF INGLEWOOD
SPD	SPL	NORCO BLUFFS, SANTA ANA RIVER, CA
SPD	SPN	OAKLAND HARBOR (42 FOOT), CA
SPD	SPN	UPPER GUADALUPE RIVER, CA
SPD	SPN	LLAGAS CREEK, CA
SPD	SPN	NAPA RIVER, SALT MARSH RESTORATION, CA
SPD	SPN	SAN FRANCISCO BAY TO STOCKTON, CA
SPD	SPN	CORTE MADERA CREEK, CA
SPD	SPN	SAN LORENZO RIVER, CA
SPD	SPN	OAKLAND HARBOR (50 FOOT PROJECT), CA
SPD	SPN	PETALUMA RIVER, CA
SPD	SPN	HAMILTON AIRFIELD WETLANDS RESTORATION, CA

Table 1. USACE Projects Under Construction During Fiscal Year 2014		January 15, 2015
MSC	DISTRICT	Project (or Program Name)
SPD	SPN	HUMBOLDT BAY SPARTINA ERADICATION, ERA, CA
SPD	SPN	SAN FRANCISCO, CA (PIER 36)
SPD	SPN	SAN RAMON VALLEY RECYCLED WATER, CA
SPD	SPN	CONTRA COSTA CANAL, CA (SEC 219)
SWD	SWF	CENTRAL CITY, FORT WORTH, UPPER TRINITY RIVER BASIN, TX
SWD	SWF	LOWER COLORADO RIVER BASIN (WHARTON/ONION), TX
SWD	SWG	HOUSTON - GALVESTON NAVIGATION CHANNELS, TX
SWD	SWG	SIMS BAYOU, HOUSTON, TX
SWD	SWG	BRAYS BAYOU, HOUSTON, TX
SWD	SWG	BUFFALO BAYOU AND TRIBUTARIES, TX
SWD	SWG	GIWW, CHOCOLATE BAYOU, TX
SWD	SWL	OZARK - JETA TAYLOR LOCK AND DAM, AR
SWD	SWT	PINE CREEK LAKE, OK
SWD	SWT	YUKON, OKLAHOMA
SWD	SWT	PINE CREEK LAKE, OK
SWD	SWT	CANTON LAKE, OK

**Table 2. Status of Projects with Incomplete Compensatory Mitigation**

**January 22, 2015**

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mitigation Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mitigation Total Acres of Land Required</u>	<u>Mitigation Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
LRD	LRC	Little Calumet River, IN	21.43	90	435.1	435.1	A total of 435 acres are required to meet the compensatory mitigation requirement for the Little Calumet River project. Mitigation includes establishing functional bottomland hardwood forests and emergent wetlands offsite.	To date, all of the required land has been acquired. Little Cal mitigation area restored: 3 acres of wet prairie, 42 acres of mesic/wet mesic prairie and 44 acres of wet oak savanna. Hobart Marsh, no mitigation work has taken place since land acquisition was completed. No monitoring or mitigation work was done during 2011 or 2012, and no work of any kind was done on this project in 2013. No work was done on this project in 2014. The project is suspended until the financial issues have been resolved by the sponsor.	2021
LRD	LRH	Marmet Lock Replacement, WV (Kanawha River Navigation Study - Marmet Lock Replacement)	100	100	104.8	104.8	A total of 59.45 acres were required for mitigation of impacts to terrestrial natural resources. Terrestrial mitigation activities included restoration of hardwood forest, bottomland hardwood/riparian habitats, and agricultural/old field. A total of 45.3 acres were required for mitigating impacts to the Kanawha River aquatic habitat. Instream mitigation activities for adverse impacts included construction of instream stone and timber dikes, rubble placement, and root wads for habitat improvement.	In-stream aquatic habitat mitigation activities included fish re-introduction, habitat conservation, and the construction of structural measures; stone and timber dikes, rubble placement, and root wads for habitat improvement. Aquatic habitat mitigation comprised 45.3 acres. Mitigation for impacts to aquatic habitat was completed and success criteria met in 2007. Created 5.3 acres of riverine riparian habitat, planted 31.1 acres of hardwood forest, planted 4.1 acres of bottomland hardwood forest/riparian, and planted 17.7 acres of prairie grasses and mast seed. Construction of mitigation requirements for terrestrial impacts was completed in 2009. No work was done in 2013 or 2014.	2020
LRD	LRL	Cincinnati Metro Region, Duck Creek, OH	100	100	23	23	Riparian restoration (23 acres total) which includes reforestation (bottomland hardwood tree plantings) and placement of 10 wood duck and 25 squirrel nesting boxes.	All 23 acres of plantings completed, enhancing wildlife habitat within riparian environment. Several areas were replanted that initially failed to meet contract specifications. Extra treatments for invasive species were applied as needed. The first phase of planting included 9,800 each 18-24 inch bareroot tree stems/saplings. The second phase planting included 2,800 each bareroot replant/replace mixed bitternut and persimmon tree stems/saplings. Additionally, Hamilton County provided 25 squirrel boxes and 10 wood duck boxes, for placement at other sites. Non-federal sponsor confirmed > 70% survival rate. In the FWCA Report, USFWS stated it would have no further formal comment on the project	2015

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LRD	LRL	Olmsted Lock and Dam, OH	100	60	3463	3463	Purchase of mitigation lands, increased water management capability on Ballard Wildlife Management Area (WMA), KY, monitoring of bald eagles and waterfowl populations, monitoring of freshwater mussel populations, support of development of restoration and propagation methodologies for mussels, and restoration of former clay mine site that serves as large part of construction site.	Acquired bottomland hardwoods, wetlands, and agricultural lands totaling 2,063 acres for wildlife management, constructed water supply system providing wetland management capabilities on Ballard Wildlife Management Area - State Lands, KY, and provided KDFWR funding to monitor and construct or repair managed wetlands. LRL continues monitoring mussels in 14 miles of Ohio River. Annual monitoring began in 1993 and is scheduled to continue for 5 years into operation of the facility or after the end of construction funding. Sampling for Year 5 (2014) has been conducted and data related to that effort are currently being entered and analyzed with a completion report forthcoming.	2023
LRD	LRN	Center Hill Dam, TN, Major Rehabilitation-Seepage	0	38	44.3	44	Mitigation requirements to address impacts for Center Hill Major Rehab Seepage include: payment into a wetland mitigation bank or in-lieu fee fund at a 2:1 ratio for wetland loss - dollar amount to be determined, restoration of stream and riparian habitat along 450 linear feet of Moss Hollow Branch for temporary stream impacts, planting of 43 acres of forested habitat with native seedling trees at 200 stems per acre.	Planning for the project mitigation has been completed and attached to the Final EA.	2023
MVD	MVK	Mississippi River Levees Construction, AR, IL, KY, LA, MS, MO, & TN	74.6	70	16250	12403	Purchase 16,250 acres of bottomland hardwood habitat, either cleared or agriculture land, for reforestation and management.	12,403 acres of cleared frequently flooded agricultural lands has been purchased and 10,328 acres has been reforested with bottomland hardwoods to date. 1,503 acres is in moist soil management and 272 acres were reforested in 2013. 3,847 acres remain to be acquired. No work was done in 2014.	2025
MVD	MVK	J. Bennett Johnston Waterway, LA	60	89	19562	8438	Purchase 14,000 acres of bottomland hardwood lands for management and reforestation. Lands may be a mixture of agricultural for restoration or be already existing forest.	8,438 acres have been purchased to date, effort is ongoing to acquire land from willing sellers. 5,562 acres remaining.	2025
MVD	MVK	Mississippi River Levees-Construction, AR, IL, KY, LA, MS, MO, & TN	98	86	5200	5095	The Vicksburg District was required to reforest 5,200 acres of bottom land hardwoods.	Reforested approximately 5,094 acres of bottom land hardwoods of the required 5,200 acres. Remaining acres of mitigation will continue to be purchased concurrently with future construction efforts. To date, mitigation is ahead of construction. No work was done in 2014.	2025
MVD	MVK	Yazoo Basin, Yazoo Backwater Maintenance	66	100	12500	8807	It was determined that 12,500 acres of frequently flooded agricultural lands were to be purchased in fee from willing sellers and reforested to create bottomland hardwoods.	8807 acres at the Lake George tract were planted between 1988-1997. Seedling survival exceeds 50% for the bottomland hardwood species replanted.	2035
MVD	MVM	Bayou Meto Basin, AR	2.5	14	4093	100	Purchase 4,093 acres of prior converted farmland. Restore hydrology and plant bottomland hardwood forest.	A 100-acre tract of prior converted farmland has been planted with bottomland hardwood trees.	2021

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MVD	MVM	Grand Prairie Region, AR	45	0	380	136	Purchase 182 acres of farmland and restore bottomland hardwood (BLH) forest for mitigation of wetlands impacts. Purchase 198 acres of farmland and restore upland vegetation to mitigate for impacts to upland hardwoods.	One hundred six acres of bottomland hardwood habitat have been purchased and the BLH restoration effort is underway with 40 acres of BLH being planted in 2014. Thirty acres of upland habitat have been purchased, and restoration effort is underway with thirty acres of warm season native grasses being planted in 2014.	2018
MVD	MVM	Mississippi River Levees Construction, AR, IL, KY, LA, MS, MO, & TN	9.9	99	1241.4	145.2	The Memphis District portion of the originally authorized MRL project mitigation requires the acquisition of a total of 1,011 acres of farmland, restoration of hydrology, and planting of bottomland hardwood (BLH) forest. The Island 8, KY portion of the project requires mitigation in the amount of 55.8 acres of BLH wetlands. The Above Cairo, IL portion of the project requires a total of 174.6 acres of land to mitigate for permanent impacts to wetlands.	The Memphis District portion of the originally authorized MRL project is 9.9% complete as 100 acres have been purchased and planted with bottomland hardwood species. The Island 8, KY project mitigation is being coordinated through NRCS, US Fish and Wildlife and other appropriate agencies. The Above Cairo, IL project mitigation has begun as 15 credits have been purchased from an approved mitigation bank. No change in 2014.	2025
MVD	MVM	St Francis Basin Construction, MO	98	89	13500	13311	Acquire and manage 13,500 acres of bottomland hardwood forest habitat.	13,310 wetland acres have been purchased of the 13,500 required. To date 12,648 acres have been purchased in Arkansas and 663 acres have been purchased in Missouri. The lands are being managed by the State of Arkansas and the State of Missouri as bottomland hardwood forest. No new mitigation acreage was acquired in 2014.	2020
MVD	MVM	St. Johns Bayou-New Madrid Floodway, MO	7.67	7	13039	1000	The scope and scale of the mitigation contemplated reflect the complexity of the proposed action.	Approximately 1,000 acres of bottomland hardwood habitat have been purchased to satisfy a portion of the mitigation requirements; however, proposed mitigation is being evaluated with the draft EIS.	2020
MVD	MVM	West Tennessee Tributaries, TN	42	42	32000	13527	The Court ordered 32,000 acres of mitigation for the total project. Approximately 42% of the project was constructed prior to shutdown for reevaluation; therefore, 42% of the required for mitigation has been purchased and turned over to the Tennessee Wildlife Resources Agency (TWRA). No further mitigation is required unless a reevaluation leads to further construction.	Approximately 13,527 of 32,000 acres have been purchased to date. These acres have been handed over to the State of Tennessee for management. No work was done in 2013 and 2014.	2026
MVD	MVN	Comite River Basin, LA	5	18	890	74	As of environmental assessment (EA) #426 (July 2012), project related impacts to 890 acres of bottomland hardwoods (BLH) will remove 704.6 Average Annualized Habitat Units (AAHUs). The mitigation goal is to acquire, reforest and manage cleared agriculture and other suitable land for BLH restoration and preservation to account for 704.6 AAHU's, or acquire mitigation bank credits.	Monitoring efforts continued in 2014, however, no additional mitigation occurred in 2014 due to project funding constraints. Currently 20 out of the 39 acres planted are meeting success criteria.	2018

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MVD	MVN	FCCE HPO Non-Federal Levees (USACE Response to Hurricanes Katrina & Rita In Louisiana, EA #433)	0	100	24	0	Construction associated with Task Force Unwatering resulted in the loss of 21.3 acres of fresh intermediate marsh with a habitat value loss of approximately 12.1 average annual habitat units (AAHUs).	Implementation/construction of the mitigation project has not begun yet. 21.3 acres of fresh to intermediate marsh were impacted or approximately 12.1 AAHUs. Project is in reformulation due to changes in environmental conditions at proposed borrow site.	2035
MVD	MVN	Lake Pontchartrain and Vicinity- Inner Harbor Navigation Canal, Lake Borgne	0	90	152	0	The programmatic IER (PIER) presenting the whole plan for mitigating the LPV HSDRRS impacts was finalized 22 November 2013. The PIER only proposed moving forward with certain constructible features of the plan, the purchase of mitigation bank credits, but required additional NEPA documentation to implement the Corps constructed projects once advanced design was achieved. The PDD for the project was approved by MVN February 2014. Mitigation bank credit purchase for E2F01 and E2F02 impacts was completed in May 2014. One tiered IER (TIER) and one supplemental PIER have been completed for the Corps constructed projects in the mitigation plan, however only the TIER has been finalized.	No construction on Corps projects has begun. Expended costs are for the purchase of approximately 418 mitigation bank credits mostly for various types of wetland with some bottomland hardwood.	2020
MVD	MVN	Mississippi River Levees Construction, AR, IL, KY, LA, MS, MO, & TN	83	83	24.8	20	Under the 1998 MRL FSEIS, the New Orleans District was required to mitigate for 24 acres of bottomland hardwood habitat.  For the 2011 Operation Watershed effort, the New Orleans District is responsible for mitigation of 34.6 acres, which will be reported for each project as credits are secured within the appropriate watershed mitigation banks.	Reforested 20 acres of bottomland hardwood of the required 24 acres. No field survey in 2014.	2016
MVD	MVN	Larose to Golden Meadow, LA (1985 Mitigation)	100	95	4598	4598	The required and authorized mitigation for the Larose to Golden Meadow 1985 Hurricane Protection Project calls for construction of a levee and water-control structure along the eastern boundary of the mitigation site; herein referred to as the Pointe-au-Chien WMA Mitigation Site. These features will serve to enhance the functional values of wetlands in the mitigation site.	The primary component of the 1985 Mitigation plan involved construction of a 7-mile long levee and 3 water control structures (weirs). These features were the backbone of a regional water management system intended to enhance existing degraded wetlands within the mitigation site proper. This site encompassed 4,598 acres in the publicly owned Pointe-au-Chien Wildlife Management Area. Construction of the levee and weirs has been completed and indications are that enhancement of wetland habitats in the mitigation site is progressing favorably.	2035

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MVD	MVN	Federal New Orleans to Venice, LA	0	0	698	0	Estimated mitigation acres from proposed alternative: BLH - wet 125 Marsh - Brackish 76.56; Marsh - Intermediate 138.41; Marsh - Saline 282.22; Marsh - Freshwater 70.19; Shrub-Scrub 3.5; Dry BLH 2.15.	Mitigation construction has not begun yet. A tentatively selected plan identifying mitigation site(s) is anticipated in FY2015. Site acquisition and subsequent construction activities are expected to begin immediately after approval.	2018
MVD	MVN	West Bank & Vicinity, LA	31	100	2002.2	698.5	Mitigation of 2002.2 acres of Bottom land hardwoods and swamp was required. Total impacts associated with previously authorized West Bank and Vicinity mitigation plans that have not been implemented are 724 impact acres (or 408.23 AAHUs) of BLH and Swamp. The mitigation for these impacts will require an additional 1439.7 acres.  The mitigation plan for the remaining acres includes 1,211 acres of preservation Cypress/BLH, 12.8 acres of restoration of BLH, and 90.9 acres of preservation were covered in Supplemental Environmental Assessment #498.	Partial mitigation has been completed for Swamp, bottomland hardwood, and marsh of approximately 562.5 acres (351 Average Annual Habitat Units) of marsh. No monitoring was required for this work. No work was done in 2014.	2018
MVD	MVP	Mississippi River - CONSTRUCTION (Mississippi River: Lock and Dam 3 Navigation Safety and Embankments, Minnesota and Wisconsin)	100	100	314.3	561.9	Interagency coordination determined that given the limited opportunities to provide functional mitigation features for affected channel border aquatic habitat in a cost effective manner, resource agencies concurred that an acceptable mitigation approach is to focus primarily on bottomland hardwoods restoration combined with freshwater marsh features. Acquisition and development of 313 acres is required.	Grading, ditch plugs and re-routing of previously-modified drainage channels were successful in restoring natural hydrologic regime to key portions of the mitigation area. A total of 313 acres have been direct seeded or planted with seedlings or cuttings to initiate forest restoration. Supplemental plantings were completed in 2012 on areas with less than expected results. Monitoring in Summer 2013 and 2014 indicated that revegetation efforts are on track to meet criteria for success by 2022. Regeneration surveys are scheduled for the summer of 2015.	2022
MVD	MVR	Mississippi River Dredged Material Management Plan, IA and IL (Pool 13 Site Plan for the Sabula Reach (includes 4 dredge cuts))	50	20	12	6	Twelve acres of island creation at two locations (roughly 6 acres of island at each site). The District anticipates approximately 6 to 10 acres of wetlands would develop within the downstream "coves" or "shadows" of the islands through sediment accumulation and other natural processes. The banks of the islands would be armored with riprap to prevent erosion and to provide additional aquatic habitat (e.g., catfish spawning areas).	The District built one of 2 mitigation islands (6 of the required 12 acres) in 2006. No construction or mitigation was done in 2014. Excellent emergent wetland vegetation has grown on the island and in the shallows surrounding the island. Waterfowl, fish, and mussels are using the constructed habitat.	2025

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MVD	MVR	Des Moines & Raccoon Rivers, IA	100	100	20.8	20.8	6.4 acres of upland forest 0.4 acres of bottomland forest 2.8 acres of emergent wetland 1.2 acres of herbaceous upland buffer 2.7 acres of open water	All emergent and deep water habitat construction is complete. All seeding and tree planting was completed in 2011. Due to drought conditions, 2013 success was improved over 2012, but still has not reached a successful level. The wetland mitigation showed an improvement to wetland plant coverage in 2014.	2017
MVD	MVS	Chain of Rocks, IL	99	98	146.4	253.1	Mitigation will consist of the development of 146.4 acres of habitats, including 134.7 acres of wetlands (92.4 acres forested and 42.3 acres herbaceous) and 11.7 acres of nonwetland bottomland forest.	In 2000 a 14-acre wet prairie was constructed. In 2004 62 acres of forested wetlands and nonwetland forest were established. In 2008 a 97-acre tract was acquired for establishment of 34 acres of forested wetlands, 1 acre of herbaceous wetlands, and 54 acres of nonwetland forest, and protection of 8 acres of forested wetlands. In late 2010 - early 2011 site grading and vegetation plantings were accomplished on the 97-acre tract. In early 2014 a 75-acre tract was acquired to complete the project's mitigation requirement, by creating about 35 acres of herbaceous wetlands and forested wetlands in summer-fall.	2022
MVD	MVS	Chesterfield, MO (010457)	95	78	91.3	95	The initial mitigation requirement for creation of 9.2 acres of emergent wetlands and 6.8 acres of forested wetlands changed to preservation of 73 acres of forested wetlands and restoration of 14 acres of cropland due to proximity to an airport. The plan also includes the creation of 4.3 acres of open water wetlands at a distance from the airport.	Construction completed for preservation of forested wetland; in 2006 95-acre tract acquired and conservation easement placed on property. In 2010 native grasses planted within this tract in 14-acre crop field to allow for reforestation through natural succession. In 2010 planning commenced for the establishment of 4.3 acres of open water wetlands at a site away from the airport; as of 2013 no compensatory site acceptable to agencies had been located. In 2014, options were considered to meet the remaining requirement, including a potential compensatory site at a new location as well as available mitigation banks.	2022
NAD	NAN	Green-Brook, NJ (Segment U )	40	60	85	85	This Mitigation is for the Bound Brook construction element of the overall project; (Segments A, N, R1, R2, T, and U) and a portion of structural project elements proposed in Middlesex County that could not be mitigated on-site. The mitigation plan was to provide in-kind mitigation for 21 acres of wetlands impacted by the Green Brook Flood Control Project. The project includes the enhancement of approximately 32 acres of existing forested wetlands, 6 acres of scrub-shrub wetland, 5 acres of emergent wetland and preservation of 6 acres of palustrine, 6 acres of upland forest and 27 acres of riparian forest and 800ft of an unnamed stream.	The Finderne site is located in the Township of Bridgewater in Somerset County, New Jersey and was completed in July 2006. To ensure compliance with Corps policy and the NJDEP wetland mitigation regulations, the mitigation site was monitored for five full growing seasons. As a result of indications that the site is not trending towards meeting success criteria as concluded in the previous years' monitoring reports, the Corps is currently formulating and evaluating adaptive management strategies related to ensuring native wetland establishment and survival.	2020

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NAD	NAN	Minish Park, NJ (Joseph G. Minish Waterfront Park and Historic Area)	0	66.6	1.7	0	Mitigation required: 1.68 acres of mitigation.	Minish Project Delivery Team is working with HRE-Lower Passaic Ecosystem Restoration Team to find suitable site. Hurricane Sandy related note: As a result of funds being received as part of Public Law (P.L.) 113-2, Disaster Relief Appropriations Act, Chapter 4, Department of the Army, Corps of Engineers, Civil, Construction and being cited in the Second Interim Report in response to P.L. 113-2, dated May 2013, funds have been appropriated to seek/select/develop the required new site alternative to meet the mitigation requirements.	2021
NAD	NAO	Craney Island Expansion, VA	10	10	122.2	122.2	Mitigation involves a total of 122.2 acres as follows: 56 acres of saltmarsh wetlands, 16 acres of oyster reefs, and 50.2 acres of sediment clean-up. As identified in FEIS, synergistic benefits provide 487 acres of compensatory mitigation in the Elizabeth River watershed.	First mitigation project is to construct approximately 11.3 acres of tidal emergent, ebb-flood channels, and tidal, scrub shrub at Paradise Creek (Chesapeake, VA) on the Elizabeth River. Construction started in December 2010 and was completed in October 2012. Monitoring began in 2013. Restored wetland vegetation is growing on site at present and meeting expectations for growth and survival. The wetland site has been completed. Oyster reef construction began in 2013, with the first of five reefs constructed and the second underway as of DEC 2013. Reefs were completed in summer 2014 and monitoring of the reefs has begun.	2019
NWD	NWK	Blue River Basin, Kansas City, MO	0	45	0.5	0.5	A total of 0.5 acre of wetland mitigation is required for this project. Acquisition of real estate for the mitigation site and future management of the mitigation site is the project sponsor's responsibility.	Project is being designed and constructed in phases. Design is ongoing for remaining phases and mitigation will be done in sync with these remaining construction elements. No mitigation has been accomplished to date since the project has not reached the phase that uses the borrow area.	2018
NWD	NWK	Blue River Channel, Kansas City, MO	100	99	319	319	A maximum of 234 acres of native grass and shrubs, and 85 acres forest/woodland is required to mitigate for this project. Changes to the project design, as a result of value engineering studies, have resulted in less adverse impacts to fish and wildlife habitat.	234 acres of mitigation have been completed by planting the project right of way with native grass and shrubs and 85 acres of forest/woodland mitigation have been completed by planting young trees. 234 acres of mitigation have been completed by planting the project right of way with native grass and shrubs and 85 acres of forest/woodland mitigation have been completed by planting young trees. Monitoring indicated that Persimmon and Shagbark Hickory were the primary losses in 2014. Different varieties will be planted in 2015.	2018

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NWD	NWO	Western Sarpy/Clear Creek, NE	75	78	40	40	40 acres wet meadow mitigation to offset immediate impact to 8.29 acres of wetlands and unknown predicted future impacts to wetlands. Creation of chutes/backwaters to connect rivers with floodplain.	Total mitigation of 40 acres of wet meadow; a two acre wetland experiment was used to determine correct seeding rate, mulch cover and elevation of 40 acres of wetland mitigation. The mitigation wetlands were constructed at two locations within the project area, one 32 acres in size and the other at 8 acres. Following monitoring of constructed features in 2014, it was concluded that about 70% of the performance standards were met after three growing seasons.	2019
NWD	NWP	Columbia River Channel Improvement - Navigation, WA (Cottonwood Island)	0	100	128	128	Deepening of the Columbia River federal navigation resulted in a loss of upland habitat due to upland disposal of dredged material. At Cottonwood, 96 acres of pasture is required to be planted to riparian forest, 14 acres of wetland are to be enhanced and expanded, and 20 acres of mature riparian forest is to be protected.	Construction at Cottonwood was completed in 2013 including 14.5 acres of emergent wetland habitat development and planting trees and shrubs on 94 acres of pasture lands to create a riparian forest, and 20 acres of riparian forest protected. During spring 2013, new plantings were done to offset a greater than 20 percent mortality of initial plantings, and plant protectors were removed. In 2013 and 2014, maintenance mowing and herbicide application was performed. Plant markers were installed in 2013 which can be used to monitor mortality. Monitoring will be done on a routine schedule to determine if the plantings and wetlands are meeting the success criteria.	2020
NWD	NWP	Columbia River Channel Improvement - Navigation, OR (Webb)	100	100	190	190	Deepening of the Columbia River federal navigation channel resulted in a loss of upland habitat due to upland disposal of dredged material. A total of 388 acres was acquired to conduct 371 acres of habitat development improvement, or maintenance at three locations, to replace the loss of 172 acres of agricultural lands, 50 acres of riparian habitat and 16 acres of wetland habitat. At Webb, 96 acres of pasture land is required to be managed as short grass pasture for Canada geese, and 74 acres converted to permanent wetlands for waterfowl and other wildlife.	Maintenance mowing of the 96 acre agricultural pastures has been successful at attracting waterfowl on a yearly basis, including 2014. The wetland is functioning to provide habitat for waterfowl which were observed in the site on all visits in 2014. Control actions will be taken in 2015 to address unwanted reed canary grass and other invasive plants.	2020
NWD	NWS	Shoalwater Bay Erosion, WA	0	100	0	0	Mitigation will be dependent upon the presence of Dungeness crab and snowy plover at the time of construction. During construction, the impact areas will be surveyed for the presence of these species and mitigation will be formulated based on the survey results. After the initial placement, mitigation might be required for any adverse impacts to crabs and snowy plovers due to the periodic beach nourishment work (approximately every 5 years). Placement activities will be monitored and mitigation formulated if needed. Habitat development will be monitored to assess if restoration is meeting projected targets	No mitigation sites are available to evaluate yet. Initial crab trawl data for 2012 will be analyzed in FY15 versus dredge amounts to determine if mitigation is required. Snowy Plover nested on beach in 2012. The single nest present fledged chicks. In 2013, plovers returned in greater numbers (3 nests) with 7 chicks fledged. Construction operations were altered to avoid disruption to sites. Mitigation will be adaptively managed based on survey results for Dungeness crab and snowy plover. No monitoring was done in FY 2014.	2035

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NWD	NWS	Howard Hanson Dam, WA (Additional Water Storage Project (Phase 1 only))	90	85	368.7	368.7	Mitigation consists of: 1. instream habitat restoration through culvert replacement engineered logjams and side channels. 2. riparian planting, thinning, protection and conservation, management of forest, pasture and emergent marsh. 3. creation of elk forage habitat.	Set aside and managed 238 acres riparian buffer/managed forest, 12.7 acres instream habitat plus 118 acres of elk pasture. All the areas are being monitored. The emergent elk pasture has not has not developed as planned and is being monitored to determine the conditions required for success. There were 4 culverts replaced, 1,198 logs placed in logjams, and 1/2 acre of side channel created as mitigation. For the fish mitigation sites, preliminary monitoring has determined that on average the sites are performing as expected providing the intended improved habitat structure for aquatic organisms. The monitoring results have been inconclusive to date (FY2014).	2022
POD	POA	Akutan Harbor, AK	70	100	41.7	41.7	Prior to construction capture and relocate Dolly Varden in the stream to avoid construction impacts. Post construction, monitor salinity in the stream to ensure that the project has not caused a hydrologic imbalance in the watershed. Also monitor presence/absence of marine mammals and sea birds to determine if they return to the area. If any substantial adverse effects are identified, the Corps, with consultation with USFWS and other appropriate agencies, will recommend appropriate measure and associated monitoring. Additionally, a 41.7 acre conservation easement of high value habitat is required.	The Dolly Varden were relocated successfully. In August 2013 the Corps conducted water quality monitoring and results indicated that there was no saltwater intrusion to the freshwater portion of the estuary and thus maintaining the ecological integrity of the freshwater habitat. Additional salt water intrusion monitoring was not accomplished in 2014 due to logistic constraints. This monitoring is scheduled for August 2015.	2015
POD	POA	Unalaska Harbor, AK	100	100	0.2	0.2	Compensatory in-kind mitigation is required to replace nearshore and intertidal habitat for sea otters, seals, waterfowl, and benthic communities by creating 30 rubble/boulder reef structures comprising approximately 0.2 acres in the intertidal and nearshore subtidal habitat lost during harbor construction. Monitoring is required to determine colonization by key marine organisms. Monitoring is also required to determine whether the project affects movement, abundance, or distribution of Steller's eiders or northern sea otters or is otherwise causing a taking of those species.	Constructed 30 reefs to provide in-kind habitat of rocky intertidal and subtidal habitat that favors use by sea ducks and marine organisms that use more open habitat. This in-kind offsite mitigation is 100% complete. There are no recommendations to improve features at this time. Monitoring that occurred in 2012 and 2013 indicated that the mitigation features are on track. Monitoring has also indicated that rubblemound breakwaters can improve habitat diversity much quicker than originally thought.	2014
SAD	SAJ	Cedar Hammock, Wares Creek, FL	99.9	67	2.5	2.5	Mitigation consists of restoring 2.53 acres of estuarine habitat at the Emerson Point Restoration Project by restoring tidal flow and removal of exotic plant species.	Mitigation construction is completed (site preparation, removal of exotic invasive species, and planting of new native species). Periodic removal of exotics over 27 year period by sponsor in accordance with agreement with Florida Department of Environmental Protection.	2015

**Table 2. Status of Projects with Incomplete Compensatory Mitigation**

**January 22, 2015**

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SAD	SAJ	Inkand Waterway Jacksonville-Miami, FL (Construct Upland Disposal Sites IR-2 and SL-2)	100	100	7.2	7.2	Create 5.95 acres of wetland mangrove and upper marsh and obtain perpetual conservation easement over an additional 1.23 acres of on-site wetlands.	(1) 5.95 acres of wetland mangrove and upper marsh created from a former citrus grove by grading to establish hydrology and by planting. (2) perpetual conservation easement over an additional 1.23 acres of on-site wetlands. (3) Monitoring ongoing. Baseline mitigation monitoring report, April 2013, indicates presence of native wetland and aquatic species. Planted red mangroves in one area are struggling. Subsequent annual monitoring in April 2014 indicates loss of red mangroves in this area.	2018
SAD	SAJ	Martin County, FL (3rd Periodic Renourishment)	0	100	5	5	Creation of nearshore artificial reef with concrete rubble (original mitigation for direct/indirect impacts) and additional mitigation for indirect impacts beyond that previously mitigated with concrete rubble or other suitable material (Current Supplemental Environmental Impact Statement/Limited Re-evaluation Report (SEIS/LRR): Indirect impacts identified by the post-construction monitoring (completed) would be mitigated by creation of artificial reef).	Mitigation for 3rd renourishment not yet constructed. Amount of mitigation constructed to be based on post-construction monitoring of indirect impacts (underway). ROD for Final EIS/report signed by SAD 15 Feb 2012. Construction (beach renourishment) completed 20 May 2013. Post construction monitoring to this point (FY14) does not indicate additional impacts requiring mitigation.	2018
SAD	SAJ	Inland Waterway CR to AR, FL (Cuts M-5, M-12, and M-14 and Longboat Pass Cuts 2 and 3)	0	100	0.7	0.7	Repair previously damaged (prop scars and blowouts) sea grass habitat with appropriate material to the appropriate elevation to support sea grass.	Mitigation surveys post-construction indicate 0.40 acres of sea grass impacted. Mitigation construction in FY16. No funds available in FY15 for mitigation. 3 years post-construction monitoring to be Corps responsibility.	2019
SAD	SAJ	Rio De La Plata, PR (Northern Segment, Mameyal Community (Contract 1A))	100	98	85	85	Northern Segment, Mameyal Community (Contract 1A), Mitigation: create mangrove (21.3 acres), lagoon (10 acres), and herbaceous wetland habitat (53.7 acres).	Real Estate acquired by sponsor (DNER).  Mitigation Construction: 10 Acres estuarine lagoon (constructed), 21.3 acres mangrove (80% completed), and 53.7 acres herbaceous wetland (65% completed).  Monitoring to begin in 2015.	2016
SAD	SAJ	Rio Puerto Nuevo, PR	100	71	28	28	Creation of 23.1 acres mangrove forest in project right-of-way plus 4.9 acres northeast of the improved channel.	4.9 acres of mangrove adjacent to project already excavated and established. Remaining 23.1 acres to be constructed with contract 2A, ARRA, Margarita Channel, which was started (NTP) 20 August 2010 and is scheduled to be physically completed on 16 June 2014. Mitigation construction was completed at end of FY14.	2016
SAD	SAJ	San Juan Harbor, PR	0	100	4	4	1.2 acres marine submerged aquatic vegetation established by raising and stabilizing bottom (to approximately -12 feet to -15 feet below the surface).	Mitigation not yet started. Mitigation has been relocated. An EA has been prepared for the new mitigation site in Condado Lagoon. Expect to complete all environmental compliance and award contract for mitigation in FY15.	2017

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SAD	SAM	Tennessee - Tombigbee Waterway, AL (Bevill Cross Current)	100	100	50	54.2	Compensatory mitigation for the proposed activity is required and the Corps will implement a three part plan addressing impacts to TTW Wildlife Mitigation lands, aquatic habitat, and bottomland hardwood wetlands along with a species specific management plan. The plan includes 1) preservation of 12 acres of predominantly bottomland hardwoods and wetlands of similar quality to those impacted, 2) control and removal of invasive/exotic species from 16 acres of Corps controlled surface waters, and 3) enhancement of 22 acres of bottomland hardwood through control of invasive/exotic species on Corps controlled reserve properties not currently bound by previous management agreements.	Mitigation implementation began in August 2013 at the Miller Tract Emergent Vegetation site and White's Slough Bottomland Hardwood site with the initial herbicide treatments of water hyacinth, Cuban bulrush, common salvinia and Chinese privet. Survey and monitoring are performed annually for spot treatment of invasive species to prevent re-infestation.	2022
SAD	SAS	Brunswick Harbor Deepening GA	100	100	37.6	19.1	The District is required to mitigate for impacts to 34.5 acres of essential fish habitat. This impact resulted from the creation of a beneficial use dredge material island (sometimes referred to as bird island) in St. Simon's Sound. The bird island has some self-mitigation components by providing EFH habitat by associated oysters and mudflats resulting from the island creation in addition to providing rare bare ground bird nesting acreage.  The District is also committed to provide mitigation for impacts to 5.9 acres of salt marsh from the turning basin enlargement and 1 acre of salt marsh from future maintenance activities at Andrew's Island.	Andrews Island- Year3(2014)monitoring = 95% percent coverage, ahead of schedule. Bird Island-2014 nesting & activity summary: 6573 Royal Tern pairs nested (only site in state for this species)- thousands fledged 50 Sandwich Tern pairs nested (only site in state for this species)many fledged 250 Least Terns nests – many fledged 4 Gull-billed Tern nests – failed, unable to determine cause, roping off nests option FY15 90 Black Skimmer nests – many fledged 5 Brown Pelicans- fledged 152 Laughing Gulls – eggs oiled to minimize hatching. Considering there were 339 LAGU eggs on the island and few live chicks observed oiling appears to be an effective deterrent.	2016
SAD	SAS	Richard B. Russell Dam & Lake, GA & SC	100	99.2	0	0	The Savannah District and South Carolina Department of Natural Resources agreed for commercial operation of pumped storage at the Richard B. Russell (RBR) Dam and Powerhouse. The items included in the agreement were: Construction of an O2 system approximately 5.5 miles upstream of J. Strom Thurmond (JST) Dam and Lake; five years of environmental monitoring once full capacity of the 4-unit pumped storage is achieved; Corps limitation to utilization of only two pumped storage units during the months of June through September until the O2 system is constructed, which was completed in June 2013.	All four pump-back units are operational and available to utilize the O2 system when needed.  Thus far, monitoring results show that striped bass are utilizing the habitat created by the O2 system and their presence will continued to be monitored through December 2015.	2015

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SAD	SAS	Savannah Harbor Disposal Areas, GA & SC	100	100	3.4	2.5	Restore 3.44 acres of salt marsh by excavating 5.1 acres of fill from areas that historically supported salt marsh. Allow the area to naturally revegetate, while monitoring for erosion and percent coverage. If erosion occurs, removing wetlands located between the mitigation site and the Savannah River, the Corps will deposit rocks to protect the Savannah River side of the mitigation site.	Previous Monitoring of the mitigation marsh indicates success criteria are being met (80% success rate for re-vegetation). While percent coverage is being met there is on-going erosion at the site. 1/4 of an acre has been lost since last year. The District is investigating ways to stabilize the site and ensure future mitigation compliance. FY14 monitoring revealed the site is below the 80% success rate with only ~71% coverage achieved.	2016
SAD	SAS	Savannah Harbor, GA	100	100	1769	1411	In order to mitigate for the 311 acres of salt marsh lost a Long Term Management Strategy EIS was developed. The plan commits the District to providing bird habitats as follows; an annual production of 74 bare ground nesting acres, 450 wetland nesting acres, 505 waterfowl feeding acres, and 740 shorebird feeding acres. At the end of a 6 yr cycle the District should be in compliance with each of the habitat acreages.	The EIS requires the District to take the 6 year rolling average of each habitat type and report on mitigation status.  Results of Habitat Production Compared to Required Production for years 2009-2014 are as follows; Bare ground nesting has a deficit of -141 acres, Wetland nesting has a surplus of 734 acres, Waterfowl feeding has a deficit of 309 acres and Shorebird feeding has a deficit of 1412 acres. The cumulative balance for FY09-FY14 is -1361.1 acres.	2019
SAD	SAW	Manteo (Shallowbag) Bay, (CG) - Wanchese Harbor Mitigation	0	10	42	5	42 acres of aquatic habitat (oyster reef). This mitigation requirement includes project components constructed.  To date, the only project components constructed include deepening of Wanchese Harbor. Mitigation for this project component is 42 acres of oyster reef habitat (site locations currently in development). Additional proposed work has been deferred. Should additional project components be constructed, additional mitigation would be required.	USACE has updated the 1981 approved Mitigation and Enhancement Plan, referred to as the 'Implementation and Monitoring Plan' for the Manteo (Shallowbag) Bay Project. The Implementation and Monitoring Plan was provided to participating resource agencies for their review. USACE plans to move forward with construction of 42 acres of oyster reef associated with the deepening of Wanchese Harbor on an incremental basis. No construction or mitigation occurred in FY 2014; although consultation took place between the Corps and the US Fish and Wildlife Service, National Marine Fisheries Service, NC Division of Marine Fisheries, and NC Division of Coastal Management, and will continue in FY 2015.	2030

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SAD	SAW	Wilmington Harbor - 96 Act	100	88	732.8	732.8	<p>Island 13 - Restoration of 30.4 acres primary nursery (including 3.4 acres intertidal marsh) on Cape Fear River dredged material disposal island 13.</p> <p>Prevention of Degradation (POD) Lands - Acquisition of 700 acres riparian wetland habitat buffer on NE Cape Fear River, including river shoreline &amp; two tributaries (Tony's and Lagoon Creeks), which serve to protect 29 acres estuarine primary nursery area.</p> <p>Fish passage at Lock and Dam #1 on the Cape Fear River - Construction of rock rapids on downstream face of dam to better aid anadromous fish passage upstream. Since cumulative &gt;80% passage was not met after 2yrs of monitoring, rapids configuration will be modified to improve passage.</p>	<p>- Island 13: Restoration of 30.4 acres of marsh and intertidal habitat is complete and was determined successful in 2005 after 3 years of monitoring.</p> <p>- POD Lands: The entirety of the 700 required acres have been acquired (including 29 acres of estuarine primary nursery area) as of June 10, 2011.</p> <p>- Fish passage at Lock and Dam #1: Construction of rock rapids on downstream face of dam to better facilitate anadromous fish passage upstream was completed in November 2012. After 2013 and 2014 monitoring, 80% of flathead catfish passed Lock and Dam #1, but only 50-70% of shad and 21-23% of striped bass passed.</p>	2016
SPD	SPA	South West Valley Albuquerque, NM (Riparian mitigation)	100	100	15	15	Mitigation is required for construction of the spillway channel to the Rio Grande as it necessitated the removal of approximately 60 mature cottonwood trees. Mitigation entails replacing each mature tree with 10 saplings at nearby locations. Ten additional trees were required as the contractor went outside of the project boundary.	700 of 700 cottonwood saplings have been planted. As of December 2014, no replacement trees have been required. Monitoring for 2014 was delayed.	2017
SPD	SPK	American River Bridge, CA	75	100	64.2	64.2	Mitigation required included 50 acres of oak woodland habitat, 6 acres of riparian habitat, 2.5 acres of seasonal wetland and 14.2 acres of habitat for Federally listed Valley Elderberry Longhorn Beetle.	The Goethe site (14.2 acres of elderberry habitat) was planted in 2006, and the Rossmoor site (56 acres of oak woodland/riparian habitat) was planted in FY10. Mitigation bank credits for seasonal wetlands mitigation were purchased in 2008.	2017
SPD	SPK	American River - Common Features, CA	100	100	25.6	25.6	The majority of impacts and associated mitigation for this project relate to the Federally listed valley elderberry longhorn beetle (VELB). Because they are host to this species, impacts to elderberry shrubs require mitigation under the ESA. Mitigation for this project has been accomplished, in most cases, on the consolidated sites referred to as the Goethe mitigation sites.	All mitigation sites have been established and are in various stages of the 10 year monitoring period. Conditions of the Biological Opinion have been partially met, and once monitoring is complete they will have been fully met. 2014 survey reports have been accomplished and sent to appropriate resource agencies in September.	2015
SPD	SPK	American River - Folsom Outlet Modifications, CA (Joint Federal Project - Auxiliary Spillway)	100	100	16.8	16.8	<p>Mitigation for the Joint Federal Project Flood Risk Management impacts include 1.8 acres riparian habitat, 0.21 acres chaparral habitat, and 1.38 acres oak woodland.</p> <p>Mitigation for the Folsom Dam Modifications Staging Area includes 7.73 acres of habitat for the Federally listed Valley Elderberry Longhorn Beetle (VELB), 6.77 acres oak woodland, and 0.53 acres chaparral habitat.</p>	Initial maintenance at 11.5 is complete. Coordination is underway to turn the site over to the non-federal sponsor. Sailor Bar is also doing well. VELB monitoring occurred this year and reports were sent to appropriate resource agencies in August. No additional plantings occurred this year. Rossmoor Bar planting continues to establish, and surveys indicate that the site has high survival. County Parks continues to work with the Corps to establish a quality wildlife corridor along the American River Parkway. All sites will be turned over in 2015.	2017

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SPD	SPK	Glenn Calusa Dam Gradient Facility/ RM208, CA	100	100	34.3	34.3	(1) Short-term degradation to riverine habitat restored through natural processes following construction; (2) compensatory mitigation for loss or degradation of Shaded Riverine Aquatic (SRA) cover, riparian and elderberry habitat (supporting Federally listed Valley Elderberry Longhorn Beetle) by installing 34.3 acres of offsite and onsite riverine and riparian habitats (5.3 acres of shaded riverine aquatic cover habitat and 29 acres of riparian/elderberry habitat); and (3) providing suitable site conditions for natural reestablishment of emergent wetland habitat temporarily disturbed by construction.	34.3 acres of habitat mitigation has been accomplished (5.3 acres of revegetation at the project site was revegetated with riverine habitat and 29 acres of riparian floodplain terraces were planted near the project site). Mitigation monitoring has been completed, except for the Gradient Facility onsite area. High erosive flows caused the loss of 1.4 acres of riverine cover onsite. The GCID intake channel was planted in 2009 to compensate for loss of these plantings from erosion. However, monitoring indicates significant beaver damage to these plantings. Coordination with the local sponsor and USFWS is in process to determine if area should be replanted or bank credits purchased.	2015
SPD	SPK	Sacramento River Bank Protection, CA-Construction (FHR at River Mile 7.0L)	100	100	0.7	0.7	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.73 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). □	The site was replanted with 0.73 acres of native riparian vegetation for on-site mitigation in fall 2011. The first three years of monitoring have showed all performance criteria being met except percent cover of vegetation. In monitoring year 3, vegetation cover was 9% too low. The site is progressing well and monitoring will continue for at least another 2 years.	2017
SPD	SPK	Sacramento River Bank Protection, CA - Construction (LAR at River Mile 10.0L)	100	100	3.2	3.2	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.65 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). Purchased 33.6 valley elderberry longhorn beetle credits (1.39 ac). Purchase 1.19 acres of spawning habitat and monitoring for 3 years.	We purchased 33.6 valley elderberry longhorn beetle credits (1.39 ac) from River Ranch VELB Conservation Bank on 11 January 2013. Also purchased was 1.19 acres of spawning gravel credits from the CVPIA Spawning Gravel Augmentation Program for impacts to Chinook salmon and steelhead on 21 September 2012. The 0.65 acres site was constructed, hydroseeded and replanted and is currently undergoing monitoring. The site will continue to be monitored annually for the next 3 to 5 years until it can be turned over to the Department of Water Resources for Operations and Maintenance. The results from the third monitoring year show all performance criteria are being met except vegetation percent cover.	2017
SPD	SPK	Sacramento River Bank Protection, CA - Construction (SAC at River Mile 77.2L)	100	100	1	1	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.71 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). Purchased 6.6 valley elderberry longhorn beetle credits (0.27 ac). □	Purchased 6.6 credits (0.27 ac) for impacts to valley elderberry longhorn beetles from River Ranch VELB Conservation bank. After construction was completed, the 0.71 acres was replanted with a native hydroseed mixture and native seedlings. The on-site plantings will be monitored for 3-5 years. The results from the third monitoring year show all performance criteria are being met except vegetation percent cover which did not meet the criteria by 8%. The site will continue to be monitored for another 2 years.	2017

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SPD	SPK	South Sacramento County Streams, CA	100	85	433.5	433.5	Mitigation was required for GGS, Vernal Pool Fairy & Tadpole Shrimp, wetlands impacts, Burrowing Owl, & VELB habitat. Mitigation included: GGS- 8.7 acres for Unionhouse Creek to Franklin, 22.86 acres for Unionhouse Creek Franklin-Center Parkway, 4.8 acres for '98-2002 construction, .24 acres for 2004 design changes. Vernal Pool Preservation- for fairy and tadpole shrimp- 9.18 acres Seasonal wetland creation- 1.13 acres VELB- 7 transplants Burrowing Owl- 386 acres for impacts to various creeks	Monitoring of burrowing owls in 2014 found 5 owls using constructed burrows.  Bank credits were purchased to meet all other mitigation requirements.	2015
SPD	SPK	Yuba River Basin, CA (Marysville Ring Levee)	80	20	12.3	11.4	Total woodland mitigation required is 8.73 acres. In addition the US Fish and Wildlife Services' Biological Opinion (BO) requires that 2.5 acres be set aside for elderberry shrub transplants, 303 elderberry seedlings and 303 associated natives. In addition, 1.05 acres of GGS habitat were required for additional impacts during Phase 1 construction.	Woodland mitigation was successfully established in 2008 at the Anderson Mitigation site. Due to an excess of habitat created at the site, this project did not require any additional plantings. Successfully transplanted 34 elderberry shrubs out of Phase 2 project area to the mitigation site. These shrubs had a high survivorship when monitored in spring of 2013 and 2014 and will continue to be watered and monitored until 2015. The transplants are surviving and will be successful. Contract was awarded in 2013 to purchase 1.05 acres of giant garter snake (GGS) credits from the Gilsizer Slough South GGS Conservation Bank.	2015
SPD	SPL	Murrieta Creek, CA (Phase I)	100	100	5.8	5.8	Mitigation required includes revegetation of an unmaintained habitat "corridor" within the modified channel, vegetated with riparian cottonwood/willow plant communities. For Phase I, this habitat corridor is 70 feet wide and includes 2 4-foot tall "benches" that are periodically inundated based on the intensity of winter storms. Mitigation also includes revegetation of the channel side slopes with coastal sage scrub vegetation.	Revegetation of an approximately 3000 feet x 70 feet riparian corridor as well as the adjacent side slopes. As of July 2014, the project completed the 5th year of the monitoring period. Observations as of July 2014 noted successful establishment of the riparian corridor with high percent cover of natives and relatively low percent cover of non-natives, due to continued weeding efforts. Success criteria have been met for tree and shrub density, however other criteria such as tree canopy and native cover have not been met. Monitoring and evaluation of the site will continue for an additional year (2015).	2015
SPD	SPL	Nogales Wash, AZ	25	99	8.6	8.6	Mitigation entails on-site creation of 5.93 acres in Areas A through C with native cottonwood, willow, and mesquite, accompanied by an appropriate assemblage of native understory vegetation. Additional mitigation measures include preservation of 2.7 acres of dense native riparian vegetation. Off-site mitigation entails establishment of two Gila minnow refugia.	Local sponsor has acquired 2.7 acres of willow/cotton wood riparian habitat for preservation. Revegetation of 3.28 acres of willow/cotton wood riparian in Area A is complete. Area A is partially unsuccessful due to improper operation and maintenance of the irrigation system by local sponsor.	2020

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SPD	SPL	San Luis Rey River, CA	75	100	243.2	197.7	Mitigation is required for temporary and permanent impacts to waters of U.S. and State of California, and riparian and endangered species habitat. Endangered species (vireo, flycatcher) utilize riparian habitat; thus, endangered species and riparian habitat mitigation overlap in most areas, totaling 241 acres (ac), to be completed in phases, on- and offsite: Pre-construction (32ac); Phase 1 (100.2ac); Phase 2 (35.4ac); Phase 3 Year 1 (51.8ac); Phase 3 Year 5 (21.6ac). Flycatcher habitat is required (2.11ac). Provision of fish passage under bridges is required; boulders will be removed/reconfigured. An adaptive habitat management plan has been prepared.	Riparian habitat, including creation of 32 acres, was established onsite prior to and during construction. Habitat preservation for Phases 1-3 is complete. Restoration initiated in 2006 is near complete. Phase 1 onsite restoration requirement (85ac) was met in 2011. Review of Phase 2 and parts of Phase 3 onsite restoration areas indicate success criteria being met (2013). A bulk of the active restoration was completed in Winter 2013 and Spring 2014. Acquisition of offsite area by sponsor is complete (45.5ac); a Real Estate Plan and NEPA document is being finalized for the site. An adaptive habitat management plan was completed in Aug 2014; coordination with resource agencies is ongoing.	2018
SPD	SPL	Santa Ana River Mainstem, CA	80	85	3413	3291	Restore 92 acres salt marsh, 5 acres freshwater marsh, ~1,277 acres of riparian habitat (mostly through non-native vegetation removal, with monitoring), and 13.5 acres perennial stream; trapping of nest-predating cowbirds; wildlife corridor improvements; develop and implement Habitat Management Plan for 1,100 floodplain acres downstream of Prado Dam; and develop and implement Multi-Species Habitat Management Plan for 764 acre preserve area downstream of Seven Oaks Dam.	Full restoration (rest.) of 467 acres (ac) of riparian habitat (hab.); partial rest. of 900 ac of riparian hab.; plan of action for additional 165-215 acres (biomass removal will begin later this year); rest. of 92 ac of salt marsh and 5 ac of freshwater marsh; completed 11 ac perennial stream restoration in 2013 (began 5-year monitoring in 2014); ongoing management of 1,864 ac of river wash/floodplain hab.; and acquisition/conservation of 150 ac outside of those habitat management areas. Fairview Park has been completed and turned over to local sponsor. Continued treating a 250 ac arundo removal site in Norco (work began in 2010; non-natives under control, native hab. growing well).	2018
SPD	SPL	Santa Maria River, CA	80	100	86	86	The permanent loss of 8.99 acres of habitat due to project construction would be fully mitigated by establishing approximately 12 acres of native riparian habitat by removing non-native vegetation and then installing native plants. Another 74 acre area, temporarily disturbed by project construction, would be fully restored to native habitat consistent with natural conditions of the river.	Restoration of temporarily disturbed areas(86 ac)is nearly complete. Unsuccessful plots are being revegetated. The project site formerly consisted of non-native vegetation, an armor stone groin constructed to interrupt or slow sediment and flood movement along the levee toe),and barren areas. Restoration/mitigation includes riparian and upland plant communities as follow: Arroyo Willow Riparian ; Riparian Scrub ; Riparian Mulefat Scrub; Coyote Bush/Central Coast Scrub; and Active Channel. The site is meeting or exceeding expectations with help of winter rain in 2014. Plant survivability is high with over 70% native cover. The goal is 75% cover. Weed management continues.	2015
SPD	SPL	Tucson Drainage Area, AZ	100	100	5.5	5.5	Compensatory mitigation requirements include 5.5 acres of mitigation to replace 4.1 acres of desert riparian habitat that will be impacted by construction of the flood detention basin complex. Mitigation would be installed at Basins 1, 2 and 3.	Mitigation of the required 5.5 acres is complete. Per annual monitoring conducted in October 2014 at the end of the plant warranty period, % survival was 90%.	2017

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**January 22, 2015**

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mitigation Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mitigation Total Acres of Land Required</u>	<u>Mitigation Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
SPD	SPN	Oakland Harbor Deepening 50'	92	100	15	15	Proposed dredging activities would result in the direct removal and loss of eelgrass bed habitat. Mitigation for the potential loss of the eelgrass bed would consist of the establishment and long-term monitoring of an eelgrass bed with equal or greater spatial extent and density as that which already exists.	100% of the dredged material has been placed in the Middle Harbor area. Although 0 acres of habitat have been fully restored, mitigation activities accomplished in 2012 include additional material settling and the beginning of contour shaping. Funding for the project was not received in 2013 or 2014. 2015 funds will be used to complete the final shaping.	2018
SPD	SPN	Upper Guadalupe River, CA	25	2	21	21	Restoration of stream habitat and the riparian zone in six reaches of the Upper Guadalupe River to compensate for construction impacts. Restoration of the first reach to be constructed also includes fluvial geomorphic reconstruction of the stream channel. Mitigation plantings for the project amount to 21 acres of riparian forest planting and replacement of lost jurisdictional wetland.	1.8 acres of riparian zone restoration plantings have been accomplished in the first reach to be constructed. Stream restoration areas in this reach have had construction activity (channel and floodplain reconfiguration) but minimal planting yet so are not complete. Zero acres of stream habitat and riparian zone restoration have been accomplished in the remainder of the project as these portions have had no construction yet. Mitigation work in these reaches will consist of riparian forest planting and aquatic habitat enhancement with channel modification and placement of large woody debris. No construction or mitigation occurred in 2013-2014.	2024
SWD	SWF	Central City, Upper Trinity River Basin, TX	0	5	148.6	0	Mitigation requirements include development of 1.43 acres of emergent wetland, establishment of 76.2 acres of riparian woodland, and establishment of 45.5 acres of upland forest.	Mitigation has not started. Mitigation is onsite and project features have to be constructed before project features can be completed. No construction occurred in FY14.	2025
SWD	SWF	Dallas Floodway Extension, TX	50	25	1540.1	1540.1	Acquisition, planting, and management of 1,179 acres of additional project lands.	Several mitigation tracts that were to be certified for Dallas Floodway Extension have been withdrawn at the local sponsors request. During FY14, other potential tracts were surveyed to determine if they would be appropriate for mitigation. Assessment of these properties will continue into FY15. In FY 14, 14 additional test sites were added to the existing eight sites for full-scale plantings. Plant production continues for FY 15 plantings. Due to inadequate success of the plantings in the mitigation plantings an adaptive management approach was developed in 2012. Test plantings utilizing the adaptive management approach were implemented in 2013.	2025

**Table 2. Status of Projects with Incomplete Compensatory Mitigation**

**January 22, 2015**

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mitigation Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mitigation Total Acres of Land Required</u>	<u>Mitigation Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
SWD	SWF	Waco Lake, TX	60	100	1540.3	1540.3	Acquire and reforest approximately 1000 acres of land. Reforest another 540 acres for a total of 1540 acres. This would include creating a 174 acre wetland.	FY14: The City planted/replanted 74 acres in mitigation site MX-3; however, survival was very low (~10%) due to continued drought. No other sites have met the success criteria. 174 acres of Emergent Wetlands have been established and success has been met. 220 acres of Riparian Woodlands have been established and the success criteria have been met. A total of 394 acres have been completed. An Additional 186 acres were planted in FY11 and are doing well, but have not meet the success criteria.	2015
SWD	SWG	Brays Bayou, TX	46	80	23.6	23.6	Construction of 27.9 acres of wetlands in Willow Waterhole Detention Basin in project area. However, as of Nov 2014, only 23.6 acres of wetlands have been impacted by project construction. 4.3 acres of wetlands identified in a potential disposal area were not impacted because the disposal area is now not needed for the project and will not be constructed. As such, HCFCD has coordinated a reduction in mitigation from 27.9 acres to 23.6 acres. This plan is described in an attached summary update from HCFCD.	10.82 acres of wetlands at Willow Waterhole Detention Basin have been constructed. The revised mitigation requirement is for construction of 23.6 acres of wetlands.  Construction by HCFCD on the detention basin continued in 2014, but it is still incomplete. Construction project features range from 50 to 100% complete. Wetland development will follow construction completion in the various basins. A masterplan for the entire basin including native prairie mitigation not required for the Federal project has been developed by the NFS and can be viewed at <a href="http://www.projectbrays.org/docs/reports/PrairieManagement%20Plan.pdf">http://www.projectbrays.org/docs/reports/PrairieManagement%20Plan.pdf</a> .	2020
SWD	SWT	Canton, OK, Dam Safety	95	90	220	220	1. Relocation of existing prairie dog town impacted by project construction. 2. Replacement of lands licensed to OK Dept of Wildlife Conservation and impacted by project construction.	Acquisition of lands similar in function to those impacted has been accomplished and acquired additional lands have been turned over to the State of OK under license for wildlife management. Acquisition is complete and only minor improvements such as a water well installation remain to be accomplished at appropriate time in project construction schedule. Prairie dog town was successfully relocated prior to construction activities thus avoiding direct impacts to prairie dogs in the project area. All remaining minor mitigation items cannot be initiated or completed until project construction is complete as they are within construction footprint.	2017

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January 23, 2015

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LRD	LRL	Olmsted Lock and Dam, OH	100	Purchase of mitigation lands, increased water management capability on Ballard Wildlife Management Area (WMA), KY, monitoring of bald eagles and waterfowl populations, monitoring of freshwater mussel populations, support of development of restoration and propagation methodologies for mussels, and restoration of former clay mine site that serves as large part of construction site.	12-DEC-13 : -US Fish and Wildlife Service, Kentucky Field Office -Senior Biologist	<p>The downstream mussel population is monitored annually by ERDC. Mussels have been reduced somewhat by impacts of the zebra mussel and droughts. Typically droughts are very favorable for mussel recruitment, as is often documented in mussel population data 3 to 5 years after the event.</p> <p>Bald eagle nesting has increased throughout the area of confluence of the Ohio and Mississippi Rivers, including on mitigation lands. Both summer and winter populations have increased. Breeding pairs may come from Northern or Southern Bald eagle populations.</p> <p>Migratory birds are monitored by KDFWR. Waterfowl numbers have increased; however, the composition of waterfowl has changed since initiation of the project. Far fewer migratory geese visit the region due to milder winters in the more northern latitudes. These have been replaced by the overall increase in migratory ducks as documented by the USFWS. This increase has been facilitated by both management practices and by favorable nesting conditions for many years. None of this change is believed to be in response to the construction of the locks and dam.</p>	High	2023	None provided.
MVD	MVK	Mississippi River Levees-Construction, AR, IL, KY, LA, MO, & TN	98	The Vicksburg District was required to reforest 5,200 acres of bottom land hardwoods.	<p>01-DEC-14 : -Mississippi Department of Environmental Quality, Office of Pollution Control -Manager Water Quality Certification Branch</p> <p>12-MAR-14 : -US Fish and Wildlife Service, Jackson Mississippi Ecological Field Office - MS -Jackson Mississippi Ecological Field Office - MS</p>	50% survival has been met on planted tracts since 1994	High	2025	None provided.

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MVD	MVK	Yazoo Basin, Yazoo Backwater Maintenance, MS	66	It was determined that 12,500 acres of frequently flooded agricultural lands were to be purchased in fee from willing sellers and reforested to create bottomland hardwoods.	15-JUL-14 : -Mississippi Department of Wildlife, Fisheries, and Parks, Wildlife Division -Government Liaison	Seedling survival exceeds 50%	High	2035	None provided.
MVD	MVM	St. Francis Basin Construction, MO	98	Acquire and manage 13,500 acres of bottomland hardwood forest habitat.	14-JAN-14 : -Arkansas Game and Fish Commission, AGFC Central Office -Deputy Director  14-JAN-14 : -Arkansas Natural Heritage Commission, Arkansas Department of Natural Heritage -State Historic Preservation Officer  14-JAN-14 : -Missouri Department of Conservation, Southeast Regional Office - Conservation Agent	The mitigation site has developed generally as anticipated.		2020	None provided.
MVD	MVN	Mississippi River Levees-Construction, AR, IL, KY, LA, MO, & TN	83	Under the 1998 Mississippi River Levee program (MRL) MRL FSEIS, the New Orleans District was required to mitigate for 24 acres of bottomland hardwood habitat.  For the 2011 Operation Watershed effort, the New Orleans District is responsible for mitigation of 34.6 acres, which will be reported for each project as credits are secured within the appropriate watershed mitigation banks.	08-MAY-14 : -US Fish and Wildlife Service, Lafayette Area Office -USFWS Staff	The mitigation site has developed generally as anticipated.	High	2016	None provided.

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MVD	MVP	Mississippi River - Construction MN & WI (Mississippi River: Lock and Dam 3 Navigation Safety and Embankments)	100	Interagency coordination determined that given the limited opportunities to provide functional mitigation features for affected channel border aquatic habitat in a cost effective manner, resource agencies concurred that an acceptable mitigation approach is to focus primarily on bottomland hardwoods restoration combined with freshwater marsh features. Acquisition and development of 313 acres is required.	20-MAY-14 : -US Forest Service, St Paul Field Office -Plant Pathologist  03-APR-14 : -Department of Natural Resources, Department of Natural Resources -Area Forester and Area Biologist  03-APR-14 : -US Fish and Wildlife Service, Upper Mississippi Refuge -Refuge Managers and Lead Biologist	Grading, ditch plugs and re-routing of previously-modified drainage channels were successful in restoring natural hydrologic regime to key portions of the mitigation area. A total of 313 acres have been direct seeded or planted with seedlings or cuttings to initiate forest restoration. Initial monitoring indicated direct seeding and seedling plantings have resulted in a very successful response and growth with over 2,500 live trees per acre on 99 percent of planted lands. Supplemental plantings were completed on areas with less than expected results as part of adaptive management.  2013 and 2014 monitoring results indicate that revegetation efforts are on track to meet criteria for success by 2022. It will take several more years to confirm that this effort is proceeding correctly, then success rating can be changed to high.	Medium	2022	None provided.
MVD	MVR	Mississippi River Dredged Material Management Plan, IL (Pool 13 Site Plan for the Sabula Reach (includes 4 dredge cuts))	50	Twelve acres of island creation at two locations (roughly 6 acres of island at each site). The District anticipates approximately 6 to 10 acres of wetlands would develop within the downstream "coves" or "shadows" of the islands through sediment accumulation and other natural processes. The banks of the islands would be armored with riprap to prevent erosion and to provide additional aquatic habitat (e.g., catfish spawning areas).	13-AUG-14 : -Iowa Department of Natural Resources, Department of Natural Resources - Mississippi River Biologist  13-AUG-14 : -US Fish and Wildlife Service, Ecological Services -Big River Planner & Biologist	One of 2 islands has been built. The second island will be built when a dredge placement site is needed, perhaps in 2020. Emergent vegetation has successfully grown on the first island. Some aquatic vegetation is beginning to form at the island edges. This island is a popular duck nesting area, heron foraging area, and pelican loafing island.	High	2025	None provided.

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MVD	MVR	Des Moines & Raccoon Rivers, IA	100	6.4 acres of upland forest 0.4 acres of bottomland forest 2.8 acres of emergent wetland 1.2 acres of herbaceous upland buffer 2.7 acres of open water	17-JUL-14 : - Polk County Conservation Board IA -Parks and Natural Areas Planning Administrator	Moderate to high ecological success to date. The areas were either seeded or planted. The contractor who planted the Chichaqua site did not conduct maintenance during the 2012 drought. In 2013 the Contractor replanted the dead trees. Spring rains helped invigorate the wetlands; the site has not yet reached its full potential. 2014 monitoring results indicate a strong improvement in the wetland condition. All success criteria have been met for one year.	High	2017	None provided.
MVD	MVS	Chain of Rocks, IL	99	Mitigation will consist of the development of 146.4 acres of habitats, including 134.7 acres of wetlands (92.4 acres forested and 42.3 acres herbaceous) and 11.7 acres of nonwetland bottomland forest.	05-NOV-14 : -Illinois Department of Natural Resources, Ecosystems and Environment Division -Interagency Wetland Program Manager  05-NOV-14 : -US Fish and Wildlife Service, Marion Illinois SubOffice -Fish and Wildlife Biologist	As of 2013, at Site 4 prairie was established successfully and the water control structure works as intended, but the amount of wet prairie was less than desired due to site soil constraints. At Mitigation Areas 3A-3C, monitoring to date shows that survival of tree seedling plantings has been successful, but the attempt to enhance surface hydrology at 3C was partially successful due to the small size of the source watershed. At Chouteau Island, monitoring to date shows that the amount of wetlands established in prior cropland by enhancing site hydrology exceeded expectations; survival of tree seedlings was below 80% due to hot dry summers after planting, and the establishment of native herbaceous plant species in the lowest areas at the site through natural succession was successful.	Medium	2022	None provided.

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NAD	NAN	Green-Brook, NJ (Segment U)	40	This Mitigation is for the Bound Brook construction element of the overall project; (Segments A, N, R1, R2, T, and U) and a portion of structural project elements proposed in Middlesex County that could not be mitigated on-site. The mitigation plan was to provide in-kind mitigation for 21 acres of wetlands impacted by the Green Brook Flood Control Project. The project also includes the enhancement of approximately 32 acres of existing forested wetlands, 6 acres of scrub-shrub wetland, 5 acres of emergent wetland and preservation of 6 acres of palustrine, 6 acres of upland forest and 27 acres of riparian forest and 800ft of an unnamed stream.	19-SEP-14 : -New Jersey Department of Environmental Protection, New Jersey Department of Environmental Protection -Staff-Div of Land Use	A wetland delineation conducted in April 2014 verified the establishment of hydric soils and wetland hydrology. Are currently in the process of formulating and evaluating adaptive management measures related to the establishment of native wetland vegetation. An updated adaptive management plan is anticipated in Dec 2015.	Medium	2020	None provided.

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NWD	NWO	Western Sarpy/Clear Creek, NE	75	40 acres wet meadow mitigation to offset immediate impact to 8.29 acres of wetlands and unknown predicted future impacts to wetlands. Creation of chutes/backwaters to connect rivers with floodplain.	11-JUN-14 : -Nebraska Game and Parks, Nebraska Game and Parks -  11-JUN-14 : -US Fish and Wildlife Service, Grand Island NE	Results from 2014 monitoring indicate that approximately 70% of wetland mitigation areas were meeting success criteria, which is great after only three growing seasons. Vegetation density increased dramatically from 2013. The wetland was flooded from October 2013 to February 2014 in an attempt to control cottonwood growth. Some of the cottonwoods were killed. The increased duration of inundation did kill most of the annual upland weeds, which allowed planted hydrophytes to flourish. There are some areas that appear to not have been graded correctly and are higher in elevation than most of the wetlands. Although, not intentional, these areas do add vegetative and habitat diversity as they represent small "islands" of diversified communities at the mitigation site.	Medium	2019	None provided.
NWD	NWP	Columbia River Channel Improvements, WA - Navigation (Chumbley)	100	Deepening of the Columbia River federal navigation channel resulted in a loss of upland habitat due to upland disposal of dredged material. A total of 388 acres was acquired to conduct 371 acres of habitat development improvement, or maintenance at three locations, to replace the loss of 172 acres of agricultural lands, 50 acres of riparian habitat and 16 acres of wetland habitat. At Chumbley, 71 acres of pasture land is required to be converted to riparian forest by planting native trees and shrubs.	07-OCT-14 : -National Oceanic and Atmospheric Administration (NOAA), Oregon State Habitat Office -Supervisory Fisheries Biologist  07-OCT-14 : -Oregon Department of Environmental Quality, Portland Office - Columbia River Coordinator  07-OCT-14 : -US Fish and Wildlife Service, Oregon Fish and Wildlife Office -Fish and Wildlife Biologist  07-OCT-14 : -Washington Department of Ecology, Southwest Regional Office -Shoreline Management Specialist	The Chumbley site was planted in 2009 has been monitored routinely. So far, the riparian planting has been extremely successful with a 95% or greater survival of trees and shrubs. Currently trees are generally more than 8 feet tall and healthy. Blackberry and reed canary grass has been treated on the edges of the plantings, resulting in a low occurrence of these undesirable plants. Mitigation has been successfully completed.	High	2014	None provided.

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NWD	NWP	Columbia River Channel Improvements, OR & WA - Navigation (Cottonwood Island)	100	Deepening of the Columbia River federal navigation resulted in a loss of upland habitat due to upland disposal of dredged material. At Cottonwood, 96 acres of pasture is required to be planted to riparian forest, 14 acres of wetland are to be enhanced and expanded, and 20 acres of mature riparian forest is to be protected.	07-OCT-14 : -National Oceanic and Atmospheric Administration (NOAA), Oregon State Habitat Office -Supervisory Fisheries Biologist  07-OCT-14 : -Oregon Department of Environmental Quality, Portland Office - Columbia River Coordinator  07-OCT-14 : -US Fish and Wildlife Service, Oregon Fish and Wildlife Office -Fish and Wildlife Biologist  07-OCT-14 : -Washington Department of Ecology, Southwest Regional Office -Shoreline Management Specialist	Completed wetland development at Cottonwood Island is providing excellent habitat for waterbirds, waterfowl, beaver and other wildlife. There are some areas at Cottonwood currently being treated for unwanted reed canary grass and blackberry growing in-between the recently planted areas. Wetlands are currently functioning as intended with mostly native wetland plants present. Riparian plantings are growing successfully and many are greater than 6 feet tall and healthy.	Medium	2020	None provided.
NWD	NWP	Columbia River Channel Improvements, OR & WA - Navigation (Webb)	100	Deepening of the Columbia River federal navigation channel resulted in a loss of upland habitat due to upland disposal of dredged material. At Webb, 96 acres of pasture land is required to be managed as short grass pasture for Canada geese, and 74 acres converted to permanent wetlands for waterfowl and other wildlife.	07-OCT-14 : -National Oceanic and Atmospheric Administration (NOAA), Oregon State Habitat Office -Supervisory Fisheries Biologist  07-OCT-14 : -Oregon Department of Environmental Quality, Portland Office - Columbia River Coordinator  07-OCT-14 : -US Fish and Wildlife Service, Oregon Fish and Wildlife Office -Fish and Wildlife Biologist  07-OCT-14 : -Washington Department of Ecology, Southwest Regional Office -Shoreline Management Specialist	At Webb, the 74 acre wetland development is complete and partially successful at providing wildlife habitat. 96 acres of shortgrass pasture management has been successful for providing good goose habitat as well as black-tailed and ESA-listed Columbia white-tailed deer habitat and is maintained annually for these species.	Medium	2020	None provided.

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NWD	NWS	Howard Hanson Dam, WA (Additional Water Storage Project (Phase 1 only))	90	Mitigation consists of: 1. instream habitat restoration through culvert replacement engineered logjams and side channels. 2. riparian planting, thinning, protection and conservation, management of forest, pasture and emergent marsh. 3. creation of elk forage habitat.	27-JUN-14 : -National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service Northwest Region - Fisheries Biologist  27-JUN-14 : -US Fish and Wildlife Service, Ecological Services - WA -Biologist  27-JUN-14 : -Washington Department of Fish and Wildlife, Habitat -Biologist  27-JUN-14 : - Muckleshoot -Fisheries Biologist	Wildlife - approximately 118 acres of habitat has been created and is being managed as elk pasture. Creation of emergent elk pasture land has not developed as planned. All elk sites are being monitored to better understand conditions needed to establish emergent elk pasture.  Approximately 238 acres of forest land are being managed for fish and wildlife. Vegetation composition will be monitored to assure that appropriate habitat is established.  Instream habitat structures have been completed (~12.7 acres), as well as riparian habitat. For the fish mitigation sites, preliminary monitoring has determined that on average the sites are performing as expected.	Medium	2022	None provided.

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POD	POA	(CG) UNALASKA HARBOR	100	Compensatory in-kind mitigation is required to replace nearshore and intertidal habitat for sea otters, seals, waterfowl, and benthic communities by creating 30 rubble/boulder reef structures comprising approximately 0.2 acres in the intertidal and nearshore subtidal habitat lost during harbor construction. Monitoring is required to determine colonization by key marine organisms. Monitoring is also required to determine whether the project affects movement, abundance, or distribution of Steller's eiders or northern sea otters or is otherwise causing a taking of those species.	29-OCT-14 : -National Oceanic and Atmospheric Administration (NOAA), NMFS AK Regional Office Anchorage, AK -Office Supervisor  15-OCT-14 : -US Fish and Wildlife Service, Anchorage Field Office -ESA and Habitat Conservation supervisors	Success has been achieved. Colonization of the constructed reefs was monitored in the summer of 2011, summer 2012, and again in summer 2013. Results of the colonization monitoring indicates that mitigation is successful. Post-construction monitoring of sea birds and mammals began during November 2012 and was completed in December 2013. Abundance is greater than or equal to pre-construction levels. Mitigation has been successfully completed.	High	2014	None provided.

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POD	POA	AKUTAN HARBOR	70	Prior to construction capture and relocate Dolly Varden in the stream to avoid construction impacts. Post construction, monitor salinity in the stream to ensure that the project has not caused a hydrologic imbalance in the watershed. Also monitor presence/absence of marine mammals and sea birds to determine if they return to the area. If any substantial adverse effects are identified, the Corps, with consultation with USFWS and other appropriate agencies, will recommend appropriate measure and associated monitoring. Additionally, a 41.7 acre conservation easement of high value habitat is required.	12-NOV-14 : - Aleutians East Borough - Administrator  07-NOV-14 : -US Fish and Wildlife Service, Anchorage Field Office -ESA and Habitat Conservation supervisors  29-OCT-14 : -National Oceanic and Atmospheric Administration (NOAA), NMFS AK Regional Office -Office Supervisor	The catch and release of Dolly Varden was successful. No additional monitoring of Dolly Varden is required as this was a one time request of the Alaska Fish and Game to protect the existing population. The conservation easement of the watershed within the area of the harbor is anticipated to be successful as well as the use of the harbor area by marine mammals and sea birds. Thus in the end, success is anticipated to be high.	High	2015	None provided.

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SAD	SAS	Brunswick Harbor Deepening GA	100	<p>The District is required to mitigate for impacts to 34.5 acres of essential fish habitat. This impact resulted from the creation of a beneficial use dredge material island (sometimes referred to as bird island) in St. Simon's Sound. The bird island has some self-mitigation components by providing EFH habitat by associated oysters and mudflats resulting from the island creation in addition to providing rare bare ground bird nesting acreage.</p> <p>The District is also committed to provide mitigation for impacts to 5.9 acres of salt marsh from the turning basin enlargement and 1 acre of salt marsh from future maintenance activities at Andrew's Island.</p>	30-SEP-14 : -Georgia Department of Natural Resources, Coastal Resources Division - Federal Consistency Coordinator & Coastal Resources Specialist	<p>Percent cover for Andrew's Island is 95% in the third year exceeding the target percentage. 12 mitigation sites were surveyed and found to have approximately 17.8 acres of marsh grass established. We have a commitment to create 18.5 acres. If at any time it appears an area is not fulfilling the mitigation criteria consultation will be initiated and a plan developed for rectifying the failure.</p> <p>Bird island has been evaluated and considered 100% success but will be monitored annually to ensure all EFH needed credits continue to be achieved. Oyster and intertidal mudflat acreage (resulting from creation of bird island) are likely to change over time and will need to be monitored annually to determine what EFH credits are present. Bird Island was not monitored in FY14 due to lack of O&amp;M funds and survey personnel but it is intended to be surveyed this winter.</p>	High	2016	Ditch or fill area holding water at Outfall Pipe 5, investigate a break water or some type of weir modification at Outfall Pipe 3 to reduce erosion.

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SAD	SAS	Savannah Harbor Disposal Areas, GA & SC	100	Restore 3.44 acres of salt marsh by excavating 5.1 acres of fill from areas that historically supported salt marsh. Allow the area to naturally revegetate, while monitoring for erosion and percent coverage. If erosion occurs, removing wetlands located between the mitigation site and the Savannah River, the Corps will deposit rocks to protect the Savannah River side of the mitigation site.	01-DEC-14 : -South Carolina Department of Health and Environmental Control, Ocean and Coastal Resource Management -Wetland Program Coordinator  28-NOV-14 : -Department of Transportation, DOT -Waterways Program Manager	As anticipated survey results from 2014 revealed the area is losing marsh and is now behind the 80% target with only ~71% coverage achieved. The District is presently analyzing the wave energy against the site. Once the energy level is determined a design for stabilization of the site will be prepared. A funding request for necessary construction will be initiated after the design is established. Once funded, the construction will be completed.  Survey results showed a 100% success to date (=80% coverage by 2012) but this is not likely to be sustained due to the high degree of erosion documented. Monitoring should continue as it is evident this area has erosion issues and accumulation of debris, both causing negative impacts to vegetation.	Medium	2016	None provided.

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SAD	SAW	Wilmington Harbor, NC - 96 Act	100	<p>Island 13 - Restoration of 30.4 acres primary nursery (including 3.4 acres intertidal marsh) on Cape Fear River dredged material disposal island 13.</p> <p>Prevention of Degradation (POD) Lands - Acquisition of 700 acres riparian wetland habitat buffer on NE Cape Fear River, including river shoreline &amp; two tributaries (Tony's and Lagoon Creeks), which serve to protect 29 acres estuarine primary nursery area.</p> <p>Fish passage at Lock and Dam #1 on the Cape Fear River - Construction of rock rapids on downstream face of dam to better aid anadromous fish passage upstream. Since cumulative &gt;80% passage was not met after 2yrs of monitoring,</p>	<p>25-SEP-14 : -North Carolina Division of Marine Fisheries, DMF Headquarters -Fisheries Biologist</p> <p>25-SEP-14 : -North Carolina State University, College of Agriculture and Life Sciences - Fisheries Biologist</p> <p>25-SEP-14 : -North Carolina Wildlife Resources Commission, Headquarters - Fisheries Biologist</p> <p>25-SEP-14 : -US Fish and Wildlife Service, Ecological Field Services Office, Raleigh - Wildlife Biologist</p> <p>25-SEP-14 : - Cape Fear River Watch - NC - River Keeper</p>	<p>Complete success at Island 13 was achieved and consultation completed as of September 2005. The North Carolina Division of Marine Fisheries (NCDMF) determined the Island 13 system displayed functional characteristics similar to natural marshes of the same type.</p> <p>POD lands in their entirety were acquired as of June 10, 2011. This is a preservation component of the mitigation plan.</p> <p>Fish Passage construction at Lock and Dam #1 on the Cape Fear River was completed as of November 2012. After 2013 and 2014 monitoring, 80% of flathead catfish passed Lock and Dam #1; but only 50-70% of shad and 21-23% of striped bass passed. These passage metrics are below the desired &gt;80% cumulative passage goal. The rapids configuration will be modified to improve passage. Modification will be developed in coordination with all interested parties.</p>	High	2016	None provided.
SPD	SPK	American River - Bridge, CA	75	<p>Mitigation required included 50 acres of oak woodland habitat, 6 acres of riparian habitat, 2.5 acres of seasonal wetland and 14.2 acres of habitat for Federally listed Valley Elderberry Longhorn Beetle.</p>	<p>12-AUG-14 : -US Fish and Wildlife Service, Crops Project Branch -Chief, Corps Projects Branch</p>	<p>A portion of the Goethe East Site (14.2 acres) of valley elderberry longhorn beetle habitat was replanted in 2012. Surveys since then indicate that, in general, survival is adequate. The Rossmoor Bar (oak woodland and riparian - 56 acres) site is progressing well with very good plant survival. This site will be turned over in 2015.</p>	High	2017	None provided.

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SPD	SPK	American River - Common Features, CA (American River Common Features )	100	The majority of impacts and associated mitigation for this project relate to the Federally listed valley elderberry longhorn beetle (VELB). Because they are host to this species, impacts to elderberry shrubs require mitigation under the ESA. Mitigation for this project has been accomplished, in most cases, on the consolidated sites referred to as the Goethe mitigation sites.	25-SEP-14 : -US Fish and Wildlife Service, Sacramento Field Office -Field Supervisor  □	All mitigation has been implemented for the Common Features Project. The Goethe site has increased in success due to additional plantings this year, with elderberry at 61% survival and other native plants at 108% survival. The Cal Expo site is over at 100% survival for both elderberry and native species with natural regeneration and volunteers. Site 11.5 has continually declined, however, with 2014 survey revealing that the site is far below survival requirements. Monitoring and reestablishment measures will continue, as required, to the end of the required 10 year period.	High	2014	None provided.
SPD	SPK	American River - Folsom Outlet Modifications, CA (Joint Federal Project - Auxiliary Spillway)	100	Mitigation for the Joint Federal Project Flood Risk Management impacts include 1.8 acres riparian habitat, 0.21 acres chaparral habitat, and 1.38 acres oak woodland.  Mitigation for the Folsom Dam Modifications Staging Area includes 7.73 acres of habitat for the Federally listed Valley Elderberry Longhorn Beetle (VELB), 6.77 acres oak woodland, and 0.53 acres chaparral habitat.	22-SEP-14 : -US Fish and Wildlife Service, Corps Projects Branch -Chief, Corps Project Branch	Mitigation at site 11.5 is complete, and it will be turned over to the sponsor in 2015. Sailor Bar is on track to be successful based on recent surveys and survival rates, increased density and plant vigor. Plants will be watered for another 2 years. Plant counts at Rossmoor Bar (1.38 acres of oak woodland) indicate that this site will also be very successful.	Medium	2017	None provided.

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SPD	SPK	Sacramento River Bank Protection, CA (FHR at River Mile 7.0L)	100	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.73 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). <input type="checkbox"/>	15-MAY-14 : -California Department of Fish and Wildlife, Sacramento Office -Senior Environmental Scientist  15-MAY-14 : -California Department of Water Resources, California Department of Water Resources -Environmental Scientist  15-MAY-14 : -National Oceanic and Atmospheric Administration (NOAA), Sacramento NMFS Office -Levee Program Coordinator  15-MAY-14 : -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist	Monitoring occurred in fall of 2012 and summer of 2013. The site is performing well and meeting most expectations so far, with the exception of the percent cover.  2013 Results (Monitoring Year 2): Percent Cover - 34% - Performance standard not met Invasive Species Abundance - 3% - Performance standard met Canopy Cover - 29% - Performance standard met	Medium	2017	None provided.

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SPD	SPK	Sacramento River Bank Protection, CA (LAR at River Mile 10.0L)	100	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.65 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). Purchased 33.6 valley elderberry longhorn beetle credits (1.39 ac). Purchase 1.19 acres of spawning habitat and monitoring for 3 years.	<p>15-MAY-14 : -California Department of Fish and Wildlife, Sacramento Office - Environmental Scientist</p> <p>15-MAY-14 : -California Department of Water Resources, California Department of Water Resources -Senior Environmental Scientist</p> <p>15-MAY-14 : -National Oceanic and Atmospheric Administration (NOAA), Sacramento NMFS Office -Levee Program Coordinator</p> <p>15-MAY-14 : -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist</p>	<p>This site was built 3 years ago. Annual monitoring occurred in fall of 2012, summer of 2013, and summer of 2014. It will continue to be monitored for at least two more years because it is not consistently meeting all criteria. The site did not meet the native vegetation cover criteria this year. That could be due to the high amount of canopy cover providing too much shade, or effects of the prolonged drought the area has been experiencing.</p> <p>2014 Vegetation Results (Monitoring Year 3): Percent Cover - 32% - Performance standard not met Invasive Species Abundance - 0% - Performance standard met Canopy Cover - 94% - Performance standard met</p> <p>2013 Vegetation Results (Monitoring Year 2): Percent Cover - 62% - Performance standard met Invasive Species Abundance - 1% - Performance standard met Canopy Cover - 28% - Performance standard met</p>	Medium	2017	None provided.

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SPD	SPK	Sacramento River Bank Protection, CA (Sacramento River at River Mile 77.2L)	100	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.71 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). Purchased 6.6 valley elderberry longhorn beetle credits (0.27 ac).  <input type="checkbox"/>	15-MAY-14 : -California Department of Fish and Wildlife, Sacramento Office - Environmental Scientist  15-MAY-14 : -California Department of Water Resources, California Department of Water Resources -Senior Environmental Scientist  15-MAY-14 : -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist	First three years of monitoring have been completed. The site is progressing well and meeting most expectations so far. This year, percent cover did not meet the criteria by 8%.  2014 Results (Monitoring Year 3): Percent Cover - 42% - Performance standard not met Invasive Species Abundance - 17% - Performance standard met Canopy Cover - 59% - Performance standard met  2013 Results (Monitoring Year 2): Percent Cover - 54% - Performance standard met Invasive Species Abundance - 3% - Performance standard met Canopy Cover - 39% - Performance standard met	Medium	2017	None provided.

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SPD	SPK	South Sacramento County. Streams, CA	100	Mitigation was required for Giant Garter Snake (GGS) , Vernal Pool Fairy & Tadpole Shrimp, wetlands impacts, Burrowing Owl, & Valley Elderberry Longhorn Beetle (VELB) habitat. Mitigation included: GGS- 8.7 acres for Unionhouse Creek to Franklin, 22.86 acres for Unionhouse Creek Franklin-Center Parkway, 4.8 acres for '98-2002 construction, .24 acres for 2004 design changes. Vernal Pool Preservation- for fairy and tadpole shrimp- 9.18 acres Seasonal wetland creation- 1.13 acres VELB- 7 transplants Burrowing Owl- 386 acres for impacts to various creeks	06-OCT-14 : -California Department of Fish and Wildlife, Sacramento Office -CDFW Staff  06-OCT-14 : -US Fish and Wildlife Service, Stone Lakes National Wildlife Refuge- CA - Stone Lakes NWF Staff	Mitigation bank credits were purchased for all mitigation other than burrowing owl. Purchase of mitigation credits was completed on the following dates: GGS- Feb 2009, vernal pool- Sep 2009, wetlands- Jul 2010, and VELB- Jun- 2003.  Mitigation success for burrowing owls is being assessed by monitoring occupation of constructed burrows which is documented in the yearly monitoring report. In 2014, 4 owls were observed utilizing constructed burrows. There is no management necessary at this time.	High	2015	Continue monitoring and mowing around constructed burrows

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SPD	SPK	Yuba River Basin, CA (Marysville Ring Levee)	80	Total woodland mitigation required is 8.73 acres. In addition the US Fish and Wildlife Services' Biological Opinion (BO) requires that 2.5 acres be set aside for elderberry shrub transplants, 303 elderberry seedlings and 303 associated natives. In addition, 1.05 acres of GGS habitat were required for additional impacts during Phase 1 construction.	16-JUL-14 : -California Department of Fish and Wildlife, Sacramento Office -Staff  16-JUL-14 : -US Fish and Wildlife Service, US Fish and Wildlife Service, Corps Projects Branch, Sacramento- CA -Staff	The mitigation site is thriving with multiple species of riparian and upland trees and shrubs including elderberry. The site received 34 elderberry transplants from Phase 2 in February 2012. There are no success criteria, but elderberry shrubs were successfully moved off site and will be maintained at the mitigation site for three years.	High	2015	None provided.

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SPD	SPL	Murrieta Creek, CA (Phase I)	100	Mitigation required includes revegetation of an unmaintained habitat "corridor" within the modified channel, vegetated with riparian cottonwood/willow plant communities. For Phase I, this habitat corridor is 70 feet wide and includes 2 4-foot tall "benches" that are periodically inundated based on the intensity of winter storms. Mitigation also includes revegetation of the channel side slopes with coastal sage scrub vegetation.	06-MAY-14 : -California Department of Fish and Wildlife, Inland Deserts Region -Staff Environmental Scientist  18-MAR-14 : -California Water Resources Control Board, San Diego -Environmental Scientist  18-MAR-14 : -US Environmental Protection Agency (EPA), San Francisco -Environmental Protection Specialist  18-MAR-14 : -US Fish and Wildlife Service, Palms Spring Fish and Wildlife Office -Chief, San Bernardino and Riverside County	1) Mitigation required: revegetation of an unmaintained habitat "corridor"  Year 4 Success: high percent cover of native vegetation in habitat corridor (average 79%). Non-native cover 12% on the terraces  Year 5 Success: high percent cover of native vegetation in the habitat corridor (average 77%). Non-native cover decreased to 5%. Tree and shrub densities meet the success criteria; native cover did not meet success criteria.  2) Mitigation required: revegetation of the channel side slopes with coastal sage scrub vegetation  Year 4 Success: high percent cover of native vegetation on side slopes (average 82%). Non-native cover near zero on the slopes.  Year 5 Success: Native cover decreased to 71%. Non-native cover increased to 1.8%. Site did not achieve success criteria.  Monitoring and evaluation of the site will continue for an additional year (2015) and success would be determined by collecting qualitative and/or quantitative data on restoration progress and ecosystem functioning. Mitigation success will be coordinated with the resource agencies.	High	2015	None provided.

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SPD	SPL	San Luis Rey River, CA	75	Mitigation is required for temporary and permanent impacts to waters of U.S. and State of California, and riparian and endangered species habitat. Endangered species (vireo, flycatcher) utilize riparian habitat; thus, endangered species and riparian habitat mitigation overlap in most areas, totaling 241 acres (ac), to be completed in phases, on- and offsite: Pre-construction (32ac); Phase 1 (100.2ac); Phase 2 (35.4ac); Phase 3 Year 1 (51.8ac); Phase 3 Year 5 (21.6ac). Flycatcher habitat is required (2.11ac). Provision of fish passage under bridges is required; boulders will be removed/reconfigured. An adaptive habitat management plan has been prepared.	11-MAR-14 : -California Department of Fish and Wildlife, South Coast Region -Senior Environmental Scientist	Riparian habitat has been established throughout most of the project area since completion of project construction. Preconstruction mitigation requirement for vireo habitat has been met onsite (32ac). The preservation-portion of Phases 1-3 requirements for riparian and vireo habitat are being met with extensive use of the habitat by vireos. Passive and active restoration activities were initiated in 2006 and are ongoing onsite to eradicate invasive exotic plant species. Phase 1 onsite habitat requirement (85 ac) was achieved in 2011. In 2014, review of Phase 2 (27ac total) and portions of Phase 3 onsite restoration areas indicate habitat is on track to meeting success criteria. Most active restoration (planting of container plants) was completed (Winter 2013). Surveys showed vireo territories increased from 2012 to 2014 in actively restored areas, confirming that portions of restored areas are meeting habitat requirements. Monitored to continue for 2-3 years to ensure habitat meets requirements. In 2014, restoration was implemented at the Whelan site; monitoring on-going. Boulder removal/reconfiguration for fish passage is anticipated to occur in Fall 2015/Winter 2016.	High	2018	None provided.

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SPD	SPL	Santa Ana River Mainstem, CA	80	Restore 92 acres salt marsh, 5 acres freshwater marsh, ~1,277 acres of riparian habitat (mostly through non-native vegetation removal, with monitoring), and 13.5 acres perennial stream; trapping of nest-predating cowbirds; wildlife corridor improvements; develop and implement Habitat Management Plan for 1,100 floodplain acres downstream of Prado Dam; and develop and implement Multi-Species Habitat Management Plan for 764 acre preserve area downstream of Seven Oaks Dam.	13-OCT-14 : -California Department of Fish and Wildlife, Inland Deserts Region -Staff Biologist  13-OCT-14 : -US Fish and Wildlife Service, Carlsbad Field Office -Staff Biologist  02-OCT-14 : - Orange County Flood Control District -Santa Ana River Project Chief	To date all mitigation sites have met or exceeded expectations for their current stage of completion and development. 92 acres salt marsh and 5 acres freshwater marsh have been fully restored. Success criteria were met in that initial plantings survived through establishment period, and areas have continued to function as designed. Arundo biomass removed from over 1000 acres of floodplain. Annual cowbird trapping program underway (intended to protect vireos from nest predation while habitat develops). Floodplain acreage acquired downstream of Prado and Seven Oaks Dams and Habitat Management Plan (HMP) developed for downstream of Prado. Seven Oaks Multi-Species HMP has been developed and partially implemented; Corps will complete treatments and associated surveys by 2017, and then turn continued management over to Sponsors. Perennial stream construction is continuing, completed portions have passed inspections and are already providing some habitat value. Fairview Park plant plantings have fully established, the site is deemed successful and has been turned over to the sponsor for future maintenance. Additional mitigation features will be added as construction continues.	High	2018	None provided.

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SPD	SPL	Santa Maria River, CA	80	The permanent loss of 8.99 acres of habitat due to project construction would be fully mitigated by establishing approximately 12 acres of native riparian habitat by removing non-native vegetation and then installing native plants. Another 74 acre area, temporarily disturbed by project construction, would be fully restored to native habitat consistent with natural conditions of the river.	07-JUL-14 : - Santa Barbara County Water Conservation and Flood Control District - Project Engineer  14-MAY-14 : -Regional Water Quality Control Board (Central Coast), San Luis Obispo, Central Region -Environmental Scientist	At this time, the vegetation communities are well established and non-native invasive plant species are suppressed or eradicated. By satisfying the performance criteria, the revegetation areas indicate that they are establishing themselves as self-sustaining habitats that are equivalent in form, function, and value to the natural, relatively undisturbed reference sites. Overall, all alliances are performing above the performance standards for percent native vegetative cover, total non-native cover, and species. As of August 2014, all alliances have surpassed the final project performance standards (except native cover in Baccharis salicifolia shrubland). The revegetation areas are surpassing the undisturbed reference habitat in species diversity and reduction of weed abundance. The revegetation areas in all vegetation communities continue to progress well. Natural recruitment of native shrub and herbaceous species is increasing throughout the site. Vegetation was dominated by sandbar willow, mock heather, deerweed and mulefat. The native species canopy continues to grow taller, and fuller and non-native species are present but minimal in cover and diversity.	High	2015	None provided.