

Sixth 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

March 2014

## INTRODUCTION

This Sixth 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. Data for this report are presented in three tables and the FY 2015 Civil Works Budget press book.

TABLE 1. – USACE Projects under Construction during Fiscal Year (FY) 2013 - Table 1 lists 281 projects and/or programs that were allotted funds in FY 2013 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 81 projects with incomplete compensatory mitigation. Most of the 281 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.

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 33 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 2015 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.

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

### 2012 Completions

Three projects that were reported in the 5<sup>th</sup> Annual Report on Table 2, Status of Projects with Incomplete Compensatory Mitigation, met their mitigation success criteria and are therefore not included in this 6<sup>th</sup> Annual report. The three completed mitigation

projects are the Dover Dam, Ohio, St. Louis Flood Protection, Missouri, and the New York and New Jersey Harbor Deepening. The mitigation measures used to offset adverse impacts included:

1) At Dover Dam, about one acre of Federal land consisting of wetland, stream and riparian areas was preserved to meet the mitigation requirements.

2) Credits were purchased from a mitigation bank for the St. Louis flood Protection project to meet its mitigation requirements.

3) The mitigation for New York and New Jersey Harbor Deepening involved the construction of approximately 57 acres of tidal wetlands over 4 sites within the estuary.

### 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 bank, planting an additional 2,599 elderberry seedlings and 3001 associated plants and purchase of 577.6 VELB credits and 0.65 acres of wetland credit.

### 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 2013

January 7, 2014

MSC	DISTRICT	Project (or Program Name)
LRD	LRB	GREAT LAKES FISHERIES AND ECOSYSTEM RESTORATION, IL, IN, MN, OH & PA
LRD	LRB	ONONDAGA LAKE, NY
LRD	LRB	PRESQUE ISLE PENINSULA, PA (PERMANENT)
LRD	LRC	CALUMET REGION, IN
LRD	LRC	CHICAGO SANITARY AND SHIP CANAL DISPERSAL BARRIER, IL
LRD	LRC	COOK COUNTY INFRASTRUCTURE, IL
LRD	LRC	DES PLAINES RIVER, IL
LRD	LRC	GREAT LAKES FISHERIES AND ECOSYSTEM RESTORATION, IL, IN, MN, OH & PA
LRD	LRC	MCCOOK AND THORNTON RESERVOIRS, IL
LRD	LRC	NORTH BRANCH CHICAGO RIVER, IL
LRD	LRE	GREAT LAKES FISHERIES AND ECOSYSTEM RESTORATION, IL, IN, MN, OH & PA
LRD	LRE	GREEN BAY HARBOR, WI
LRD	LRE	NORTHEASTERN MINNESOTA ENVIRONMENTAL INFRASTRUCTURE, MN
LRD	LRE	NORTHERN WISCONSIN ENVIRONMENTAL ASSISTANCE, WI
LRD	LRH	BLUESTONE LAKE, WV
LRD	LRH	BOLIVAR DAM, OH (DAM SAFETY)
LRD	LRH	CENTRAL WEST VIRGINIA ENVIRONMENTAL INFRASTRUCTURE, WV (SECTION 571)
LRD	LRH	DELAWARE LAKE, OH
LRD	LRH	DOVER DAM, MUSKINGUM RIVER, OH (DAM SAFETY)
LRD	LRH	GREENBRIER RIVER BASIN, WV
LRD	LRH	LEVISA AND TUG FORKS AND UPPER CUMBERLAND RIVER, VA, WV & KY
LRD	LRH	MARMET LOCK, KANAWHA RIVER, WV
LRD	LRH	MOHAWK DAM, OH SEEPAGE CORRECTION MAJOR REHAB
LRD	LRH	OHIO & NORTH DAKOTA ENVIRONMENTAL INFRASTRUCTURE, OH & ND (SECTION 594)
LRD	LRH	SOUTHERN AND EASTERN KENTUCKY ENVIRONMENTAL INFRASTRUCTURE, KY (SECTION 531)
LRD	LRH	SOUTHERN WEST VIRGINIA ENVIRONMENTAL INFRASTRUCTURE, WV (SECTION 340)
LRD	LRL	CITY OF DAYTON, NE QUADRANT, OH
LRD	LRL	HOLES CREEK
LRD	LRL	INDIANAPOLIS, WHITE RIVER (NORTH), IN
LRD	LRL	JOHN T MYERS LOCKS AND DAM, IN & KY
LRD	LRL	MILL CREEK, OH
LRD	LRL	OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY
LRD	LRL	ROUGH RIVER, KY (MAJOR REHAB)
LRD	LRL	SOUTHERN AND EASTERN KENTUCKY ENVIRONMENTAL INFRASTRUCTURE, KY (SECTION 531)
LRD	LRN	BLACK FOX, MURFREE AND OAKLANDS SPRINGS WETLANDS, TN
LRD	LRN	CENTER HILL LAKE, TN
LRD	LRN	CHICKAMAUGA LOCK, TENNESSEE RIVER, TN
LRD	LRN	KENTUCKY LOCK AND DAM, TENNESSEE RIVER, KY
LRD	LRN	LEVISA AND TUG FORKS AND UPPER CUMBERLAND RIVER, VA, WV & KY
LRD	LRN	WOLF CREEK DAM, LAKE CUMBERLAND, KY
LRD	LRP	EAST BRANCH CLARION RIVER LAKE, PA
LRD	LRP	EMSWORTH LOCKS AND DAM, OHIO RIVER, PA
LRD	LRP	GRAYS LANDING LOCK AND DAM, MONONGAHELA RIVER, PA
LRD	LRP	LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA
LRD	LRP	SOUTH CENTRAL PA ENVIRONMENTAL IMPROVEMENT PROGRAM, PA
MVD	MVK	CHANNEL IMPROVEMENT, DIKES, AR, IL, KY, LA, MS, MO & TN
MVD	MVK	CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN
MVD	MVK	DES MOINES AND RACCOON RIVERS, IA
MVD	MVK	ILLINOIS RIVER BASIN RESTORATION , IL
MVD	MVK	J BENNETT JOHNSTON WATERWAY, LA
MVD	MVK	MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN
MVD	MVM	BAYOU METO BASIN, AR
MVD	MVM	CHANNEL IMPROVEMENT, DIKES, AR, IL, KY, LA, MS, MO & TN
MVD	MVM	CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN
MVD	MVM	GRAND PRAIRIE REGION, AR
MVD	MVM	MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN
MVD	MVM	ST FRANCIS BASIN, AR & MO

MVD	MVM	WEST TENNESSEE TRIBUTARIES, TN
MVD	MVN	ATCHAFALAYA BASIN, FLOODWAY SYSTEM, LA
MVD	MVN	CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN
MVD	MVN	COMITE RIVER, LA
MVD	MVN	EAST BATON ROUGE PARISH ENVIRONMENTAL INFRASTRUCTURE, LA
MVD	MVN	LAKE PONTCHARTRAIN AND VICINITY, LA (HURRICANE PROTECTION)
MVD	MVN	LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION)
MVD	MVN	MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN
MVD	MVN	NEW ORLEANS TO VENICE, LA (HURRICANE PROTECTION)
MVD	MVN	SOUTHEAST LOUISIANA, LA
MVD	MVN	WEST BANK AND VICINITY, NEW ORLEANS, LA
MVD	MVP	GRAFTON, PARK RIVER, ND
MVD	MVP	NORTH DAKOTA INFRASTRUCTURE, ND
MVD	MVP	ROSEAU, MN
MVD	MVP	SHEYENNE RIVER, ND
MVD	MVP	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI
MVD	MVR	DAVENPORT, IA
MVD	MVR	DES MOINES RECREATION RIVER AND GREENBELT, IA
MVD	MVR	ILLINOIS WATERWAY, LOCKPORT LOCK AND DAM, IL (MAJOR REHAB)
MVD	MVR	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI
MVD	MVS	CHAIN OF ROCKS CANAL, MISSISSIPPI RIVER, IL (DEF CORR)
MVD	MVS	EAST ST LOUIS, IL
MVD	MVS	LOCK & DAM 25 DAM SAFETY STUDY, MO
MVD	MVS	LOCK AND DAM 27, MISSISSIPPI RIVER, IL (MAJOR REHAB)
MVD	MVS	MELVIN PRICE LOCK AND DAM, IL & MO
MVD	MVS	MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REG WORKS), MO & IL
MVD	MVS	MONARCH - CHESTERFIELD, MO
MVD	MVS	ST LOUIS FLOOD PROTECTION, MO
MVD	MVS	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI
MVD	MVS	WOOD RIVER LEVEE, DEFICIENCY CORRECTION AND RECONSTRUCTION, IL
NAD	NAB	ANACOSTIA RIVER AND TRIBUTARIES, MD & DC
NAD	NAB	ASSATEAGUE, MD
NAD	NAB	BALTIMORE HARBOR AND CHANNELS (50 FOOT), MD
NAD	NAB	CHESAPEAKE BAY ENV RESTORATION AND PROTECTION, MD, VA & PA
NAD	NAB	CHESAPEAKE BAY OYSTER RECOVERY, MD & VA
NAD	NAB	LACKAWANNA RIVER, SCRANTON, PA
NAD	NAB	NORTHEAST COUNTIES ENVIRONMENTAL INFRASTRUCTURE
NAD	NAB	POPLAR ISLAND, MD
NAD	NAB	SOUTH CENTRAL PA ENVIRONMENTAL IMPROVEMENT PROGRAM, PA
NAD	NAB	WASHINGTON, DC & VICINITY
NAD	NAB	WYOMING VALLEY, PA (LEVEE RAISING)
NAD	NAE	MUDDY RIVER, MA
NAD	NAE	TOWN BROOK, MA
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	FIRE ISLAND INLET TO MONTAUK POINT, NY
NAD	NAN	JOSEPH G MINISH HISTORIC WATERFRONT PARK, NJ
NAD	NAN	LONG BEACH ISLAND, NY
NAD	NAN	MONTAUK POINT, NY
NAD	NAN	NEW YORK AND NEW JERSEY HARBOR, NY & NJ
NAD	NAN	PASSAIC RIVER MAINSTEM, NJ
NAD	NAN	RARITAN BAY AND SANDY HOOK BAY, PORT MONMOUTH, NJ
NAD	NAN	RARITAN BAY AND SANDY HOOK BAY, UNION BEACH, NJ
NAD	NAN	RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ
NAD	NAN	SANDY HOOK TO BARNEGAT INLET, NJ
NAD	NAN	SOUTH RIVER, RARITAN RIVER BASIN, NJ
NAD	NAO	AIWW, BRIDGES AT DEEP CREEK, VA
NAD	NAO	NORFOLK HARBOR AND CHANNELS, CRANEY ISLAND, VA
NAD	NAP	BARNEGAT INLET TO LITTLE EGG HARBOR INLET, NJ

NAD	NAP	BRIGANTINE INLET TO GREAT EGG INLET (ABSECON ISLAND), NJ
NAD	NAP	BRIGANTINE INLET TO GREAT EGG INLET, BRIGANTINE ISLAND, NJ
NAD	NAP	CAPE MAY INLET TO LOWER TOWNSHIP, NJ
NAD	NAP	DELAWARE BAY COASTLINE, DE & NJ - OAKWOOD BEACH, NJ
NAD	NAP	DELAWARE COAST, BETHANY BEACH TO SOUTH BETHANY BEACH
NAD	NAP	DELAWARE COAST, REHOBOTH BEACH TO DEWEY BEACH, DE
NAD	NAP	DELAWARE RIVER MAIN CHANNEL, NJ, PA & DE
NAD	NAP	GLEN FOERD, PA
NAD	NAP	GREAT EGG HARBOR INLET AND PECK BEACH, NJ
NAD	NAP	GREAT EGG HARBOR INLET TO TOWNSEND INLET, NJ
NAD	NAP	LOWER CAPE MAY MEADOWS, CAPE MAY POINT, NJ
NAD	NAP	MANASQUAN INLET TO BARNEGAT INLET, NJ
NAD	NAP	SOUTHEASTERN PENNSYLVANIA, PA
NWD	NWK	BLUE RIVER BASIN, KANSAS CITY, MO
NWD	NWK	BLUE RIVER CHANNEL, KANSAS CITY, MO
NWD	NWK	KANSAS CITIES, MO & KS
NWD	NWK	MISSOURI RIVER FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, NE, ND & SD
NWD	NWK	SWOPE PARK INDUSTRIAL AREA, KANSAS CITY, MO
NWD	NWK	TURKEY CREEK BASIN, KS & MO
NWD	NWO	BIG SIOUX RIVER, SIOUX FALLS, SD
NWD	NWO	GARRISON DAM, LAKE SAKAKAWEA, ND
NWD	NWO	MISSOURI RIVER FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, NE, ND & SD
NWD	NWO	RURAL MONTANA, MT
NWD	NWO	SAND CREEK WATERSHED, SAUNDERS COUNTY, NEBRASKA
NWD	NWP	COLUMBIA RIVER FISH MITIGATION, WA, OR & ID
NWD	NWP	CRFM RPA38 LCR USACE PILE DIKES
NWD	NWP	ELK CREEK LAKE, OR
NWD	NWP	LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA
NWD	NWP	MOUNT SAINT HELENS SEDIMENT CONTROL, WA
NWD	NWS	DUWAMISH AND GREEN RIVER BASIN, WA
NWD	NWS	GRAYS HARBOR, WA
NWD	NWS	HOWARD HANSON DAM, WA
NWD	NWS	MUD MOUNTAIN DAM, WA
NWD	NWS	PUGET SOUND AND ADJACENT WATERS RESTORATION, WA
NWD	NWS	SHOALWATER BAY, WA
NWD	NWW	COLUMBIA RIVER FISH MITIGATION, WA, OR & ID
NWD	NWW	JACKSON HOLE RESTORATION, WY
NWD	NWW	LOWER SNAKE RIVER FISH AND WILDLIFE COMPENSATION, WA, OR & ID
NWD	NWW	RURAL IDAHO, ID
POD	POA	ALASKA COASTAL EROSION, AK
POD	POA	CHENA RIVER LAKES, AK
POD	POA	FALSE PASS HARBOR, AK
POD	POA	SITKA HARBOR, AK
SAD	SAC	CHARLESTON HARBOR, SC (DEEPENING & WIDENING)
SAD	SAC	FOLLY BEACH, SC
SAD	SAC	MYRTLE BEACH, SC
SAD	SAJ	ARECIBO RIVER, PR
SAD	SAJ	BREVARD COUNTY, CANAVERAL HARBOR, FL
SAD	SAJ	BROWARD COUNTY, FL (REIMBURSABLE)
SAD	SAJ	C&SF: UPPER ST. JOHN RIVER BASIN, FL
SAD	SAJ	CANAVERAL HARBOR, FL
SAD	SAJ	CEDAR HAMMOCK, WARES CREEK, FL
SAD	SAJ	COMPREHENSIVE EVERGLADES RESTORATION PLAN, FL
SAD	SAJ	EVERGLADES AND SOUTH FLORIDA ECOSYSTEM RESTORATION, FL
SAD	SAJ	FORT PIERCE BEACH, FL
SAD	SAJ	HERBERT HOOVER DIKE, FL (SEEPAGE CONTROL)
SAD	SAJ	JACKSONVILLE HARBOR, FL
SAD	SAJ	LEE COUNTY, FL
SAD	SAJ	MANATEE COUNTY, FL
SAD	SAJ	PALM BEACH COUNTY, FL

SAD	SAJ	PINELLAS COUNTY, FL
SAD	SAJ	PORTUGUES AND BUCANA RIVERS, PR
SAD	SAJ	RIO DE LA PLATA, PR
SAD	SAJ	RIO GRANDE DE LOIZA, PR
SAD	SAJ	RIO PUERTO NUEVO, PR
SAD	SAJ	SAN JUAN HARBOR, PR
SAD	SAJ	SARASOTA COUNTY, FL
SAD	SAJ	ST JOHN'S COUNTY, FL
SAD	SAJ	TAMPA HARBOR MAIN CHANNEL, FL
SAD	SAM	ATLANTA ENVIRONMENTAL INFRASTRUCTURE, GA
SAD	SAM	CHICKAMAUGA LOCK, TENNESSEE RIVER, TN
SAD	SAM	JACKSON COUNTY INDUSTRIAL WATER SUPPLY, MS
SAD	SAM	MOBILE HARBOR, AL
SAD	SAM	PANAMA CITY HARBOR, FL
SAD	SAM	TUSCALOOSA AREA OFFICE, AL
SAD	SAM	WALTER F GEORGE LOCK AND DAM, AL & GA
SAD	SAS	LOWER SAVANNAH RIVER BASIN, GA
SAD	SAS	RICHARD B RUSSELL DAM AND LAKE, GA & SC
SAD	SAS	SAVANNAH HARBOR DISPOSAL AREAS, GA & SC
SAD	SAS	SAVANNAH HARBOR EXPANSION, GA
SAD	SAS	TYBEE ISLAND, GA
SAD	SAW	BRUNSWICK COUNTY BEACHES, NC
SAD	SAW	CAROLINA BEACH AND VICINITY, NC
SAD	SAW	DARE COUNTY BEACHES, NC
SAD	SAW	MANTEO (SHALLOWBAG) BAY, NC
SAD	SAW	NORTH CAROLINA ESTUARIES, NC
SAD	SAW	ROANOKE RIVER UPPER BASIN, HEADWATERS AREA, VA
SAD	SAW	WRIGHTSVILLE BEACH, NC
SPD	SPA	ACEQUIAS IRRIGATION SYSTEM, NM
SPD	SPA	ALAMOGORDO, NM
SPD	SPA	CENTRAL NEW MEXICO, NM
SPD	SPA	EL PASO COUNTY, TX
SPD	SPA	L4 CG ALAMOSA COLO
SPD	SPA	MIDDLE RIO GRANDE FLOOD PROTECTION, BERNALILLO TO BELEN, NM
SPD	SPA	MIDDLE RIO GRANDE RESTORATION
SPD	SPA	RESTORATION OF ABANDONED MINE SITES
SPD	SPA	RIO GRANDE FLOODWAY, SAN ACACIA TO BOSQUE DEL APACHE, NM
SPD	SPA	SOUTHWEST VALLEY FLOOD DAMAGE REDUCTION, ALBUQUERQUE, NM
SPD	SPK	AMERICAN RIVER WATERSHED (COMMON FEATURES), CA
SPD	SPK	AMERICAN RIVER WATERSHED (FOLSOM DAM MODIFICATIONS), CA
SPD	SPK	AMERICAN RIVER WATERSHED (FOLSOM DAM RAISE), CA
SPD	SPK	BUCHANAN DAM, HV EASTMAN LAKE, CA
SPD	SPK	CACHE CREEK SETTLING
SPD	SPK	COYOTE & BERRYESSA CREEKS, CA
SPD	SPK	GUADALUPE RIVER, CA
SPD	SPK	ISABELLA LAKE, CA (DAM SAFETY)
SPD	SPK	KAWEAH RIVER, CA
SPD	SPK	LOWER SACRAMENTO AREA LEVEE RECONSTRUCTION, CA
SPD	SPK	MARYSVILLE/YUBA CITY LEVEE RECONSTRUCTION, CA
SPD	SPK	MERCED COUNTY STREAMS, CA
SPD	SPK	MID-VALLEY AREA LEVEE RECONSTRUCTION, CA
SPD	SPK	NAPA RIVER, CA
SPD	SPK	PLACER COUNTY SUB-REGIONAL WASTEWATER TREATMENT
SPD	SPK	RURAL NEVADA (SECTION 595)
SPD	SPK	RURAL UTAH
SPD	SPK	SACRAMENTO RIVER BANK PROTECTION PROJECT, CA
SPD	SPK	SACRAMENTO URBAN AREA, CA
SPD	SPK	SAN LORENZO RIVER, CA
SPD	SPK	SOUTH SACRAMENTO COUNTY STREAMS, CA
SPD	SPK	STOCKTON METROPOLITIAN FLOOD CONTROL REIMBURSEMENT, CA

SPD	SPK	SUCCESS DAM, TULE RIVER, CA (DAM SAFETY)
SPD	SPK	TAHOE BASIN RESTORATION 108
SPD	SPK	TULE RIVER, CA
SPD	SPK	UPPER JORDAN RIVER, UT
SPD	SPK	YUBA RIVER BASIN, CA
SPD	SPL	CAMBRIA SEAWATER DESALINATION, CA
SPD	SPL	HARBOR/SOUTH BAY WATER RECYCLING STUDY, LOS ANGELES, CA
SPD	SPL	IMPERIAL BEACH, SILVER STRAND SHORELINE, CA
SPD	SPL	LOS ANGELES RIVER DEMONSTRATION PROJECTS, CA
SPD	SPL	MURRIETA CREEK, CA
SPD	SPL	NOGALES WASH, AZ
SPD	SPL	NORTH VALLEY REGIONAL WATER INFRASTRUCTURE, CA
SPD	SPL	RIO DE FLAG FLAGSTAFF, AZ
SPD	SPL	RIO SALADO, PHOENIX AND TEMPE REACHES, AZ
SPD	SPL	RURAL NEVADA (SECTION 595)
SPD	SPL	SAN LUIS REY RIVER, CA
SPD	SPL	SANTA ANA RIVER MAINSTEM, CA
SPD	SPL	SANTA MARIA LEEVES, CA
SPD	SPL	SANTA PAULA CREEK, CA
SPD	SPL	SOUTH PERRIS, CA
SPD	SPL	SURFSIDE - SUNSET - NEWPORT BEACH, CA
SPD	SPL	TUCSON DRAINAGE AREA, AZ
SPD	SPN	CONTRA COSTA CANAL, CA (SEC 219)
SPD	SPN	CORTE MADERA CREEK, CA
SPD	SPN	HAMILTON AIRFIELD WETLANDS RESTORATION, CA
SPD	SPN	LLAGAS CREEK, CA
SPD	SPN	NAPA RIVER, SALT MARSH RESTORATION, CA
SPD	SPN	OAKLAND HARBOR (42 FOOT), CA
SPD	SPN	OAKLAND HARBOR (50 FOOT PROJECT), CA
SPD	SPN	PETALUMA RIVER, CA
SPD	SPN	SACRAMENTO DEEPWATER SHIP CHANNEL, CA
SPD	SPN	SAN FRANCISCO BAY TO STOCKTON, CA
SPD	SPN	SAN FRANCISCO, CA (PIER 36)
SPD	SPN	SAN RAMON VALLEY RECYCLED WATER, CA
SPD	SPN	UPPER GUADALUPE RIVER, CA
SWD	SWF	CENTRAL CITY, FORT WORTH, UPPER TRINITY RIVER BASIN, TX
SWD	SWG	BRAYS BAYOU, HOUSTON, TX
SWD	SWG	BUFFALO BAYOU AND TRIBUTARIES, TX
SWD	SWG	SIMS BAYOU, HOUSTON, TX
SWD	SWG	TEXAS CITY CHANNEL (50-FOOT PROJECT), TX
SWD	SWL	WHITE RIVER MINIMUM FLOWS, AR
SWD	SWT	CANTON LAKE, OK
SWD	SWT	PINE CREEK LAKE, OK
SWD	SWT	RED RIVER BASIN CHLORIDE CONTROL, TX & OK

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit 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.	All of the real estate 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. The project is suspended until the financial issues have been resolved by the sponsor.	2021
LRD	LRH	Beach City, OH Dam Safety	100	100	0	0	Mitigation was required for 0.32 acres of category one non-isolated and non-forested wetlands.	Mitigation bank credits have been purchased and 401 Water Quality Certification has been issued.	<b>2013 mitigation success</b>
LRD	LRH	Marmet Lock Replacement, WV (Kanawha River Navigation Study - Marmet Lock Replacement)	100	100	104.8	104.8	A total of 48 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. Mitigation for impacts to aquatic habitat was completed and success criteria met in 2007. Construction of mitigation requirements for terrestrial impacts was completed in 2009. There has been no monitoring of the terrestrial mitigation to date.	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. Non-federal sponsor confirmed > 70% survival rate. USFWS concurrence of successful mitigation is anticipated in FY14.	2014

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
LRD	LRL	Indianapolis, White River, IN	0	66	29	0	The project, as approved in the 1997 ROD, required 29 acres of mitigation for impacts to fish and wildlife habitat. At that time, there was an agreement with agencies not to clear trees beyond five feet from the crown of the levee. Due to more stringent levee certification standards, additional tree clearing is now required and represents a clear change to the condition agreed to in 1997, i.e., a much greater impact to habitat than expected. As a result, an increase in mitigation lands from the project will be necessary. This is a cost shared project; therefore, both local sponsor and COE will pay to clear the trees. Once the local sponsor supplies land, a mitigation plan will be finalized.	No mitigation has been accomplished to date. The comment period for the SEIS has closed and a revised mitigation plan will be developed once the final mitigation requirements have been identified and mitigation sites are provided by the local sponsor.	unknown at this time
LRD	LRN	Center Hill Dam, TN, Major Rehabilitation - Seepage	0	38	44.2	44.2	Mitigation requirements to address impacts for Center Hill Major Rehab Seepage include: payment into a wetland mitigation bank or in-lieu fee fund for wetland loss - dollar amount to be determined, restore stream and plant riparian habitat along 450 linear feet for temporary stream loss impacted by the project, replanting 43 acres of forested habitat with native seedling trees at 200 stems per acre. Planting 11 acres of forested habitat with tree seedlings in the disposal areas.	Mitigation Plan has been drafted. Draft Environmental Assessment scheduled for public review in FY 14.	2023
MVD	MVK	Upper Yazoo Projects, MS	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 have been purchased and 10,328 acres have been reforested with bottomland hardwoods to date. 1,503 acres are in moist soil management and 272 acres were reforested in 2013. 3,847 acres remain to be acquired.	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 bottomland hardwoods.	Reforested approximately 5,094 acres of bottomland 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.	2025
MVD	MVK	Yazoo Basin, Yazoo Backwater Maintenance, MS	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.	2035
MVD	MVM	Bayou Meto Basin, AR	0	85	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 purchased. The site specific mitigation plan has been coordinated with the agencies and finalized. Mitigation work is scheduled to begin in the 2014 planting season.	2021

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
MVD	MVM	Grand Prairie Region, AR	48	1	519	136	Purchase 182 acres of farmland and restore bottomland hardwood forest for mitigation of wetlands impacts. Purchase 198 acres of farmland and restore upland vegetation to mitigate for impacts to upland hardwoods.	106 acres of bottomland hardwood habitat have been purchased and the BLH restoration effort is underway. 30 acres of upland habitat have been purchased, no restoration has occurred.	2018
MVD	MVM	Mississippi River Levees Construction, AR, IL, KY, LA, MS, MO & TN	9.9	99	1241.4	131.4	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. No change in 2013.	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 2013.	2025
MVD	MVM	St Francis Basin Construction, MO	98	89	13500	13311	Acquire and manage 13,500 acres of bottomland hardwood forest habitat.	13,311 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 2013.	2020
MVD	MVN	Comite River Basin, LA	5	18	3235	74	As of EA 426 (July 2012), project impacts and mitigation requirements are measured in units of Average Annualize Habitat Units (AAHU's), not acres. Impacts to 890 acres of bottomland hardwoods (BLH) will remove 704.6 (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 2012, however, no mitigation occurred. The mitigation efforts focused instead on EA 426, which evaluated and approved additional mitigation areas for acquisition in the project vicinity. Moving forward, the project now has sufficient mitigation alternatives available to accomplish its objectives.	2017
MVD	MVN	FCCE HPO Non-Federal Levees (Flood Control and Coastal Emergency Hurricane Protection Office 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).	Project is in real estate acquisition phase at the mitigation site. Construction is anticipated to begin early 2014.	2035

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit. Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
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 FY 2011 Operation Watershed Restore 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 bank.	Reforested 20 acres of bottomland hardwood of the required 24 acres. Field survey in 2013 and analysis of aerial photography indicates good survival and growth.	2016
MVD	MVN	Lake Pontchartrain 3000 - Jefferson, LA	50	100	10	10	Construct breakwaters to protect wetlands and dredged material deposition to restore wetlands - 1,100 average annual acres total preserved/restored. Modification of these breakwaters are being designed to be continuous rather than segmented. Also dredged material will be placed behind the breakwater as a wetland platform.	This is in support of the existing hurricane levees and mitigation. Construction of initial segmented breakwaters was previously completed. Modifications to these breakwaters began in January 2013 pursuant to mitigation design modifications authorized in 2011.	2035
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
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 FY2014. Site acquisition and subsequent construction activities are expected to begin immediately after approval.	2017

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

February 26, 2014

Division	District	Project Name	Percent Mit. Physically Complete	Percent Project Physically Complete	Mit Total Acres of Land Required	Mit Total Acres of Land Acquired	Mitigation Requirements	Mitigation Accomplishments to Date	Estimated Date of Success
MVD	MVN	West Bank & Vicinity, LA	31	100	2002.2	562.5	<p>Mitigation of 2002.2 acres of bottomland hardwoods and swamp was required.</p> <p>Total impacts associated with previously authorized WBV 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.</p> <p>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.</p>	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.	2014
MVD	MVP	LD3, 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 indicated that revegetation efforts are on track to meet criteria for success by 2022. Regeneration surveys are scheduled for the summer of 2014.	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 2013. 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.	2016
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.	2017

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
MVD	MVS	Chain of Rocks, IL	78	97	146.4	178.1	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 2013 agreement reached with landowner to acquire about 75 acres to complete remaining mitigation.	2022
MVD	MVS	Chesterfield, MO	95	63	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 has been located, bank will be considered.	2018
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 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.	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 has elected to continue monitoring for Year-7 in conjunction with adaptive management strategies both proposed and currently underway onsite.	2020
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.	0 acres implemented; still seeking 1.68 acres of marsh habitat - may be deferred until after Superfund activities are completed.  Minish Project Delivery Team is working to find suitable site.	2018

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

February 26, 2014

Division	District	Project Name	Percent Mit Physically Complete	Percent Project Physically Complete	Mit Total Acres of Land Required	Mit Total Acres of Land Acquired	Mitigation Requirements	Mitigation Accomplishments to Date	Estimated Date of Success
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 six reefs constructed and the second underway as of DEC 2013.	2023
NWD	NWK	Blue River Basin, Kansas City, MO	0	45	0.5	0.5	A total of 0.5 acre of wetland mitigation would be required for this project. Acquisition of real estate for the mitigation site and future management of the mitigation site would be 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.	2018
NWD	NWO	Western Sarpy/Clear Creek, NE	88	74	40	40	40 acres wet meadow mitigation to offset immediate impact to 8.29 acres of wetlands and unknown predicted future impacts to wetlands.	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 wet meadow mitigation. The wet meadows 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 2013, it was concluded that about 75% of the performance standards were met after two growing seasons.	2019
NWD	NWP	Columbia River Channel Improvement - Navigation, OR & WA (Chumbley)	100	100	71	71	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.	The 71 acre Chumbley site was planted in 2009. Tree and shrub survival is monitoring yearly. As of 2013, monitoring has determined an extremely high success for tree survival (about 95%), and above established success criteria. Most trees have grown greater than 8 feet. A multi-agency inspection team will continue monitoring annually until 2020. At this time no further planting is required since the planting is one its way to meeting the success criteria. Reed canary and invasive blackberry is continuing to encroach the edges of the planting. Invasive plants were treated in 2013 to reduce any impacts to the plantings and will continue in future years.	2020

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
NWD	NWP	Columbia River Channel Improvement - Navigation, OR & WA (Cottonwood Island)	100	100	128	128	Deepening of the Columbia River federal navigation 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 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 September 2013, contracts were awarded for maintenance mowing and herbicide application and installation of plant markers which will be used to monitor mortality. Monitoring will be done annually to determine if the plantings and wetlands are meeting the success criteria.	2020
NWD	NWP	Columbia River Channel Improvement - Navigation, OR & WA (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.	As of 2013, the 74 acre developed wetland is not meeting the success criteria. The unwanted reed canary grass and other invasive plants continue to expand and degrade the wetland. This degradation is due to not being able to use the gates to control water from the slough to the wetland. Further construction is needed prevent fish entrapment when operating the tide gates. Further consultation with the National Marine Fisheries Service may also be needed to resolve issue entrapment of listed salmonids. Maintenance mowing of the 96 acre agricultural pastures has been successful at attracting waterfowl on a yearly basis, including 2013.	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.	No mitigation sites are available to evaluate yet. Initial crab trawl data for 2012 will be analyzed in FY14 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 cab and snowy plover.	2035

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
NWD	NWS	Howard Hanson Dam, WA (Additional Water Storage Project - Phase 1)	100	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 for the forest mitigation sites have been inconclusive to date.	2022
POD	POA	Unalaska Harbor, AK	100	80	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 indicated that the mitigation features are on track. Monitoring has also indicated that rubblemound breakwaters can improve habitat diversity much quicker than originally thought. Monitoring for FY 13 is scheduled to take place the 3rd week in December.	2014
POD	POA	Akutan Harbor, AK	60	75	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. Mammal and bird monitoring will occur in FY 14.	2014

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

February 26, 2014

Division	District	Project Name	Percent Mit Physically Complete	Percent Project Physically Complete	Mit Total Acres of Land Required	Mit Total Acres of Land Acquired	Mitigation Requirements	Mitigation Accomplishments to Date	Estimated Date of Success
SAD	SAJ	Cedar Hammock, Wares Creek, FL	38	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 underway (site preparation only) - 0 acres mitigation completed. Remaining mitigation contracted out by sponsor (awarded late 2013 to complete in 2014, includes removal of exotic invasive species and planting of new native species).	2015
SAD	SAJ	Inland Waterway Jacksonville-Miami, FL (Construct Upland Disposal Sites IR-2 and SL-2)	100	100	7.2	7.2	(1) 5.95 acres of wetland mangrove and upper marsh has been created. (2) 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. The next monitoring event should give a better indication of success.	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 impacts) and additional mitigation for indirect impacts with concrete rubble or other suitable material (Current SEIS/LRR: Indirect impacts identified by the post-construction monitoring (underway) 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.	2018
SAD	SAJ	O&M, Intracoastal Waterway, Caloosahatchee River to Anclote River (Ft. Myers to Tarpon Springs, FL)	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 and design underway. Mitigation construction in FY14. 3 years post-construction monitoring to be Corps responsibility.	2017
SAD	SAJ	Rio De La Plata, PR (Northern Segment, Mameyal Community (Contract 1A))	73	67	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 2014.	2016
SAD	SAJ	Rio Grande de Arecibo, PR	0	25	8	8	Restoration 7.2 acres of mangrove forest required for next phase (contract 3). Restoration consists of clearing and grading, then planting with mangrove seedlings.	Contract 3 will require and involve mitigation. Construction contract award for contract 3 is 2025 and construction complete 2027.	2030

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit. Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
SAD	SAJ	Rio Puerto Nuevo, PR	75	85	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.  Site preparation and grading is completed. Planting was 60% completed by end of FY13.	2016
SAD	SAJ	San Juan Harbor, PR	0	100	1.2	1.2	1.2 acres marine submerged aquatic vegetation established by raising and stabilizing bottom.	Mitigation not yet started. Mitigation to be relocated. Requires an LRR and EA. LRR must be prepared/reviewed/approved and construction must be authorized, budgeted, and funded. LRR was started in October 2012 and expected to complete by September 2014.	2017
SAD	SAM	Tennessee - Tombigbee Waterway (Bevill Cross Current), AL	10	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.	2022

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

February 26, 2014

Division	District	Project Name	Percent Mit. Physically Complete	Percent Project Physically Complete	Mit Total Acres of Land Required	Mit Total Acres of Land Acquired	Mitigation Requirements	Mitigation Accomplishments to Date	Estimated Date of Success
SAD	SAS	Brunswick Harbor Deepening, GA	100	100	37.6	19.1	<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>	<p>Andrews Island- Year 2(2013) mitigation marsh monitoring resulted in 85% percent coverage, still ahead of schedule with success criteria timeframe.</p> <p>Bird Island-2013 nesting and activity summary:                      5755 Royal Tern pairs nested (only site in state for this species)                      47 Sandwich Tern pairs nested (only site in state for this species)                      57 Least Terns nests – many fledged                      64 Gull-billed Tern nests – many fledged                      54 Black Skimmer nests – many fledged                      180 Laughing Gulls – eggs oiled to minimize hatching                      3 Wilson's Plover pairs – at least 1 chick hatched                      Considering there were 200 Laughing Gull eggs on the island and few live chicks observed oiling appears to be an effective deterrent.</p>	2016
SAD	SAS	Richard B. Russell Dam & Lake, GA & SC	100	98.5	0	0	<p>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.</p>	<p>Access road improvements to the Oxygen System Site at JST Dam and Lake and construction of the Underwater and Aboveground O2 system components have been completed. The O2 system was completed and has been 100% functional since April 2012. All four pump-back units are operational and available to utilize the O2 system when needed.</p> <p>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 2017.</p>	2017
SAD	SAS	Savannah Harbor Disposal Areas, GA & SC	100	100	3.4	3.4	<p>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.</p>	<p>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.</p>	2016

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
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 2008-2013 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 FY08-FY13 is -946 acres.	2019
SAD	SAW	Manteo (Shallowbag) Bay, NC (CG Wanchese)	0	10	42	0	42 acres of aquatic habitat (oyster reef). This mitigation requirement includes project components constructed and those deferred.  To date, the only project components constructed include deepening of Wanchese Harbor. Mitigation for this project component is 42 acres of oyster reef habitat (specific site locations yet to be determined). Additional proposed work has been deferred. Should additional project components be constructed, additional mitigation would be required.	USACE is currently in the process of amending (or supplementing) the 1981 approved Mitigation and Enhancement Plan for the Manteo, (Shallowbag) Bay Project. No construction or mitigation occurred in FY 2013; 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 2014.	2030
SAD	SAW	Manteo (Shallowbag) Bay, NC	17	10	12	12	68 acres of oyster reef habitat in the general project area is to be constructed for the loss of 102.4 acres of estuarine shallow water habitat associated with the Manteo-Oregon Inlet channel and Old House Channel.	12 of 68 acres of oyster reef habitat have been constructed in association with completed project components; specifically dredged material disposal island expansion in the project vicinity (northern Dare County, NC). Monitoring of these 12 acres (6, 2-acre sites) was completed in 2000.  No construction or mitigation occurred in FY2013.  Additional consultation on mitigation plan will occur in FY 2014.	2020

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

February 26, 2014

Division	District	Project Name	Percent Mit Physically Complete	Percent Project Physically Complete	Mit Total Acres of Land Required	Mit Total Acres of Land Acquired	Mitigation Requirements	Mitigation Accomplishments to Date	Estimated Date of Success
SAD	SAW	Wilmington Harbor, NC - 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 facilitate anadromous fish passage upstream.</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 monitoring, 80% of flathead catfish passed Lock and Dam #1, but only 50% of shad and 21% of striped bass passed.</p>	2014
SPD	SPA	SW 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.	2014
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 (under the Endangered Species Act (ESA)) 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 (American River Common Features )	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. 2013 survey reports have been accomplished and sent to appropriate resource agencies in August.	2014
SPD	SPK	American River - Folsom Outlet Modifications, CA (Joint Federal Project - Auxiliary Spillway)	90	70	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 ESA 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.	2017

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
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 ESA 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 revetment 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.	2014
SPD	SPK	Kaweah Spillway Enlargement, CA	100	100	5735.2	5735.2	Based on adverse impacts associated with project construction, mitigation was required to include installation of 40 acres of riparian habitat, 7.19 acres of habitat for the Valley Elderberry Longhorn Beetle (VELB) (under the Endangered Species Act (ESA)), and preservation of 4,388 acres of oak woodland and 1,300 acres of seasonal waterfowl habitat.	At the Davis Ranch site(4,388 acres) success criteria were met, the O&M manual finalized, and the site turned over to the non-federal sponsor.  The Dry Creek site (40 acres) has also met key success criteria to include canopy density and vigor, areal cover and habitat structure. Consultation was completed with FWS in 2013, and consensus met that ecological success achieved. Site was turned over to the non-federal sponsor in Spring 2013. Tulare Lakebed Site (1,300 acres) and elderberry site have met success criteria and been turned over to the non-federal sponsor.	2013 mitigation success
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. First and second year monitoring has been completed and the site is performing well so far. Monitoring will continue annually for the next 3 to 5 years. The results from the second monitoring year show all performance criteria are being met except percent cover of vegetation.	2017

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
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 (ESA listed) 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 second monitoring year show all performance criteria are being met.	2017
SPD	SPK	Sacramento River Bank Protection, CA - Construction (LAR at River Mile 10.6L)	100	100	7.2	7.2	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.77 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). Purchased 155.6 valley elderberry longhorn beetle (ESA listed) credits (6.43 ac).	Valley elderberry longhorn beetle off site mitigation has been completed through the purchase of 155.6 credits (6.43 ac) from River Ranch VELB Conservation Bank. The site has also been hydroseeded and replanted to meet the requirements for 0.77 acres of on-site mitigation. The site is currently undergoing monitoring and that will continue for 3 to 5 years depending on the health and growth of vegetation at the site. The results from the second monitoring year show all performance criteria are being met.	2017
SPD	SPK	Sacramento River Bank Protection, CA - Construction (SAC Setback Levee at River Mile 57.2R)	100	80	28	4.2	Seventy eight elderberry plants require transplanting with associated native riparian plantings that will mitigate for the loss of heritage oak trees. Impacts (under the ESA) associated with the Valley Elderberry Longhorn Beetle resulting from transplanting elderberry plants within the project footprint requires 577.6 VELB credits. Impacts to wetlands requires 0.65 acres of seasonal wetland credits.	To mitigate for effects to Valley Elderberry Longhorn Beetle (VELB) habitat loss and heritage trees, 78 elderberry shrubs were transplanted to a VELB mitigation bank. The transplants and 2579 additional planting of elderberry seedlings and 3001 associated native plants compensated for the adverse effects to the VELB, habitat loss and heritage trees. Success remains to be measured per agreement with the USFWS and the VELB Mitigation Bank. The purchase of 577.6 VELB credits (23.87 ac) was completed on 11 January, 2013, from River Ranch VELB Conservation Bank. The 0.65 acres of wetland mitigation credits were purchased from River Ranch Wetland Mitigation Bank on 11 January, 2013.	2013 mitigation success

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
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 (ESA listed) 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 second monitoring year show all performance criteria are being met. If the site is determined to be successful after the third monitoring year, it will be turned over to DWR for Operation and Maintenance.	2017
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 (ESA listed) 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 2013 found 10 owls using constructed burrows, which is the same as last year.  Bank credits were purchased to meet all other mitigation requirements.	2014
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 November 2013, the project is in it's fifth year of the 5-year monitoring period. Observations as of November 2013 noted successful establishment of the riparian corridor with increasing percent cover of natives and decreasing percent cover of non-natives, due to continued weeding efforts. Overall native cover is high. On track to meet Year 5 success criteria in May 2014.	2014
SPD	SPL	Nogales Wash, AZ	25	90	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.	2016

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit. Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
SPD	SPL	Rio De Flag - Flagstaff, AZ	0	52	3	1.2	Mitigation for impacts to cottonwood/willow include installation of 3.0 acres of riparian habitat preceded by exotic weed/invasive removal. Approximately 1.2 acres will be mitigated on-site; 1.8 offsite.	There has been no mitigation accomplished to date. Construction has been delayed due to problems with previous work. The previously constructed detention basis was found to be deficient and is now under reconstruction through 2014. Mitigation is required for resources that will not be impacted until later in the construction process within the main stem of Rio de Flag. A limited reevaluation for construction within Rio de Flag is currently underway focused on maintaining costs under the authorized limit.	2026
SPD	SPL	San Luis Rey River, CA	75	100	241	195.5	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). Provision of fish passage under bridges is required; boulders will be removed/reconfigured. An adaptive habitat management plan is required; will cover the project area and an off-site mitigation site.	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. Acquisition of offsite area by sponsor is complete (45.5ac); a Real Estate Plan and NEPA document is being finalized for the site. Completion of a final adaptive habitat management plan is expected in Jan 2014; coordination with resource agencies is ongoing.	2018
SPD	SPL	Santa Ana River Mainstem, CA	75	83	3396	3291	Restore 92 acres salt marsh, 5 acres freshwater marsh, ~1,257 acres of riparian habitat (mostly through non-native vegetation removal, with monitoring), and 11 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.; 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); 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. No new mitigation was initiated in FY12 through FY13. 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	60	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 site is meeting or exceeding expectations with help of irrigation in 2013. Plant survivability is high with over 58% native cover. The goal is 75% cover. Weed management continues.	2015

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
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 of the required 5.5 acres is complete. Plants are currently under warranty. Monitoring of the site will resume in February 2014. Preparation of an adaptive management plan is underway.	2018
SPD	SPN	Oakland Harbor, CA 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.	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. 0 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 in 2013.	2024
SWD	SWF	Central City, Upper Trinity River Basin, TX, Construction	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. Additional requirements include management activities on 12.2 and 13.3 acres of existing riparian woodland and upland forest, respectively.	Mitigation has not started. Mitigation is onsite and project features have to be constructed before project features can be completed. No construction occurred in FY13.	2025
SWD	SWF	Dallas Floodway Extension, TX, Construction	50	25	1540.1	1540.1	Acquisition, planting, and management of 1,179 acres of additional project lands.	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. Adaptive management includes altering species use in the plantings and modifying techniques for establishing seeds/seedlings. The test plots will be monitored to assess the efficacy and success of the adaptive planting strategy.	2025

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit 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.	<p>FY13: The City planted/replanted 74 acres in mitigation site MX-3; however, survival was very low (~10%) due to continued drought.</p> <p>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.</p> <p>An Additional 186 acres were planted in FY11 and are doing well, but have not meet the success criteria.</p> <p>No additional areas were completed in 2013.</p>	2015
SWD	SWG	Brays Bayou, TX	70	65	27.9	27.9	Construction of 27.9 acres of wetlands in Willow Waterhole Detention Basin in project area.	<p>20 acres of wetlands at Willow Waterhole Detention Basin have been constructed. Mitigation requirement is for construction of 27.9 acres of wetlands.</p> <p>Construction by HCFCD on the detention basin occurred in 2013, but it is still incomplete. 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>.</p>	2020
SWD	SWL	Arkansas River Navigation Study, AR&OK	4	3	558.1	15.1	130 acres of Bottomland Forest and 248 acres of Marsh restoration. Relocation of approximately 30K mussels to Lake Dardanelle, relocation of approximately 60K mussels to Pool 2 and then using these individuals to recolonize the Canal. Throughout system , only scattered beds and patches of mussels were noted. Mitigation for mussel beds and patches that are located near construction areas will consist of relocating bed or patches as needed. Gravel bar surveys in proposed dredging locations indicated that an estimated 165 acres of gravel would be impacted and would require mitigation by relocating or creating gravel bars. 15.1 acre island required for terns.	Although a 15.1 acre marsh and forest island was constructed primarily for terns, in FY 13, no other project or mitigation construction has been accomplished due to no construction funding.	2021

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

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Percent Mit Physically Complete</u>	<u>Percent Project Physically Complete</u>	<u>Mit Total Acres of Land Required</u>	<u>Mit Total Acres of Land Acquired</u>	<u>Mitigation Requirements</u>	<u>Mitigation Accomplishments to Date</u>	<u>Estimated Date of Success</u>
SWD	SWT	Canton, OK, Dam Safety	95	85	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.	2014

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
MVD	MVK	Mississippi River Levees Construction, AR, IL, KY, LA, MS, MO & TN	98	The Vicksburg District was required to reforest 5,200 acres of bottom land hardwoods.	15-JUL-13 -Mississippi Department of Environmental Quality, Office of Pollution Control -Manager Water Quality Certification Branch	50% survival has been met on planted tracts since 1994	High	2025	None provided.
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-13 -Mississippi Department of Wildlife, Fisheries, and Parks, Wildlife Division -Government Liaison	Seedling survival exceeds 50%	High	2035	None provided.
MVD	MVN	Mississippi River Levees Construction, AR, IL, KY, LA, MS, MO & TN	83	Under the 1998 MRL FSEIS, the New Orleans District was required to mitigate for 24 acres of bottomland hardwood habitat.  For the FY 2011 Operation Watershed Restore 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 bank.	10-OCT-13 -US Fish and Wildlife Service, Lafayette Area Office -USFWS Biologist	The mitigation site has developed generally as anticipated.	High	2016	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
MVD	MVP	LD3, MISS R - Construction (Mississippi River: Lock and Dam 3 Navigation Safety and Embankments, Minnesota and Wisconsin)	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.	16-SEP-13 -Department of Natural Resources, Division of Waters -Area Biologist  -US Fish and Wildlife Service, Ecological Services -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 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 DMM, IA and 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).	08-AUG-13 -Illinois Department of Natural Resources, Office of Realty and Environmental Planning -Resource Planner  -Iowa Department of Natural Resources, Department of Natural Resources -Mississippi River Wildlife Biologist  -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. 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.	Medium	2016	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>		<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
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	18-JUL-13	- Polk County Conservation Board - IA -Parks and Natural Areas Planning Administrator	Moderate 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.	High	2017	None provided.
MVD	MVS	Chain of Rocks, IL	78	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.	11-APR-13	-Illinois Department of Natural Resources, Ecosystems and Environment Division -Interagency Wetland Program Manager  -US Fish and Wildlife Service, Marion Illinois Sub-Office -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.
MVD	MVS	Chesterfield, MO (010457)	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.	08-AUG-13	-Missouri Department of Conservation, Headquarters -Policy Coordinator  -US Fish and Wildlife Service, Ecological Services -Fish and Wildlife Biologist	At Site 1, preservation of the 73 acres of floodplain forest has been a success. Efforts to reforest a 14-acre crop field adjacent to this forest have been successful to date. A mix of prairie grasses was planted in the field in June 2010 to establish a dense groundcover that would allow for woody encroachment of native tree species in a slow and controlled fashion. A dense groundcover of grasses and forbs was observed in the field in early November 2011. As of September 2013 the groundcover is still present, and woody encroachment is progressing over most of the field.	High	2018	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
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.	22-JUL-13 - New Jersey Department of Environmental Protection -Staff - Division of Land Use	The project is trending away from the criteria established to be considered successful. Will continue monitoring and are currently in the process of developing a conceptual adaptive management plan expected to be completed by early 2014 to address the hydrologic deficiencies on the site.	Medium	2020	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
NWD	NWP	Columbia River Channel Improvement - Navigation, OR & WA (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.	13-SEP-13 -National Oceanic and Atmospheric Administration (NOAA), Oregon State Habitat Office -Supervisory Fisheries Biologist  -US Fish and Wildlife Service, Oregon Fish and Wildlife Office - Fish and Wildlife Biologist  -Washington Department of Ecology, Southwest Regional Office -Shoreline Management Specialist  -Washington Department of Environmental Quality, Portland Office -Columbia River Coordinator  -Washington Department of Fish and Wildlife, District 10 - Vancouver Office -Habitat Biologist	The Chumbley site was planted in 2009 and is currently being monitored annually. 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 yearly resulting in a low occurrence of these undesirable plants.	High	2020	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
NWD	NWP	Columbia River Channel Improvement - Navigation, OR & WA (Cottonwood Island)	100	Deepening of the Columbia River federal navigation 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 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.	13-SEP-13 -National Oceanic and Atmospheric Administration (NOAA), Oregon State Habitat Office -Supervisory Fisheries Biologist  -Oregon Department of Environmental Quality, Portland Office -Columbia River Coordinator  -US Fish and Wildlife Service, Oregon Fish and Wildlife Office - Fish and Wildlife Biologist  -Washington Department of Ecology, Southwest Regional Office -Southwest Regional Office  -Washington Department of Fish and Wildlife, District 10 - Vancouver Office -Habitat Biologist	As of 2013, construction is complete at Cottonwood Island with wetland development completed 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. The planting was complete spring 2012 with some re-plantings done in 2013. Annual maintenance will be conducted for a minimum of three years to reduce competition between planting and unwanted vegetation. Wetlands are currently functioning as intended with mostly native wetland plants present. 2014 will be the first year for a full evaluation of the success of the project.	Medium	2020	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
NWD	NWP	Columbia River Channel Improvement - Navigation, OR & WA (Webb)	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 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.	13-SEP-13 -National Oceanic and Atmospheric Administration (NOAA), Oregon State Habitat Office -Supervisory Fisheries Biologist  -Oregon Department of Environmental Quality, Portland Office -Columbia River Coordinator  -US Fish and Wildlife Service, Oregon Fish and Wildlife Office - Fish and Wildlife Biologist  -Washington Department of Ecology, Southwest Regional Office -Shoreline Management Specialist  -Washington Department of Fish and Wildlife, District 10 - Vancouver Office -Habitat Biologist	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. The wetland area cannot be properly managed due to fish entrapment when the gates are operated to provide water to the wetlands. Additional, construction is needed along with further consultation with NMFS to evaluate take of threatened and endangered salmonids.	Medium	2020	None provided.
NWD	NWS	Howard Hanson Dam, WA (Additional Water Storage Project - Phase 1)	100	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.	24-JUL-13 -National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service, Northwest Region -Fisheries Biologist  -US Fish and Wildlife Service, Ecological Services - WA -Biologist  -Washington Department of Fish and Wildlife, Habitat -Biologist  - 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.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>		<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
POD	POA	AKUTAN HARBOR, AK	60	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.	10-JAN-13	- Aleutians East Borough - Administrator	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 but only medium at this time as a result of the relocation of the Dolly Varden.	Medium	2014	None provided.
					13-DEC-12	-US Fish and Wildlife Service, Ecological Services Office - Supervisor				
SAD	SAJ	Rio Puerto Nuevo, PR	75	Creation of 23.1 acres mangrove forest in project right-of-way plus 4.9 acres northeast of the improved channel.	31-OCT-13	-Puerto Rico Department of Natural and Environmental Resources, Puerto Rico Department of Natural and Environmental Resources - Secretary of DNER  -US Fish and Wildlife Service, Boqueron, PR Field Office -Field Supervisor	Adjacent to Project: Natural recruitment of mangrove. Well established.  Project Right-of-way being cleared and graded for later planting.	Medium	2016	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>	
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-13	-Georgia Department of Natural Resources, Coastal Resources Division -Coastal Program Manager	<p>Percent cover for Andrew's Island is 85% in the second year exceeding the 3rd year target percentage. 12 mitigation sites were surveyed and found to have approximately 16.8 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 FY13 due to Government shutdown and lack of O&amp;M funds but will be surveyed early in FY14.</p>	Medium	2016	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
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.	20-NOV-13 -Department of Transportation, DOT -Waterways Program Manager  -South Carolina Department of Health and Environmental Control, Ocean and Coastal Resource Management -Wetland Program Coordinator	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.	High	2016	implement erosion control methods

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SAD	SAS	Savannah Harbor, GA	100	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.	30-SEP-13 -Federal Aviation Administration, Atlanta Airports District Office - Environmental Program Manager  -Federal Highway Administration, Georgia DOT -Waterways Program Manager  -Georgia Department of Natural Resources, Coastal Resources Division -Coastal Program Manager  -National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service -Biologist  -South Carolina Department of Health and Environmental Control, Ocean and Coastal Resource Management -Biologist  -South Carolina Department of Natural Resources, Marine Resources Division -Biologist  -US Fish and Wildlife Service, Ecological Services -Biologist  -US Fish and Wildlife Service, Savannah National Wildlife Refuge - Biologist	Project is behind for acreage numbers in all areas for 2013. FY13 results showed a deficit of 27 bare ground nesting, 50 Wetland nesting, 394 Waterfowl feeding, and 585 Shorebird feeding.  Success is determined by calculating annual production of acreages for each type and at the end of a 6 yr cycle determining the cumulative balance. Currently for FY08-FY13 Bare ground nesting is negative 141, Wetland nesting is positive 784, Waterfowl feeding is negative 267, Shorebird feeding is negative 1322 and the total project is negative 946.  Planning division, program management, and operations division are developing a strategy for catching up on mitigation numbers for all habitat types by 2015. To combat this deficit the District is pursuing holding water in more DMCA's for longer durations, adding more bare ground bird islands, acquiring more areas for mitigation credits, and better management of bare ground islands.	Medium	2019	Improve mitigation credits by holding water in more areas for longer durations, keep bird islands clear of vegetation and surrounded by water, continue monitoring and satellite imagery collection, hold frequent status meetings.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>	
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 facilitate anadromous fish passage upstream.</p>	30-MAY-13	<p>-Minnesota Department of Natural Resources, DNR Central Office - Hydrologist</p> <p>-North Carolina Division of Marine Fisheries, DMF Headquarters - Fisheries Biologist</p> <p>-North Carolina State University, College of Agriculture and Life Sciences -Fisheries Biologist</p> <p>-North Carolina Wildlife Resources Commission, Headquarters - Fisheries Biologist</p> <p>-US Fish and Wildlife Service, Ecological Field Services Office, Raleigh -Wildlife Biologist</p> <p>- 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 monitoring, 80% of flathead catfish passed Lock and Dam #1, but only 50% of shad and 21% of striped bass passed. Should the 80% criteria not be met for all species after Spring 2014, the rapids configuration will be modified to improve passage. The modification will be developed in coordination with all interested parties.</p>	High	2014	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 the Endangered Species Act (ESA) listed Valley Elderberry Longhorn Beetle.</p>	22-AUG-13	<p>-US Fish and Wildlife Service, U.S. Fish and Wildlife Service, Corps Project Branch -Branch Chief</p>	<p>A portion of the Goethe East Site (14.2 acres) of valley elderberry longhorn beetle habitat was replanted in 2012. Initial surveys indicate that generally survival is adequate. The Rossmoor Bar (oak woodland and riparian - 56 acres)site is progressing well with very good plant survival.</p>	High	2017	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
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 ESA 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.	06-DEC-13 -US Fish and Wildlife Service, Sacramento Field Office -Field Supervisor	All mitigation has been implemented for the Common Features Project. To date success at the Goethe site has been low for Elderberry (EB) shrubs (28%) so additional plantings were installed in 2012 but not counted in 2013 due to size of plants, native plants are at 93%. The Cal Expo site is over 100% survival for both EB and native with the natural regeneration and volunteers. Site 11.5 has continually declined with the 2013 results showing that the site is far below survival requirements. This is being coordinated with FWS at this time to determine future action.	High	2014	None provided.
SPD	SPK	American River - Folsom Outlet Modifications, CA (Joint Federal Project - Auxiliary Spillway)	90	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 ESA listed Valley Elderberry Longhorn Beetle (VELB), 6.77 acres oak woodland, and 0.53 acres chaparral habitat.	09-DEC-13 -US Fish and Wildlife Service, Sacramento Field Office -Field Supervisor	Mitigation at site 11.5 is complete and will be turned over to the sponsor in 2013. 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 be very successful.	Medium	2017	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>		<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SPD	SPK	Glenn Calusa Dam Gradient Facility/ RM208, CA	100	(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.	06-AUG-13	-US Fish and Wildlife Service, USFWS, Sacramento Field Office - Corps Projects Branch Chief	Resource agencies consulted agree, based on surveys for plant growth, health and canopy cover criteria, that all mitigation areas except for the Gradient Facility onsite have achieved mitigation success. The Gradient Facility onsite area was expected to fulfill all success criteria in 2011 with the successful establishment of 800 linear feet of willows along the riverbank to provide SRA cover with at least 60% canopy cover. However, in 2011 the willow plantings suffered significant plant mortality due to beaver damage. Since the 2012 status update, the project has been transferred over to the local sponsor for O&MRRR. The local sponsor has assumed responsibility under a 215 agreement to resolve mitigation deficiency.	High	2014	None provided.
					07-JAN-13	-National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service Southwest Region -Regional Director/Field Office Chief				

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SPD	SPK	Kaweah Spillway Enlargement, CA	100	Based on adverse impacts associated with project construction, mitigation was required to include installation of 40 acres of riparian habitat, 7.19 acres of habitat for ESA listed Valley Elderberry Longhorn Beetle (VELB), and preservation of 4,388 acres of oak woodland and 1,300 acres of seasonal waterfowl habitat.	20-AUG-13 -US Fish and Wildlife Service, US Fish and Wildlife Service Corps Project Branch -Branch Chief	At the Davis Ranch site,(4,388 acres) success criteria were met when the site was purchased by the non-Federal sponsor and the O&M manual was finalized. The site has been turned over to the non-Federal sponsor. The Dry Creek site (40 acres) had a couple of replants due to fire and grazing damage, but is well on the way to meeting success criteria to include canopy density and vigor, areal cover and habitat structure. Consultation was done this year with FWS, and concurrence was reached that ecological success was met. The site has been turned over to the non-Federal sponsor. Tulare Lakebed Site (1,300 acres) has met the success criteria and has been turned over to the sponsor. The elderberry site consists of 4 individual sites planted at various times between 2001 and 2006. All sites have met the 60% survival criteria identified in the ESA Biological Opinions, and have been turned over to the non-Federal sponsor.	High	2013 mitigation success	mitigation successful
SPD	SPK	Sacramento River Bank Protection, CA - Construction (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).	18-APR-13 -California Department of Fish and Wildlife, Sacramento Office -Senior Environmental Scientist  -California Department of Water Resources, California Department of Water Resources -Environmental Scientist  -National Oceanic and Atmospheric Administration (NOAA), Sacramento NMFS Office -Levee Program Coordinator  -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.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SPD	SPK	Sacramento River Bank Protection, CA - Construction (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.	18-APR-13 -California Department of Fish and Wildlife, Sacramento Office -Senior Environmental Scientist  -California Department of Water Resources, California Department of Water Resources -Environmental Scientist  -National Oceanic and Atmospheric Administration (NOAA), Sacramento NMFS Office -Levee Program Coordinator  -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist	This site was built 2 years ago. Annual monitoring occurred in Fall of 2012 and Summer of 2013. It will continue to be monitored for at least one more year.  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	Medium	2017	None provided.
SPD	SPK	Sacramento River Bank Protection, CA - Construction (LAR at River Mile 10.6L)	100	Mitigate on-site for effects to riparian vegetation and associated habitat with 0.77 acres of native riparian vegetation and associated habitat, including In-water Woody Material (IWM). Purchased 155.6 valley elderberry longhorn beetle credits (6.43 ac).	18-APR-13 -California Department of Fish and Wildlife, Sacramento Office -Senior Environmental Scientist  -California Department of Water Resources, California Department of Water Resources -Environmental Scientist  -National Oceanic and Atmospheric Administration (NOAA), Sacramento NMFS Office -Levee Program Coordinator  -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist	Annual monitoring occurred in fall of 2012 and summer of 2013. The site is doing well and meeting all performance standards so far. The site will continue to be monitored for at least one more year.  2013 Results (Monitoring Year 2): Percent Cover - 63% - Performance standard met Invasive Spp Abundance - 7% - Performance standard met Canopy Cover - 28% - Performance standard met	Medium	2017	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SPD	SPK	Sacramento River Bank Protection, CA - Construction (SAC Setback Levee at River Mile 57.2R)	100	Seventy eight elderberry plants require transplanting with associated native riparian plantings that will mitigate for the loss of heritage oak trees. Impacts associated with the ESA listed Valley Elderberry Longhorn Beetle resulting from transplanting elderberry plants within the project footprint requires 577.6 VELB credits. Impacts to wetlands requires 0.65 acres of seasonal wetland credits.	18-APR-13 -California Department of Water Resources, California Department of Water Resources -Environmental Scientist  -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist	Elderberry transplants and additional native plantings have been accomplished. Success at the River Ranch and French Camp mitigation banks will be assessed by the USFWS, based on provision of identified habitat values to include support of protected longhorn beetles.	Medium	2013 mitigation success	None provided.
SPD	SPK	Sacramento River Bank Protection, CA - Construction (SAC 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).	18-APR-13 -California Department of Fish and Wildlife, Sacramento Office -Senior Environmental Scientist  -California Department of Water Resources, California Department of Water Resources -Environmental Scientist  -National Oceanic and Atmospheric Administration (NOAA), Sacramento NMFS Office -Levee Program Coordinator  -US Fish and Wildlife Service, Sacramento Office -Fish and Wildlife Biologist	First and second year monitoring has been completed. The site appears to be performing well and meeting expectations so far.  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.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SPD	SPK	South Sacramento County Streams, CA	100	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	04-NOV-13 -US Fish and Wildlife Service, Stone Lakes National Wildlife Refuge- CA Stone Lakes NWR Staff  06-SEP-13 -US Fish and Wildlife Service, Sacramento Office -Endangered Species Office	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 2013, 10 owls were observed utilizing constructed burrows. There is no management necessary at this time.	High	2014	Continue monitoring and mowing around constructed burrows
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.	19-JUN-13 -California Department of Fish and Wildlife, Inland Deserts Region - Biologist  -California Water Resources Control Board, San Diego -Environmental Scientist  -US Environmental Protection Agency (EPA), San Francisco - Wetlands Regulatory Officer  -US Fish and Wildlife Service, Carlsbad -Federal Projects Coordinator  - Riverside County Flood Control and Water Conservation District - Senior Civil Engineer - Special Projects	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  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  On track to meet Year 5 success criteria in May 2014.	High	2014	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
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). Provision of fish passage under bridges is required; boulders will be removed/reconfigured. An adaptive habitat management plan is required; will cover the project area and an off-site mitigation site.	06-FEB-13 -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 2011 and 2012, initial review of Phase 2 (27ac total) and portions of Phase 3 onsite restoration areas indicate habitat is meeting success criteria. Most active restoration (planting of container plants) was completed (Winter 2013). Surveys showed vireo territories increased from 2012 to 2013 in actively restored areas, confirming that portions of restored areas are meeting habitat requirements. Monitored to continue for 5 years to ensure habitat meets remaining Phase 3 onsite requirements. Boulder removal/reconfiguration for fish passage is anticipated to occur in Fall 2014/Winter 2015.	High	2018	None provided.

Table 3. ANNUAL CONSULTATION ON SUCCESS OF MITIGATION as required by Section 2036 of WRDA 2007

February 26, 2014

<u>Division</u>	<u>District</u>	<u>Project Name</u>	<u>Mitigation % Physically Complete</u>	<u>Mitigation Requirements</u>	<u>Consultation Date and Agency, Office, Title of Party Consulted</u>	<u>Evaluate Ecological Success to Date</u>	<u>Likelihood of Success</u>	<u>Projected Timeline for Achieving Success</u>	<u>Recommendations for improving the likelihood of success made during consultation</u>
SPD	SPL	Santa Ana River Mainstem, CA	75	Restore 92 acres salt marsh, 5 acres freshwater marsh, ~1,257 acres of riparian habitat (mostly through non-native vegetation removal, with monitoring), and 11 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.	21-FEB-13 -California Department of Fish and Wildlife, Inland Deserts Region - Staff Biologist  -US Fish and Wildlife Service, Carlsbad -Staff Biologist  - 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.	High	2018	None provided.