Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
BER 1.9 L	Bear River	1.9	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2011	432	5	Erosion Pockets, Fluvial	Scattered Quarry Stone in Poor condition	Likely	None	2011 - Large slumped sections of bank. 2012 - Slopes slightly steeper.	Minor new erosion observed.
BER 2.5 L	Bear River	2.5	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2011	222	25	Erosion Pockets, Whole Bank Failure	None	Likely	None	2011 - Large section of bank has slumped off. RD has flagged and appears to be watching. 2012 - Slopes slightly steeper. 2013 - Minor new erosion observed.	Erosion pockets have expanded
BER 4.9 R	Bear River	4.9	0	R	RD 784 - Plumas Lake	Johnson Ranch	Eroding	2009	64	10	Fluvial	None	Likely	None	2009 - Small site which could be repaired with maintenance. Erosion into the levee toe, rock has started to fail.	Access Issues - Could not observe
BER 5.7 L	Bear River	5.7	0	L	RD 1001 - Nicolaus	Bear	Eroding	2008	474	10	Fluvial, Erosion Pokets	None	Likely	None	2008 - Sandy/silty banks with rotational slab failures creating near vertical bank with pop-outs due to tree failures. Narrow berm.	Minor new erosion observed.
BTC 1.8 L	Butte Creek	0	1.8	L	Maintenance Area 5	Unassigned	Eroding New	2017	558	20	Fluvial, Whole Bank Failure	None	Unsure	None		Long vertical scarp on toe.
BTS 0.8 R	Butte Slough	0.8	0	R	RD 070 - Meridian Farms	North Sutter	Eroding New	2017	409	0	Erosion Pockets, Whole Bank Failure	None	Likely	Overhead power lines and power poles		Erosion along lower bank, one section has slumped off. Large cracks observed, and expecting additional slumping failures.
CBD 0.5 L	Colusa Basin Drainage Canal	0	0.5	L	RD 787 -Fair Ranch	RD 787	Eroding	2011	611	5	Fluvial, Tree Pop-outs	None	Likely	None	2011 - Large scallops throughout the entire reach. Toe scour due to tree pop-outs, resulting in a steepening slope. The reduced resistive forces plus clay levee may increase the loading. Additional erosion due to human use.	Wide levee section, roughly 40 ft.
CBD 0.9 L	Colusa Basin Drainage Canal	0	0.9	L	RD 787 -Fair Ranch	RD 787	Eroding	2011	968	0	Tree Pop-Outs, Fluvial	None	Likely	Overhead utility poles and pipe	2011 - Large scallops throughout the entire reach. Toe scour due to tree pop-outs, resulting in a steepening slope. The reduced resistive forces plus clay levee may increase the loading.	Oversized embankment.
CBD 19.2 L	Colusa Basin Drainage Canal	0	19.2	L	RD 108 - River Farms	Grimes	Eroding	2011	397	0	Fluvial, Toe Scour	None	Unsure	None	2011 - Toe scour at the bottom of a steep bank, large sections of the toe are sliding down. Erosion may be due to the upstream bend.	Access Issues - Could not observe
CHC 2.4 L	Cache Creek	0	2.4	L	DWR Sacramento Maintenance Yard	Yolo	Critical	2002	218	15	Fluvial	None	Likely	Pipe through levee with flapgate, overhead powerline crossing and power pole	Site identified as CRITICAL in 2002. 2006 - Currently constructing a setback levee. New failures present and extensive. Downstream end of the setback levee did not extend far enough. Upstream end was repaired. 2007 - DWR repaired with a setback levee, but the levee did not go far enough downstream. 2012 - New cracks observed. 2013 - Fresh erosion on upper bank.	No observed change.
CHC 3.5 R	Cache Creek	0	3.5	R	DWR Sacramento Maintenance Yard	Woodland	Eroding	2010	450	25	Fluvial	None	Likely	None	2010 - Large slump on the upper berm, a tree has recently slid down the slope. 2011 - Large slump and new erosion. 2012 - Slightly steeper slopes and cracks observed.	Significant amount of debris along bank.
CHC 5.4 L	Cache Creek	0	5.4	L	DWR Sacramento Maintenance Yard	Yolo	Eroding	2009	198	10	Fluvial	None	Likely	None	2009 - Erosion into the levee slope. 2010 - Minor new erosion. 2011 - New erosion and a freshly fallen tree. 2012 - New animal holes and slightly steeper slopes. 2013 - New tree popout and 2 feet of erosion along the top bank.	Site continues to erode due to recent high storm events.
CHI 2.7 L	Chico Creek	0	2.7	L	Butte County	Unassigned	Eroding New	2017	207	15	Fluvial, Whole Bank Failure	None	Unlikely	None		No trees on bank or levee. Large erosion scarp along lower bank.
CHS 1.8 L	Cache Slough	0	1.8	L	RD 2104 - Perters Pocket Tract	Peters Pocket	Critical	2017	21,499	0	Slump Cracking	None	Likely	Pump and pipes		Deep cracking aobserved along the ENTIRE LEVEE; risk of total levee failure; vertical cracking is on both the waterside and landside, eminent slump failure expected.
CHS 21.1 R	Cache Slough	21.1	0	R	RD 2060 - Hastings Tract	Hasting Tract	Eroding	2011	1,625	0	Toe Scour, Wave Wash	Scattered Quarry Stone in Fair Condition	Unsure	None	2011 - Several pockets of erosion from rotational failure and slumping toe. 2013 - Site extended downstream to include new erosion pockets. 2016 - New rock in one of the erosion spots.	Significant toe erosion within last year.
CHS 22.9 R	Cache Slough	22.9	0	R	RD 2060 - Hastings Tract	Hasting Tract	Eroding	2007	3,086	0	Erosion Pockets	Quarry Stone in Good Condition	Unsure	None	2007 - Geotechnical failure of midside slope and wave wash/scalloping in toe area. Stone revetment upstream and downstream of site. Similar sites are present all along the right bank downstream of this site, most could be repaired with some maintenance. 2008 - Small scour pockets and mid-slope wave wash. 2010 - Minor new erosion. 2011 - Site extended downstream and new erosion. 2013 - Pockets of erosion behind willows and extending into the levee toe. 2015 - Erosion pockets have increased in size. 2016 - Rock has been placed in some of the pockets.	Sites 22.6, 22.8, 22.9, and 23.0 were combined into one long erosion site due to due erosion.
DEC 0.9 R	Deer Creek	0	0.9	R	Tehama County	Unassigned	Eroding	2006	265	10	Fluvial	Quarry Stone in fair condition	Likely	None	2006 - Banks are composed of lithified cobble alluvial soils (relict alluvial fan deposits). Slow erosion of lithified lower bank materials with faster erosion of overlying less cohesive soils resulting in channel "skating" across lithified horizon. 2011 - The Deer Creek Watershed Conservation Group is planning a reach-wide repair for Deer Creek.	No observed change.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
ELC 1.4 L	Elder Creek	0	1.4	L	Tehama County	Unassigned	Eroding	2006	331	20	Fluvial	Quarry Stone in good condition	Unlikely	None	2006 - High vertical bank due to mass failures. Thalweg meandering and erosion of bank. Banks are cohesive with non cohesive gravel horizons. 2011 - Foundation is silty-sand with gravel. New slumping at the toe, mass failure continues.	A large quarry stone placed since last inspection.
ELC 3.0 R	Elder Creek	0	3	R	Tehama County	Unassigned	Eroding	2006	129	20	Fluvial	None	Likely	None	2006 - Mass failure of this bank due to being along the outside of a bend where erosion and undercutting are the greatest. Low flow is being forced into the toe of this bank by point bar on the opposite side of the creek. 2011 - Toe of the bank continues to be undercut.	Does not appear to have new erosion , channel was being dredged during inspection.
ELK 0.2 L	Elk Slough	0.2	0	L	RD 150 - Merritt Island	Merritt Island	Eroding	1997	49,631	0	Whole Bank Failure, Tree Pop-outs	Scattered Quarry Stone in fair condition	Likely	Multiple pipes through the levee, boat docks, and a bridge	1997 - Most of lower Elk Slough contains high near vertical banks, with erosion into the levee slope. Channel almost appears incised. 2002 - Sites where the levee slope is near vertical and severely eroding. It could fail catastrophically. 2004 - Looks bad in terms of vertical slopes and fallen trees. 2005 - Banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2006 - Both banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2010 - The entire reach is in poor condition, with severely eroding near vertical slopes, needs a regional repair. 2011 - Channel banks are still oversteepened with erosion continuing. 2012 - New cracks and animal holes observed.	Fresh erosion; site continues to worsen.
ELK 0.2 R	Elk Slough	0.2	0	R	RD 999 - Netherlands	Clarksburg	Eroding	1997	49,983	0	Whole Bank Failure, Tree Pop-outs	Scattered Quarry Stone in fair condition	Likely	Multiple pipes through the levee, boat docks, and a bridge	1997 - Most of lower Elk Slough contains high near vertical banks, with erosion into the levee slope. Channel almost appears incised. 2002 - Sites where the levee slope is near vertical and severely eroding. It could fail catastrophically. 2004 - Looks bad in terms of vertical slopes and fallen trees. 2005 - Banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2006 - Both banks are still over steepened in most places and potentially susceptible to geotechnical failures. 2010 - The entire reach is in poor condition, with severely eroding near vertical slopes, needs a regional repair. 2011 - Channel banks are still oversteepened with erosion continuing. 2012 - New cracks and animal holes observed. 2013 - Fresh erosion around pump structure.	Fresh erosion; site continues to worsen.
FHR 0.6 L	Feather River	0.6	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	1997	901	5	Fluvial, Toe Scour	None	Likely	None	1997- Deposits over top of cobble on the upper slope. 2000 - Old cobble site in poor shape; some toe retreat, but little change; steep bank. 2010 - Site extended upstream due to new toe erosion. 2012 - Minor new erosion at toe, new slumping, animals holes and cracks observed.	Further toe erosion, with sections of sand deposition.
FHR 1.0 L	Feather River	1	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2000	1,054	20	Fluvial, Whole Bank Failure	None	Unsure	Pump structure, pile wall and power pole	2000 - Site is relatively stable except for some toe erosion at the upstream end, recommend monitoring the upstream end. 2004 - Some new block failures (10ft deep) at the toe of the upstream end. 2007 - Some minor new slumping at the waterline. 2013 - Minor new erosion along the bank toe.	Significant new erosion along lower bank.
FHR 3.8 L	Feather River	3.8	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2006	2,094	15	Fluvial, Toe Scour	None	Likely	Pump structure near downstream end	2006 - Sandy, silty bank with intermittent pockets of erosion. Rotational failure and tree pop outs are most of the problem. Some upper slope fluvial erosion. 2010 - Site extended upstream. The lower Feather may benefit from a regional repair. 2011 - Site combined with 3.6. Minimal new erosion. 2013 - New erosion observed at bank toe. Trees on site now have exposed roots.	New erosion along lower slope
FHR 5.0 L	Feather River	5	0	L	RD 1001 - Nicolaus	Rio Oso	Critical	2000	1,666	15	Whole Bank Failure, Fluvial	None	Unsure	None	2000 - Steep bank off berm with some slumps and fallen trees, continued erosion. 2002 - Site lengthened upstream and downstream due to vertical bank along most of the reach. 2010 - Site extended upstream. 2011 - Minimal new erosion. 2012 - Site extended on the upstream end, new tree pop-out, and bank erosion continues to worsen. 2013 - Minor new erosion at the toe and top of bank.	Upgraded to critical, significant new erosion, entire bank slope is vertical with non cohesive soils.
FHR 5.8 L	Feather River	5.8	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2011	1,030	5	Whole Bank Failure, Fluvial	Scattered Cobbles in poor condition	Unsure	Pipe through levee and pump structure at downstream end	2011 - Large slumped sections on the lower bank. 2012 - New cracks observed.	slope is not stable enough to maintain vegetation growth, new erosion
FHR 6.0 L	Feather River	6	0	L	RD 1001 - Nicolaus	Rio Oso	Critical	2011	487	10	Whole Bank Failure, Fluvial	None	Likely	Pipe	2011 - Tall slumping sections. Scour around trees has exposed most of the roots. 2016 - Recent large slope failure observed.	Upgraded to critical, entire bank slope is slumping, with near vertical face

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
FHR 6.6 L	Feather River	6.6	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2011	710	5	Fluvial, Toe Scour	None	Likely	Pipe through levee, pump at upstream end, and power pole	2011 - Erosion pockets from tree popouts. Sections of the lower bank have slumped off. 2013 - Scallops from tree popouts no longer visible on site. Minor new erosion at the middle of the bank. 2015 - Fres erosion from human usage.	Sandy bank slope is unraveling.
FHR 7.7 L	Feather River	7.7	0	L	RD 1001 - Nicolaus	Rio Oso	Eroding New	2017	309	0	Fluvial, Tree Pop-outs	Cobbles in Fair Condition	Unsure	None		Erosion along bank appears to be due to rapid drawdown condition. Lower bank cobbles are unraveling. Tree popout at upstream end.
FHR 12.3 R	Feather River	12.3	0	R	Maintenance Area 3	Yuba City	Under Construction	2015	177	15	Toe Scour	None	Likely	None	2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve.	Under construction. work in progress.
FHR 12.8 R	Feather River	12.8	0	R	Maintenance Area 3	Yuba City	Under Construction	2015	293	15	Toe Scour	None	Likely	None	2013 - Minor toe scour causing gradual erosion into the bank slope.	Under construction. work in progress.
FHR 17.8 L	Feather River	17.8	0	L	RD 784 - Plumas Lake	Arboga	Eroding	2003	1,858	50	Fluvial, Tree Pop-outs	None	Unlikely	Pump structure and pipes through levee	2003 - Bank is near vertical. Identified as a Potentially Critical site. 2004 - Eddy flow off downstream end of Modesto formation eroding the fluvial sediments. 2005 - Some new slumping. Actively eroding but berm width is greater than 50 ft. 2006 - Downgraded to regular erosion site. Still actively eroding. Large old rotational failures in high bank on the downstream end. 2008 - Removed from inventory due to wide berm width does not meet criteria for an erosion site. 2010 - Added back to the inventory after 10 ft of bank erosion in the winter 2009 storm. Steep vertical face. 2011 - Bank has retreated an additional 2.5 ft from last year. New tree popouts and erosion throughout the site. 2012 - Site continues to worsen with new tree popouts and many sections of new erosion.	Large sandbar on opposite bank, thalweg moving closer to levee.
FHR 47.5 R	Feather River	47.5	0	R	Maintenance Area 7	Live Oak	Eroding	2011	842	30	Fluvial, Eddy Scour	None	Unsure	Pipes through levee and canal on landside slope	2011 - The toe of the levee has been excavated by the land owner. Small holes throughout the site have been filled with a plaster like substance. Large canal on landside slope and over the levee toe.	Vertical face into the levee prism, huge eddy.
GEO 0.3 L	Georgiana Slough	0.3	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	523	0	Erosion Pockets, Fluvial	Quarry Stone in good condition	Likely	None	1997 - Erosion pockets into the levee toe. 1999 - Some small pockets fixed with rock riprap. 2002 - New "brush boxes" along the bank toe. 2005 - Brush boxes are empty. Some pockets are filled with new stone. 2006 - Some new rock at the downstream end (~100 ft long). Several small pockets of new rock in scallops. Brush boxes in poor to fair condition. 2010 - Site looks a little worse, some toe rock but still has erosion scars at lower to mid slope. 2011 - Site upgraded to CRITICAL. Significant new erosion. Erosion scallops are vertical and almost the height of the levee. 2012 - Rock has been placed in some of the erosion scallops and therefore the site is no longer critical. 2013 - Site shortened site. The downstream half of site was repaired by RD. Pipe no longer in site limits.	Site shortened. New rock placed on levee slope in erosion pockets.
GEO 1.7 L	Georgiana Slough	1.7	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	1,528	5	Erosion Pockets, Wave Wash	Quarry Stone in good condition	Likely	None	1997 - Old damaged rock riprap along the toe. 1999 - Downstream end (400 ft) repaired with rock. 2002 - New rock/concrete rubble section on the downstream end. 2004 - Small pocket repairs at the downstream end. 2005 - Some new bundles in the brush boxes. 2012 - Some rock has been placed in last year.	New rock placed in erosion pockets , site has improved wih work done by RD, but still some erosion pockets and toe erosion. Slump failure with headscarp at downstream end.
GEO 2.0 L	Georgiana Slough	2	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	2009	652	0	Whole Bank Failure	Quarry Stone in good condition	Likely	None	1997 - Erosion pockets into the toe of the levee. 2001 - Staked low fascine walls at the bankline. 2004 - Numerous "Brush Boxes." 2005 - Some new bundles in the brush boxes. 2012 - Site extended downstream to account for new bank sloughing. 2013 - Some rock added to the upstream end by the local RD. 2016 - Quarry stone is starting to fail.	Rock placed on levee for most of site in last years, but it is already failing, almost vertical bank.
GEO 2.5 L	Georgiana Slough	2.5	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	992	0	Whole Bank Failure, Wind Wave	None	Likely	None	1997 - Erosion pockets into the toe of the levee. 2001 - Staked low fascine walls at the bankline. 2004 - Numerous "Brush Boxes." 2005 - Some new bundles in the brush boxes. 2012 - Site extended downstream to account for new bank sloughing. 2013 - Some rock added to the upstream end by the local RD.	Head scarp observed.
GEO 3.8 L	Georgiana Slough	3.8	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	2,589	0	Wave Wash, Toe Scour	Quarry Stone in fair condition	Likely	Pump, Pipe, utility	1997 - Pockets of erosion into the levee at the water line. Alders are being undercut and rotating out into the channel. Damaged rock at upstream end. 2000 - New minor erosion. 2001 - Staked low fascine walls at bankline. 2002 - New "Brush Boxes" along the bank toe. 2003 - New erosion pockets in the middle of the site. 2005 - Some new bundles in the brush boxes. 2011 - Site upgraded to CRITICAL. Significant new erosion. Sites 3.6, 3.7, 3.71, and 4.0 were combined. 2012 - Rock has been placed in some of the erosion pockets since last year, however site remains critical. 2013 - Site no longer critical. The worst pockets were filled with rock by the local RD.	Fresh toe erosion, significant undercutting and slumping.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
GEO 4.3 L	Georgiana Slough	4.3	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	1,052	0	Fluvial, Wave Wash	Quarry Stone in good condition	Likely	PG&E pipeline crossing	1997 - Pockets of erosion into the levee toe. 1999 - Minor rock riprap and willow bundles place in a couple of spots. 2001 - Staked, low fascine walls at bankline. 2003 - Small unprotected pockets still eroding. 2004 - Numerous brush boxes, some falling apart, some with new bundles. 2005 - Some new brush boxes installed; some boxes are empty. Levee slope and banks still look bad with pocket scallops into the levee slopes. 2011 - Erosion continues and the number of pockets is increasing. 2013 - Some of the downstream end was repaired by the RD. 2016 - Fresh erosion observed.	The worst sections have been filled with quarry stone , but still areas of concern.
GEO 4.5 L	Georgiana Slough	4.5	0	L	RD 563 - Tyler Island	Tyler Island	Critical	1997	1,396	0	Whole Bank Failure, Wave Wash	Quarry Stone in fair condition	Likely	Bridge, underground telephone crossing, and pipe	1997 - Pocket erosion at upstream end and into the levee toe under the Alder trees. 2003 - New brush boxes with wattles on bank. 2004 - No brush boxes. 2005 - Site extended from the downstream side of the bridge. Whole bank is vertical. 2010 - Some minor new erosion. 2011 - Site upgraded to CRITICAL. New erosion pockets throughout the site. Sites 4.5, and 4.6 were combined. 2016 - Fresh erosion observed.	Numerous areas of bank erosion, with vertical sections up to the levee hinge.
GEO 5.3 L	Georgiana Slough	5.3	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	3,538	0	Whole Bank Failure, Wave Wash	Quarry Stone in good condition	Likely	Pipes	1997 - Pocket erosion into the toe of the levee. 2000 - Scallops in banks with small colored flags, biotech rolls present. 2001 - Staked, low fascine walls at bankline. 2003 - Still have visibly bad spots, especially at the upstream end. 2005 - Some new brush bundles in the brush boxes; some with missing bundles. Some boxes too low relative to high tide. 2010 - Site extended upstream. 2011 - Minor new erosion. 2016 - Fresh erosion observed.	Site extended upstream, increased toe erosion from boat wake/tide action, RD has placed rock on levee slope in places.
GEO 5.5 R	Georgiana Slough	5.5	0	R	Brannan-Andrus Levee Maintenance District	Brannan Andrus Island	Eroding New	2017	86	0	Whole Bank Failure, Anthropogenic Erosion	Scattered Quarry Stone in poor condition	Unlikely	Pump and pipe through levee		Failed rock section, slump failure of bank to subvertical face.
GEO 6.3 L	Georgiana Slough	6.3	0	L	RD 563 - Tyler Island	Tyler Island	Critical	1997	5,951	0	Erosion Pockets, Wave Wash	Quarry Stone in fair condition	Unsure	Pipes and PG&E crossing	1997 - Deep pockets of erosion and narrow berm. Reach is characterized by lots of pockets into the existing berm and/or levee slope. 1999 - Some pockets filled with rock riprap. 2000 - Exposed fabric. 2001 - Staked, low fascine walls at bankline. 2002 - New spot of rock at upstream end. Some new brush boxes. 2005 - Some stone sliding off the underlying geotextile fabric. Some new brush bundles in the brush boxes; some with missing bundles. Some boxes too low relative to high tide. 2009 - Minimal new erosion, site length extended. 2010 New erosion on downstream end, site extended downstream. 2011 - Sites 6.1. 6.4 and 6.6 were combined. New erosion pockets, site extended to include the erosion in between the old sites. 2012 - Rock has been placed in portions of the bank since last year. 2016 - Site 5.8 was merged with this site due to new erosion connecting the sites.	Upgraded to CRITICAL. Combined with 6.8. Vertical sections from mid slope to toe, vertical face from levee hinge at some locations. Wave/tide erosion at toe, evidence of beavers.
GEO 7.0 R	Georgiana Slough	7	0	R	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	1997	1,137	5	Toe Scour, Wave Wash	Scattered Quarry Stone in poor condition	Likely	Pipe and boat dock permited	1997 - Toe damaged rock. 1999 - One pocket filled with gravel. 2000 - Eroding beach with some biotech rolls and stakes; some gravel on slope. 2001 - Staked, low fascine walls at bankline. 2005 - Stone revetment in between pockets. 2006 - New rock on upper slope behind brush boxes at the upstream end, Stone is sliding off the hard toe. 2016 - Fresh erosion observed.	Site extended downstream. Large erosion pockets and significant toe erosion.
GEO 7.2 L	Georgiana Slough	7.2	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	2009	332	0	Wave Wash, Toe Scour	Scattered Quarry Stone in Poor condition	Likely	None	2009 - Small scallops of erosion into the levee toe behind brush boxes. 2011 - Minor new erosion. 2012 - Site extended upstream to account for addition erosion pockets. 2016 - Fresh erosion observed.	New erosion at toe.
GEO 8.3 L	Georgiana Slough	8.3	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	1997	3,110	0	Wind Wave, Whole Bank Fialure	Quarry Stone in good condition	Likely	Pump and house on landside slope	1997 - Narrow eroding berm upstream of existing rock. 2001 - Staked, low fascine walls at bankline. 2011 - Minor new erosion. Site extended downstream. 2012 - Rock repair failing in one erosion pocket. 2016 - Fresh erosion observed.	New rock on levee in sections, failure of old rock in other sections, site extended upstream to account for new erosion pocket.
GEO 9.0 R	Georgiana Slough	9	0	R	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding New	2017	1,678	0	Whole Bank Failure, Toe Scour	Quarry Stone in fair condition	Likely	Pipe and ramps		Toe erosion and failed revetment.
GEO 9.2 R	Georgiana Slough	9.2	0	R	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding New	2017	707	0	Whole Bank Failure, Toe Scour	Quarry Stone in fair condition	Likely	Pump and pipe		Toe erosion.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
GEO 9.3 L	Georgiana Slough	9.3	0	L	RD 563 - Tyler Island	Tyler Island	Critical	1997	4,304	0	Toe Scour, Wave Wash	Scattered Quarry Stone in poor condition	Likely	Pump, Pipes, Ramp, and power poles	1997 - Loss of rock at toe; pockets of upper berm erosion; very narrow berm width; toe rock problem; erosion pockets in rock. 2002 - New brush boxes at toe of the worst spots. 2005 Upstream 200 ft removed because of the wide berm. 2006 - Some rock repair pockets behind the brush boxes at the upstream end. 2010 - Some new erosion. 2013 - New rock placed on the levee slope. 2016 - Fresh erosion along the toe.	Upgraded to critical. Pockets of erosion - subvertical. Areas of failed revetment, old rock is unraveling, and eminent tree popout outs expected.
GEO 9.8 L	Georgiana Slough	9.8	0	L	RD 563 - Tyler Island	Tyler Island	Eroding New	2017	280	0	Whole Bank Failure, Wave Wash	None	Likely	None		Whole bank failure , eroded to subvertical face, and giant animal holes.
GEO 10.0 L	Georgiana Slough	10	0	L	RD 563 - Tyler Island	Tyler Island	Eroding New	2017	1,282	0	Wave Wash, Whole Bank Failure	Quarry Stone in poor condition	Unsure	Pipes		Revetment failure , toe erosion moving landward.
GEO 10.2 L	Georgiana Slough	10.2	0	L	RD 563 - Tyler Island	Tyler Island	Eroding New	2017	3,906	0	Whole Bank Failure, Wave Wash	None	Likely	Pump, pipes, and boat dock permitted		Evidence of meander process, eroding to short vertical face
GEO 10.9 R	Georgiana Slough	10.9	0	R	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding New	2017	1,703	5	Toe Scour, Whole Bank Failure	Concrete Rubble in poor condition	Likely	Pipeline		Significant toe erosion and whole bank failure in sections, large pockets from tree popouts.
GEO 11.0 L	Georgiana Slough	11	0	L	RD 563 - Tyler Island	Tyler Island	Eroding	2011	990	0	Wave Wash, Whole Bank Failure	Quarry Stone in poor condition	Likely	None	2011 - Short sections of eroding bank at the waterline and holes in toe of levee. 2012 - Site extended upstream. 2013 - Erosion pockets filled with an insufficient amounts of revetment. 2016 - Fresh erosion observed.	Increased toe erosion, slumping, boat wake erosion, and revetment failure near downstream end. Site extended upstream.
GEO 11.4 L	Georgiana Slough	11.4	0	L	RD 563 - Tyler Island	Tyler Island	Critical	2017	1,338	0	Whole Bank Failure, Toe Scour	Quarry Stone in poor condition	Likely	None		New erosion site, upgraded to critical. Subvertical face from levee hinge, large erosion pockets, and toe erosion throughout.
GEO 11.8 R	Georgiana Slough	11.8	0	R	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding New	2017	1,007	5	Toe Scour, Whole Bank Failure	Concrete Rubble in poor condition	Likely	Pipe		Tree popout popouts eminent , significant toe erosion and whole bank failure in sections
GEO 12.0 L	Georgiana Slough	12	0	L	RD 563 - Tyler Island	Tyler Island	Eroding New	2017	356	0	Toe Scour	None	Likely	Pipe and ramp		Toe erosion throughout site, slumping, subvertical levee slope in sections.
HAS 7.9 L	Haas Slough	0	7.9	L	RD 2098 - Cache-Haas Area	Moore Tract	Eroding	2011	2,150	0	Erosion Pockets, Toe Scour	None	Likely	Pipes	2011 - Large vertical erosion pockets and bank slumping.	POSSIBLY BEING FIXED BY RD; deep cracks along bank and toe, intermittent slump.
HAS 8.4 L	Haas Slough	0	8.4	L	RD 2098 - Cache-Haas Area	Moore Tract	Eroding New	2017	1,514	0	Toe Scour, Tree Pop-outs	Scattered Quarry Stone in poor condition	Likely	Overhead powerpole		Horizontal cracks; scour along toe; poorly constructed levee susceptible to erosion.
HAS 9.7 L	Haas Slough	0	9.7	L	RD 2098 - Cache-Haas Area	Moore Tract	Critical	2011	1,595	0	Slump Failures, Erosion Pockets, Bovine Erosion	None	Unlikely	In-channel structure at upstream end	2011 - Several scallops of erosion. Erosion primarily due to the weight of cattle on the slope. 2016 - Two new large scallop pockets in the middle of the site.	Upgraded to CRITICAL. Multiple slump on top of old slumping ; slump is into levee prisim.
KLR 3.0 L	Knights Landing Ridge Cut	0	3.0	L	Knights Landing Ridge Drainage District	Knights Landing	Eroding	2006	1,113	0	Wave wash	None	Unsure	None	2006 - The whole levee toe area is slowly slumping into the channel (creep) due to dewatering and poor slope soils. Occasional piping in the levee slope evident as well. Pistol-butted trees at the levee toe indicate slow retreat. 2011 - Multiple scallops throughout the site and slumping of the toe.	Access Issues - Could not observe
KLR 3.1 L	Knights Landing Ridge Cut	0	3.1	L	Knights Landing Ridge Drainage District	Knights Landing	Eroding	2006	658	0	Fluvial	None	Unsure	None	2006 - The whole levee toe area is slowly slumping into the channel (creep) due to dewatering and poor slope soils. Occasional piping in the levee slope evident as well. Pistol-butted trees at the levee toe indicate slow retreat. 2011 - Slumping of the levee toe.	Access Issues - Could not observe
KLR 3.5 R	Knights Landing Ridge Cut	0	3.5	R	Knights Landing Ridge Drainage District	Yolo	Eroding	2011	418	0	Toe Scout	None	Unsure	Pipe through levee	2011 - Toe scour and bank slumping.	Access Issues - Could not observe
KLR 3.7 L	Knights Landing Ridge Cut	0	3.7	L	Knights Landing Ridge Drainage District	Knights Landing	Eroding	2011	678	0	Tree Pop-outs and whole bank failure	None	Unsure	Abandoned pipe and concrete box	2011 - The toe has eroded away and there are a few scallops from bank slumping.	Access Issues - Could not observe
KLR 3.9 R	Knights Landing Ridge Cut	0	3.9	R	Knights Landing Ridge Drainage District	Yolo	Eroding	2011	366	0	tree Pop-outs	None	Unsure	None	2011 - Toe erosion and erosion pockets from tree popouts. More tree popouts are expected due to the eroding toe.	Access Issues - Could not observe
KLR 4.7 L	Knights Landing Ridge Cut	0	4.7	L	Knights Landing Ridge Drainage District	Knights Landing	Eroding	2011	1,266	0	Fluvial	None	Unsure	None	2011 - This site is the downstream section of the old KLR 5.3L site. Levee toe is slowly retreating. Cracking on top of the levee may indicate potential mass movement.	Access Issues - Could not observe
KLR 5.8 L	Knights Landing Ridge Cut	0	5.8	L	Knights Landing Ridge Drainage District	Knights Landing	Eroding	2011	2,986	0	Fluvial	None	Likely	Pipes and concrete structure	2011 - This site is the upstream section of the old KLR 5.3L site. Levee toe is slowly retreating. Cracking on top of the levee may indicate potential mass movement.	Hummocky levee, with multiple slump failures and tree popouts.
LAR 1.8 L	Lower American River	1.8	0	L	American River Flood Control District	Sacramento	Eroding	2012	866	10	Fluvial, Anthropogenic	None	Likely	None	2012 - Located just downstream of older repair. Failing rock at the upstream end. Erosion of the bank has exposed large tree roots.	Site littered with homeless camps. Hard to survey. Site extended downstream.
LDS 0.6 R	Lindsey Slough	0	0.6	R	RD 536 - Egbert Tract	Lindsey	Eroding	2011	1,620	0	Erosion Pockets, Bovine Erosion	Scattered Quarry Stone in fair condition	Unlikely	None	2011 - Multiple sections of slumping bank. 2016 - Bank continues to erode.	Appears to be cow paths along slope causing erosion.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
LDS 0.7 R	Lindsey Slough	0.7	0	R	RD 536 - Egbert Tract	Lindsey	Critical	2011	280	0	Erosion Pockets, Wave Wash	None	Likely	None	2011 - Levee toe is unraveling with large slumping sections. This site is downstream of old bank rock. 2012 - Erosion pocket has increased in size. 2016 - Site continues to erode.	Upgraded to CRITICAL. Erosion pocket has increased significantly in the last year.
LDS 0.8 R	Lindsey Slough	0.8	0	R	RD 536 - Egbert Tract	Lindsey	Eroding	2011	86	0	Wave Wash, Toe Scour	Scattered Quarry Stone in poor condition	Likely	Pipe through levee and pump structure	2011 - Multiple erosion pockets from tree popouts. A smaller erosion pocket in the middle of a failing bank repair. Pump structure at the downstream end may be contributing to the erosion.	additional erosion at toe.
LDS 1.7 L	Lindsey Slough	0	1.7	L	RD 2060 - Hastings Tract	Hasting Tract	Eroding New	2017	720	0	Erosion Pockets	None	Likely	None		Soil is boulders and sand. Multiple slumping sections.
MUD 3.3 L	Mud Creek	0	3.3	L	Butte County	Unassigned	Eroding New	2017	457	10	Whole Bank Failure, Fluvial	None	Unsure	None		Large mass failure of lower bank slope.
MUD 2.8 L	Mud Creek	0	2.8	L	Butte County	Unassigned	Eroding New	2017	766	15	Fluvial, Whole Bank Failure	None	Unsure	None		Large erosion scarp along lower toe.
MUD 4.4 R	Mud Creek	0	4.4	R	Butte County	Unassigned	Eroding	2011	300	20	Whole Bank Failure, Fluvial	None	Unsure	None	2011 - Two large erosion scallops at the toe from a rotational failure. Deep cracks along the slope indicate the potential for further failures.	Erosion scarps have increased since last inspection in 2011.
NCC 1.9 L	Natomas Cross Canal	0	1.9	R	RD 1001 - Nicolaus	Rio Oso	Eroding New	2017	408	0	Fluvial	None	Unsure	None		Erosion along mid bank and sections of slumped bank.
NCC 2.4 R	Natomas Cross Canal	0	2.4	R	RD 1001 - Nicolaus	Rio Oso	Eroding	2006	526	30	Erosion Pockets	None	Unlikely	None	2006 - Noted old saturation slumping of upper levee slope that is into the levee core (near high water line). 2011 - Erosion is into the top of the levee. This site is actually located at LM 2.4. 2016 - Site extended downstream. Slumping of entire meiddle levee section.	Site renamed, previously mislabeled as NCC 3.0. Erosion along mid bank slope.
NCC 2.9 R	Natomas Cross Canal	2.9	2.9	R	RD 1001 - Nicolaus	Rio Oso	Eroding New	2016	2,377	0	Erosion Pockets	None	Unlikely	None	2016 - Slumping of upper bank slope.	Hummocky levee face, slumping upper bank.
PUC 7.2 L	Putah Creek	0	7.2	L	DWR Sacramento Maintenance Yard	Davis	Eroding	2011	305	0	Toe Scour, Fluvial	None	Likely	Storm drain through levee	2011 - The toe to mid-bank is slumping. Large tree pop-outs have furthered the erosion. Slope is slightly steeper than 1:1.	New erosion along lower bank.
SAP 1.4 R	Sacramento Bypass	0	1.4	R	RD 785 - Driver District	Elkhorn	Critical	2017	841	0	Slump Cracking, Erosion Pockets	None	Unlikely	None		New site, immediately upgraded to critical. Start of slump failure, deep cracks along levee crest, concern that a large slump failure will occur from the next heavy rain.
SAC 7.3 L	Sacramento River	7.3	0	L	RD 341 - Sherman Island	Sherman Island	Critical	2011	619	0	Surface Runoff Erosion, Whole Bank Failure	Concrete Rubble in poor condition	Likely	Fish release system, pipes, pilings, conduit, netting, and power poles	2011 - Large slump at downstream end. Gully formed from surface runoff from the road. Shallow slumping throughout site. 2012 - The gully at upstream end has increased in size and site continues to worsen.	No observed change..
SAC 7.5 L	Sacramento River	7.5	5.5	L	RD 341 - Sherman Island	Sherman Island	Eroding New	2017	580	0	Whole Bank Failure, Anthropogenic Erosion	Concrete Rubble in poor condition	Likely	Ramp, pipe, poles		Erosion along levee slope, erosion appears to mainly be human caused, but it is threatening the integrity of the Hwy on top of the levee.
SAC 7.9 L	Sacramento River	7.9	0	L	RD 341 - Sherman Island	Sherman Island	Critical	2011	1,276	0	Whole Bank Failure, Wind Wave	Concrete Rubble in fair condition	Likely	Pipe	2011 - Large slump section. 2012 - Site extended downstream, upgraded to critical, severe windwave. Slope is very steep and may be effecting the highway on top of the levee.	Road base exposed in multiple locations. New tree popout observed.
SAC 8.0 L	Sacramento River	8	0	L	RD 341 - Sherman Island	Sherman Island	Critical	1999	1,200	0	Wave Wash, Whole Bank Failure	Concrete Rubble in poor condition	Likely	None	1999 - New small slump in eroded bank. 2005 - Reach extended because of vertical bank along the roadway upstream. 2011 - More slumping since last year. 2012 - Site upgraded to critical. Very steep slope which may be effecting the highway on top of the levee. 2015 - New erosion towards the downstream end of site.	Site extended downstream
SAC 8.2 L	Sacramento River	8.2	0	L	RD 341 - Sherman Island	Sherman Island	Eroding	2011	1,023	0	Wind Wave, Whole Bank Fialure	Quarry Stone in poor condition	Unsure	Pipe through levee	2011 - Large new erosion pocket probably hidden by vegetation in the past.	Minor new erosion.
SAC 10.8 L	Sacramento River	10.8	0	L	Brannan-Andrus Levee Maintenance District	Brannan Andrus Island	Eroding	2004	820	0	Wave Wash	Quarry Stone in good condition	Likely	Pipe	2004 - Wave wash pockets approximately 100 ft long with new full bank rock between the pockets. 2005 - Spot repairs, but toe is still eroding in several places. 2006 - Low vertical bank along roadway. 2007 - A PL 84-99 repair was constructed, it cover the majority of the site with the exception of the upstream 150 to 200 ft and the downstream 250 ft, therefore it is being kept in the inventory. 2009 - Minimal new erosion. 2010 - Outboard berm looks good, but the banks are still very steep. 2011 - While the outboard berm is protecting against wave wash, bank still has slumping issues.	Lots of new woody debris recruitment.
SAC 11.2 L	Sacramento River	11.2	0	L	Brannan-Andrus Levee Maintenance District	Brannan Andrus Island	Critical	2008	1,971	0	Whole Bank Failure, Wave Wash	Quarry Stone in fair condition	Likely	Pipe	2008 - Erosion causing vertical bank at the highway on top of levee. The whole bank along the highway should be repaired. 2009 - Minimal new erosion. 2011 - Bank continues to slowly erode. 2012 - Upgrade to critical, new erosion since lat year and steeper slopes in sections. 2015 - Road foundation and cables exposed. Extremely large tree with exposed roots looks likely to fail and take out a significant portion of the levee. 2016 - Site continues to erode.	New slump section. Erosion under the road has enlarged.

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SAC 12.1 L	Sacramento River	12.1	0	L	Brannan-Andrus Levee Maintenance District	Brannan Andrus Island	Critical	2010	1,165	0	Whole Bank Failure	Concrete Rubble in poor condition	Likely	Pipe, gas line, ramp, dock, boat launch, and utility poles	2010 - Small inlet area behind a man-built spit. Bank is slumping and could possibly be fixed with maintenance. 2011 Site continues to worsen. 2015 - Upgraded to CRITICAL. 2016 - Site continues to get worse.	Continues to worsen and threaten the road.
SAC 13.6 L	Sacramento River	13.6	0	L	Brannan-Andrus Levee Maintenance District	Brannan Andrus Island	Critical	2011	303	0	Whole Bank Failure	None	Likely	Marina at upstream end	2011 - Large section of bank slumped off.	Upgraded to critical. Nearly vertical face from levee hinge. Trees with large root balls likely to fail.
SAC 18.1 L	Sacramento River	18.1	0	L	Brannan-Andrus Levee Maintenance District	Brannan Andrus Island	Critical	2009	267	0	Fluvial, Wave Wash	Quarry Stone in fair condition	Likely	None	2009 - Short reach of vertical bank at the toe. 2010 - Large tree is getting ready to fall in. 2015 - Freshly exposed tree roots.	Upgraded to critical. Vertical slope face behind a tree that is likely to pop-out soon.
SAC 21.9 L	Sacramento River	21.9	0	L	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	2013	237	5	Wave Wash, Fluvial	None	Likely	None	2013 - Erosion pockets encroaching on levee foundation.	No observed change..
SAC 22.5 L	Sacramento River	22.5	0	L	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	1997	900	10	Eddy Scour, Fluvial	Quarry Stone in good condition	Likely	Pipe and pump structure	2002 - Spot rock along berm, but not in the erosion pockets. 2005 - Some new minor stone revetment at the upstream end. Brush boxes present. 2006 - Currently installing new brush in downstream brush boxes. 2007 - Rock in middle portion for about 150 ft. 2010 - Some attempt at repairs but still has pockets of erosion. 2012 - More erosion along the toe.	New lower bank erosion at the upstream end. Locals placed rock in some erosion pockets.
SAC 22.7 L	Sacramento River	22.7	0	L	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	1997	311	0	Fluvial, Wave Wash	None	Likely	Pipe	1997 - Scallops into berm and very close to levee toe. 2005 - Brush boxes present. 2011 - New toe scour and freshly fallen tree. 2012 - New tree popout has taken significant portion of soil out of the levee.	Minor new erosion at toe.
SAC 23.2 L	Sacramento River	23.2	0	L	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	1997	589	0	Fluvial, Wave Wash	None	Likely	None	2000 - Recently fallen cottonwood at the downstream end. 2005 - Empty brush boxes. 2011 - A few trees have fallen since last year. 2012 - Potential new tree popout since last year. 2013 - New erosion at downstream end of site and a recent tree pop-out observed. 2016 - New erosion at the toe.	New erosion along lower bank.
SAC 24.8 L	Sacramento River	24.8	0	L	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	1997	783	5	Fluvial, Wave Wash	None	Likely	None	1997 - Slow erosion of the berm at the waterline; bench below water. 2005 - Brush boxes present. 2010 - Minor new erosion. 2013 - There is little to no berm remaining at downstream end of this site. 2016 - New erosion on levee slope.	Significant lower bank erosion.
SAC 25.2 L	Sacramento River	25.2	0	L	RD 556 - Upper Andrus Island	Brannan Andrus Island	Eroding	1997	619	5	Fluvial, Wave Wash	Quarry Stone in good condition	Likely	None	1997 - Rock is in poor condition and has failed in many places. Scallops in berm with remnants of old rock in the toe area. 2005 - Brush boxes present. 2013 - Site extended upstream approximately 300 ft to include new erosion pockets. 2015 - Minor new erosion at toe.	Minor new erosion observed.
SAC 27.0 L	Sacramento River	27.0	0	L	RD 554 - Walnut Grove	Tyler Island	Eroding	2009	504	0	Whole Bank Failure	Quarry Stone in fair condition	Likely	Pipe	2009 - Tension cracks on road on top of levee. Erosion into the levee slope and mass failure. 2013 - Short vertical sections at bank toe.	Minor new erosion at toe.
SAC 33.9 R	Sacramento River	33.9	0	R	RD 349 - Sutter Island	Sutter Island	Critical	2015	457	10	Toe Scour, Wave Wash	Concrete Rubble in poor condition	Likely	House on waterside slope	2015 - Erosion observed at the toe.	New erosion pocket. Tree roots propped up with junk. Tree likely to fall and house to come tumbling after. Upgraded to critical.
SAC 38.5 R	Sacramento River	38.5	0	R	RD 150 - Merritt Island	Merritt Island	Critical	1997	364	0	Fluvial, Whole Bank Failure	Quarry Stone in fair condition	Likely	None	1999 - Downstream end (300 ft) repaired with rock. 2010 - Toe erosion, some vertical slopes lower down. 2011 - Failing rock repair. Slumping of the lower bank. Minor new erosion. 2013 - Tree at upstream end has exposed roots. Some new erosion.	New erosion pocket. Vertical section along lower bank, and cracking. Upgraded to critical.
SAC 38.8 L	Sacramento River	38.8	0	L	Maintenance Area 9	Beach Stone Lake	Eroding New	2017	549	0	Toe Scour, Wave Wash	Quarry Stone in fair condition	Likely	None		Toe erosion along entire site. Heavily used by people for fishing and campfires. Large tree at downstream end.
SAC 40.4 L	Sacramento River	40.4	0	L	Maintenance Area 9	Beach Stone Lake	Eroding New	2017	108	0	Fluvial, Toe Scour	Quarry Stone in fair condition	Likely	None		Erosion along lower slope. Large erosion pocket at downstream end.
SAC 41.9 R	Sacramento River	41.9	0	R	RD 999 - Netherlands	Clarksburg	Critical	1997	1,360	0	Toe Scour, Whole Bank Failure	None	Likely	Gas pipeline at downstream end and power poles	1997 - Structural problem rather than erosional, failed cobble at downstream end. 2005 - New brush boxes at waterline for several hundred feet downstream, No toe or bank protection present. 2006 - Some minor new erosion. Brush boxes not working well; most of the brush has floated out. 2007 - Brush boxes have recently been repaired. 2016 - Minor new slumping.	Fresh erosion on entire bank. Upgraded to critical.
SAC 43.1R	Sacramento River	43.1	0	R	RD 307 - Lisbon Island	Borges	Eroding	2011	646	0	Tree Pop-Outs, Whole Bank Failure	Cobbles in poor condition	Likely	Large discharge pipes	2011 - Erosion pockets likely from tree popouts. This site has been in the inventory before and been fixed with emergency bank rock but continues to fail.	Fresh erosion observed along toe and slope.
SAC 43.2 R	Sacramento River	43.2	0	R	RD 307 - Lisbon Island	Borges	Eroding	2008	992	0	Tree Pop-Outs, Whole Bank Failure	Quarry Stone in fair condition	Likely	Pipe	2008 - Large rotational failure in bank and well into the levee slope. Could be a significant problem in the next high flow event. 2009 - Minimal new erosion, site extended upstream. 2010 - Minor new erosion. 2011 - Tree popout has left a large hole. Large slump area. Rock on the bank is failing in some locations. 2012 - The toe appears to be scouring out. 2016 - Some rock placed in the last year	New erosion pockets and new toe erosion.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
SAC 48.4 L	Sacramento River	48.4	0	L	Maintenance Area 9	Sacramento	Eroding New	2016	1,399	0	Toe Scour, Wave Wash	None	Unsure	None	2016 - Extensive toe erosion. Erosion around roots of multiple trees.	New erosion along toe. Possibly part of pl 84-99 site
SAC 48.6 R	Sacramento River	48.6	0	R	RD 307 - Lisbon Island	Borges	Eroding	2012	471	0	Fluvial	Quarry Stone in fair condition	Likely	None	2012 - Bank is slowly eroding, old rock protection starting to unravel. 2016 - Anthropogenic erosion observed.	Site lengthened upstream and shortened downstream.
SAC 50.3 L	Sacramento River	50.3	0	L	Maintenance Area 9	Sacramento	Eroding	2011	89	0	Tree Pop-Outs	Quarry Stone in fair condition	Likely	None	2011 - Tree popout at the toe has taken out the rock toe protection. 2016 - Sand deposition has filled in some of the hole.	Vegetation has grown in the tree hole.
SAC 52.4 L	Sacramento River	52.4	0	L	Maintenance Area 9	Sacramento	Critical	2010	260	0	Tree Pop-Outs, Toe Scour	Concrete Rubble in fair condition	Likely	Pipe, Wooden steps	2004 - A large tree cave was identified. 2005 - Site repaired. 2010 - At the downstream end of the repair at 52.5, bad transition is inducing further erosion. 2011 - Minor new erosion on bank. 2016 - Erosion continues under the tree.	Huge tree with scoured roots, likely to fall soon and take huge chunk of levee with it. Upgraded to critical.
SAC 52.7 L	Sacramento River	52.7	0	L	Maintenance Area 9	Sacramento	Eroding	2010	158	0	Fluvial, Tree Pop-outs	Cobbles in poor condition	Likely	None	2010 - Small section of slumping, can be fixed with maintenance. 2011 - Freshly fallen tree and minor new toe erosion.	Minor new toe erosion. Observed bricks mixed with soil.
SAC 53.8 L	Sacramento River	53.8	0	L	Maintenance Area 9	Sacramento	Eroding	2011	155	15	Tree Pop-Outs, Fluvial	None	Likely	Caltrans Pipeline, pump, house built into ladside slope	2010 - Small section of slumping, can be fixed with maintenance. 2011 - Freshly fallen tree and minor new toe erosion. 2016 - Erosion continues due to anthropogenic usage.	Minor new erosion at toe.
SAC 54.8 L	Sacramento River	54.8	0	L	Maintenance Area 9	Sacramento	Eroding	2011	325	0	Toe Scour	None	Likely	Pipes, dock	2011 - A large tree has fallen behind a larger tree, putting stress on an already compromised tree. Toe erosion due to wave wash. 2013 - Site extended upstream due to steep bank. 2015 - Site extened upstream due to steep bank.	No observed change..
SAC 55.2 L	Sacramento River	55.2	0	L	Maintenance Area 9	Sacramento	Eroding	2003	1,075	5	Fluvial, Toe Scour	Quarry Stone in poor condition	Likely	Pump, pipes, boat docks, and fences	Site previously named 55.1. 2003 - Pockets of toe erosion at low flow waterline. 2005 - Site renamed 55.2. Still have pockets of erosion but rock bench at waterline is still present. 2010 - Site extended upstream due to new erosion. 2011 - Some of the toe rock has failed. The upper levee slope seems to be slumping. 2012 - Minor new slumping. 2016 - New erosion observed under a tree at the upstream end.	No observed change.
SAC 55.5 L	Sacramento River	55.5	0	L	Maintenance Area 9	Sacramento	Eroding	1997	384	15	Toe Scour	Quarry Stone in poor condition	Likely	Large marina and parking lot on waterside berm	1997 - Large cottonwoods on slope. 2003 - Some minor sloughing. 2004 - New sediment deposition on the downstream end. 2007 - New dock was installed without notification to USACE and halted the planned repair due to ROW issues. 2015 - Minor new erosion at the toe.	No observed change.
SAC 55.7 R	Sacramento River	55.7	0	R	RD 900 - West Sacramento	Southport	Critical	2008	1,150	0	Fluvial, Whole Bank Failure	Quarry Stone in good condition	Likely	Boat dock, pipes, power poles, and dolphins	2008 - Erosion into levee toe. Over steepened levee slope, worst at the upstream end. 2009 - Near vertical banks from rotational slumping, hidden by vegetation. 2010 - Boat sinking more, may be causing eddy scour around it. Difficult to see the vertical slumps due to dense vegetation. 2011 - Minor new erosion at the toe. The paddleboat that was sitting at this site for years has been removed. 2012 - Site extended upstream due to additional erosion. 2016 - New rock on slope at upstream end.	Fresh toe erosion. Site upgraded to critical. A setback levee is under construction behind this site.
SAC 56.5 R	Sacramento River	56.5	0	R	RD 900 - West Sacramento	Southport	Eroding	1997	465	10	Fluvial, Wave Wash	None	Unsure	Pump and pipeline	1997 - Low berm is contributing to erosion. Old timber pile dikes above water parallel to bank. The upstream mitigation low berm causes a flow separation at the site. 1999 - Some new localized erosion with less thank one foot of bank retreat. 2000 - Some new erosion at the upstream end. Fat toe deposits at toe. 2003 - Some new erosion upstream, but have a wide berm. 2011 - Minor new erosion at toe.	Fresh toe erosion.
SAC 56.6 L	Sacramento River	56.6	0	L	City of Sacramento	Sacramento	Eroding	1997	70	0	Fluvial, Toe Scour	Quarry Stone in fair condition	Likely	SMUD structure and pipe	1997 - Erosion at pump station, concrete debris and plastic showing. 2000 - Separation scour of bank due to poor transition. 2004 - New large tree pop out; city dumped fill dirt/rock into hole. 2006 - Minor new erosion at top of bank. 2010 - Some new rock placed in tree pop-out. 2011 - A large tree has fallen and flood fighting was performed by the city on the upper levee slope. 2012 - Small rock placed in hole from tree popout.	Upstream portion repaired by locals.
SAC 56.7 R	Sacramento River	56.7	0	R	RD 900 - West Sacramento	Southport	Eroding	2007	662	10	Fluvial, Wave Wash	Quarry Stone in fair condition	Likely	Power Poles	2007 - Have good berm width with minor toe erosion. Close to the levee toe protection, but levee slope is steep. 2011 - New large erosion pocket. 2012 - Minor new erosion at the toe.	Fresh toe erosion. New rock placed.
SAC 58.5 L	Sacramento River	58.5	0	L	City of Sacramento	Sacramento	Eroding	2008	445	0	Fluvial	Quarry Stone in fair condition	Likely	Pipe through levee, railroad and bikepath on top of levee, and monitoring wells	2008 - Oversized levee, should be repaired under maintenance. 2009 - Shallow slumps at the mid bank. 2010 - Some minor erosion at the toe, likely from wave wash. Some new shallow slumps. 2011 - One new tree has fallen. 2013 - Erosion continues on the slope surface, site extended upstream.	Slump sections along mid bank. City requested PL 84-99 assistance.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
SAC 62.9 R	Sacramento River	62.9	0	R	RD 537 - Lovdal District	West Sacramento	Eroding	1997	1,059	10	Erosion Pockets, Wave Wash	Concrete Rubble in poor condition	Likely	Ramp and structure on top of levee	1997 - This may have been a cobble rehabilitation site to the 1957 cobble that was place all the way to the I-80 Bridge. 2000 - Local damage induced by human use. 2003 - Site is still very close to the levee and into the levee toe. 2011 - One new tree has fallen. 2015 - Sites 62.9 and 63 were combined into one site.	Fresh erosion pocket near downstream end.
SAC 71.3 R	Sacramento River	71.3	0	R	RD 1600 - Mull District	Elkhorn	Under Construction	1997	522	25	Toe Scour, Fluvial	None	Likely	None	2000 - Very cohesive vertical bank. 2003 - Some minor new erosion. 2006 - Some minor erosion in old pockets. 2009 - Minimal new erosion. 2011 - Multiple new erosion pockets and a few new tree popouts.	New erosion pocket and fresh toe erosion. Site is currently under construction.
SAC 74.0 R	Sacramento River	74	0	R	RD 1600 - Mull District	Elkhorn	Eroding New	2017	2,049	30	Toe Scour, Whole Bank Failure, Tree Pop-outs	None	Likely	None		Significant toe erosion. Erosion along entire bank. Tree popouts observed.
SAC 74.4 R	Sacramento River	74.4	0	R	RD 1600 - Mull District	Elkhorn	Eroding	1997	1,343	25	Toe Scour, Fluvial	None	Likely	None	1997 - Steep high bank. 2005 - Some small pockets in the low toe near the waterline. 2006 - Minor slope clearing. 2010 - Minor new erosion. 2011 - Multiple trees have fallen since last year. Some other trees look ready to fall. Significant new erosion since last year. 2012 - Minor new erosion. 2013 - Minor new erosion. 2015 - Minor new toe erosion.	Significant erosion at toe in the past year. Fresh tree popout.
SAC 75.3 R	Sacramento River	75.3	0	R	RD 1600 - Mull District	Elkhorn	Eroding	1997	2,753	30	Toe Scour, Fluvial	None	Likely	Pump and pipe through levee	1997 - Very steep bank. 2005 - Lots of small trees down along the bank at the upstream end. 2006 - Minor new erosion, but slow. 2010 - Almost all of the roots are exposed on the trees, appears ready to fall. 2011 - New erosion and tree popouts. 2012 - Site has become overgrown with vegetation, making it hard to observe. 2015 - Dense vegetation made the site difficult to observe.	Fresh erosion along lower bank in sections.
SAC 77.7 R	Sacramento River	77.7	0	R	RD 1600 - Mull District	Elkhorn	Eroding	2006	156	10	Eddy Scour, Tree Pop-outs	None	Likely	USACE wing dam	2006 - Eddy scour off end of rock causing erosion and scour hole near levee. Sandy silt bank with rock on upstream end. 2010 - Trees are leaning more, minor new erosion. 2011 - Many of the tree roots have scoured out and trees look ready to fall.	Minor new erosion.
SAC 83.9 R	Sacramento River	83.9	0	R	Yolo County Service Area 6	Knights Landing	Eroding	2006	988	35	Fluvial, Whole Bank Failure	None	Likely	Gage station	2006 - Approximately 18 to 20 ft of bank near levee at the corner of the levee and the Freemont Weir. Vertical bank with undercutting/mass failure. 2007 - Staked at top of bank for monitoring. 2011 - Site has become significantly worse with more of the toe and lower bank eroded. Many trees have fallen since last year. 2012 - Site looks worse with more ersion around trees. 2013 - Additional erosion into the toe. 2015 - Site extended upstream about 500 ft to account for eroding bank. 2016 - Site continues to erode. Multiple trees appear ready to fall into the river.	Fresh erosion on lower bank.
SAC 86.3 L	Sacramento River	86.3	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	2006	3,035	30	Fluvial, Whole Bank Failure	Cobbles in poor condition	Unsure	Pipe and electric conduit through levee	2006 - New erosion upstream, new bank failures near levee but still fairly wide berm in most places. 2008 - Large berm, questionable as to if it should remain in the inventory. 2010 - Minor new erosion, old cobble starting to fail. 2011 - Cobble continues to unravel and additional slumping. 2012 - Minor new erosion at bank mid point. 2013 - Minor new erosion. 2016 - Toe relatively stable. Upper slope is over steepened.	No observed change..
SAC 86.9 R	Sacramento River	86.9	0	R	Yolo County Service Area 6	Knights Landing	Eroding	2006	517	25	Toe Scour, Wave Wash	None	Likely	Pump and conduit through levee	2006 - Short section is into the levee toe, rest is near the levee toe. Mass failure and fluvial erosion of depositional material. Rock at the upstream and downstream ends. 2011 - Minor new erosion. 2012 - Slope continues to steepen, tree roots have become exposed, and new eddy formed.	No observed change..
SAC 87.1 L	Sacramento River	87.1	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	2010	1,239	40	Fluvial, Toe Scour	None	Likely	Pipe and PG&E pipeline	2010 - The upstream end of the repair site at 87.0. Repair did not extend far enough upstream. 2011 - New erosion pockets. 2012 - Minor new erosion at toe. 2013 - Minor new erosion. 2015 - Significant new toe erosion. 2016 - Fresh erosion on riverbank.	Large whole bank failure section in middle of site.
SAC 95.8 L	Sacramento River	95.8	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	1997	2,458	15	Fluvial	Concrete Rubble in poor condition	Unlikely	Well, trailer pad, spetic tank, leach field, pipes, fish screen, ramp, structure, and overhead utility	1997 - No toe on the large upstream rubble (mix of broken concrete, bricks, rock, and steal) - should be replaced. Oversized bank. 2001 - New slump at the downstream end. 2003 - Some minor bank retreat at the downstream end. 2004 - Some new retreat at the downstream end. 2006 - Some new erosion, mainly on the steep slope and scarps. (Pumping station is not part of the erosion site.) 2010 - Minor new erosion. 2011 - Minor new erosion at the toe. 2015 - Fresh slumping	Sites 95.8 and 96.2 combined.
SAC 99.0 L	Sacramento River	99	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	1997	1,745	10	Fluvial	Quarry Stone in fair condition	Unlikely	Pipe and Pump structure	1997 - Intermittent toe failure of the hand placed riprap; failure of toe materials.	Rock continues to unravel.
SAC 101.3 R	Sacramento River	101.3	0	R	RD 108 - River Farms	Grimes	Eroding	1997	188	25	Toe Scour, Fluvial	Cobbles in poor condition	Likely	None	1997 - Toe damage and loss of cobble revetment and small patch of local damage to the cobble revetment. 2000 - Cohesive vertical toe; revegetation site.	No observed change..

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
SAC 104.0 L	Sacramento River	104	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	1997	3,443	40	Fluvial	Cobbles in Fair Condition	Unlikely	Pumping plant and discharge pipe	1997 - Pocket failures of cobble revetment toe; scallops of rock loss along the bank; irregular bankline developing. 2001 Small scallops in the toe of the berm. 2005 - Still multiple erosion pockets in the toe. 2006 - Two new small slumps. 2011 - Old cobble continue to fail causing minor slumping. 2012 - Portions of site appears to be stabilizing. 2016- Cobble revetment continues to fail.	Bank slope is relatively stable.
SAC 104.5 L	Sacramento River	104.5	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	1997	1,424	25	Fluvial	Cobbles in poor condition	Unlikely	Pump and pipes through levee	1997 - Cobbles eroded off the clay materials; not much evidence of erosion on the toe; cobble loss on the toe. 2011 - Some minor new erosion.	Site appears stable.
SAC 111.0 R	Sacramento River	111	0	R	RD 108 - River Farms	Grimes	Eroding	2009	110	20	Toe Scour, Whole Bank Failure	Cobbles in poor condition	Likely	Pipes through levee	2009 - Minor erosion, should be repaired under maintenance. 2011 - Some new minor erosion at the toe.	No observed change.
SAC 115.9 R	Sacramento River	115.9	0	R	RD 108 - River Farms	Grimes	Eroding	2008	540	30	Fluvial, Toe Scour	Cobbles in poor condition	Unsure	None	2008 - Slippage of cobbles off hard underlying toe material. 2011 - Minor slumping site. 2012 - Failing cobble site, site extended upstream. 2016 - New erosion pockets.	No observed change.
SAC 116.0 L	Sacramento River	116	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	2000	831	30	Fluvial	Concrete Rubble in poor condition	Unlikely	Pipe through levee	2000 - Eroding, vertical berm slope over a vertical cohesive toe; slow erosion but getting close to the toe. 2002 - Erosion is getting close to the levee, still eroding with some new small slumps. 2004 - Some minor new erosion. 2006 - Some new erosion, cleaned off older scars and slump faces. 2008 - New, small, partial rotational failure. 2011 - Some new minor erosion. 2016 - Fresh erosion on lower bank.	Minor new erosion throughout the site.
SAC 116.5 L	Sacramento River	116.5	0	L	RD 1500 - Sutter Basin	South Sutter	Eroding	1997	3,393	30	Fluvial, Whole Bank Failure	None	Unlikely	Pipe through levee and pump	2003 - New sedimentation and some new small toe scallops at the upstream end; downstream end has some new erosion. 2004 - Some new erosion at the toe and upper bank and some small new rotational failures (mainly minor, except at the downstream end). 2007 - Some new slumps. 2009 - Some new scallops and site was extended upstream. 2010 - New deposition along upstream end of site, however there is also new erosion throughout the site. Site seems to be worsening, and eroding fast. Large habitat for bank swallows. 2011 - Some new minor erosion. 2012 - Minor new erosion. 2016 - Fresh erosion on lower bank.	Site has been stable for a few years.
SAC 118.0 R	Sacramento River	118	0	R	RD 108 - River Farms	Grimes	Eroding	2008	837	10	Whole Bank Failure, Fluvial	None	Likely	None	2008 - Whole bank is eroding, nearly vertical slope with cohesive toe. Bed is very deep along the toe (greater than 30 ft deep at 20 ft from the shore). 2011 - Some new minor erosion. 2016 - Minor new erosion.	No observed change.
SAC 120.6 L	Sacramento River	120.6	0	L	RD 1660 - Tisdale	North Sutter	Eroding	2011	190	20	Eddy Scour, Fluvial	None	Likely	Pipe	2009 - Erosion on levee toe where an old cobble site is failing. 2011 - Some new minor erosion. 2012 - Site extended downstream, bank is being impacted from the weight of the trees. 2013 - Minor new erosion at the toe. 2015 - Minor new erosion at toe.	No observed change.
SAC 122.0 R	Sacramento River	122	0	R	Sacramento River West Side Levee District	Grimes	Eroding	1997	311	40	Fluvial, Whole Bank Failure	None	Unsure	None	1997 - Mass failure of the lower cohesive bank and toe. 2000 - Still eroding, steeply dipping foresets in the toe are falling off. 2010 - Some new erosion and some new deposition. Eddy current off the upstream rock. 2011 - Still plenty of berm left. 2016 - Minor new erosion.	Minor new erosion at toe.
SAC 122.3 R	Sacramento River	122.3	0	R	Sacramento River West Side Levee District	Grimes	Eroding	2002	855	40	Fluvial	None	Unsure	Pipe	2002 - Upstream end has recent slope failure and exposure of tree roots. 2003 - Some new minor slope erosion with new snags on the bank. 2004 - Appears a little worse. 2005 - Scallop in bank at the upstream end looks worse. 2009 - Minimal new erosion, Berm width is still large, but one large event or one fallen tree and it could go fast. 2010 - New erosion, bank is nearly all vertical from slumping. Site looks bad. 2011 - Site continues to look bad. 2012 - Minor new erosion. 2015 - Undermining of toe rock. 2016 - Site extended upstream, new erosion and exposed tree roots.	Fresh slumping erosion at toe.
SAC 123.3 L	Sacramento River	123.3	0	L	RD 070 - Meridian Farms	North Sutter	Eroding	2006	679	30	Fluvial, Tree Pop-outs	None	Likely	None	2006 - Erosion into the levee toe. Rock at upstream end has poor transition causing eddy scour. 2010 - Minor new erosion. 2011 - Some fresh erosion. 2012 - Additional slumping on the previously slumped bank, site extended downstream.	minor new erosion. additional tree popout.
SAC 123.7 R	Sacramento River	123.7	0	R	Sacramento River West Side Levee District	Grimes	Eroding	1997	122	15	Fluvial	Concrete Rubble in fair condition	Likely	Pumphouse and pipe through levee	1997 - Erosion into the levee section; old concrete rubble loss at toe; transition between the rock upstream and the cobble downstream. 2000 - Cohesive bench with concrete slabs on top; 25 ft deep scour hole on the downstream end.	No observed change.
SAC 125.6 R	Sacramento River	125.6	0	R	Sacramento River West Side Levee District	Grimes	Eroding	2008	415	15	Fluvial, Anthropogenic Erosion	None	Likely	None	2008 - Slow erosion of the hard toe. 2010 - Cobble rubble is failing, erosion is into the toe of the levee, with vertical slumping. 2012 - Site appears to be relatively stable. 2013 - New animal holes.	No observed change.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
SAC 127.9 R	Sacramento River	127.9	0	R	Sacramento River West Side Levee District	Grimes	Eroding	1997	562	30	Eddy Scour, Whole Bank Failure	None	Unsure	None	1997 - Major scour off the downstream end of existing rock, creating a scour pocket where the levee starts diverging from the bankline. 2000 - Some minor erosion, 20 ft deep hole at downstream end. 2004 - Small amount of new erosion. 2010 - Bad transition off downstream end of rock revetment, some new erosion. 2012 - Site extended downstream, minor new erosion. 2013- Minor new erosion. 2016 - Fresh erosion at toe.	fresh erosion at lower slope.
SAC 131.8 L	Sacramento River	131.8	0	L	RD 070 - Meridian Farms	North Sutter	Eroding	2005	665	25	Toe Scour, Fluvial	None	Likely	Pipe	2005 - (known as 132) On inside of bend. Erosion of berm toe. Levee slope is steep. Erosion probably due to eddy scour off upstream cobble. 2009 - Groins may be a good option for repair. 2010 - Scour off the upstream rock, some new erosion. 2011 - Site extended downstream. 2012 - Minor new erosion since last year and new animal holes. 2012 - Minor new erosion since last year and new animal holes. 2013 - New tree popout.	Difficult to observe with excessive vegetation growth.
SAC 136.6 R	Sacramento River	136.6	0	R	Sacramento River West Side Levee District	Grimes	Eroding	2010	1,013	30	Toe Scour, Fluvial	None	Unsure	None	2010 - Lower portion of 136.7 that did not extend far enough. Abrupt transition from upstream site. 2012 - Site extended upstream, minor new erosion. 2013 - Minor new erosion at the toe. New tree popout. Downstream limit extended. 2016 - Site continues to worsen, fresh erosion at toe.	New erosion observed along the entire bank slope.
SAC 138.1 L	Sacramento River	138.1	0	L	RD 070 - Meridian Farms	North Sutter	Eroding	1997	1,308	10	Toe Scour, Fluvial	Cobbles in Fair Condition	Likely	Pipe	1997 - Loss of cobble revetment in levee section. 2004 - New fresh erosion in a short section of the downstream end. 2010 New deposition on cobbles. 2016 - Site appears to be stabilizing.	No observed change.
SAC 141.5 R	Sacramento River	141.5	0	R	Sacramento River West Side Levee District	Colusa Basin	Eroding	2010	696	30	Fluvial, Tree Pop-outs	Cobbles in Fair Condition	Unsure	Power pole	2010 - Old cobble site starting to unravel at toe. 2011 - Cobbles continue to unravel. 2013 - Site extended downstream to revetment.	No observed change.
SAC 141.9 R	Sacramento River	141.9	0	R	Sacramento River West Side Levee District	Colusa Basin	Eroding New	2017	1,018	20	Whole Bank Failure, Tree Pop-outs	Scattered Quarry Stone in poor condition	Unsure	Pump, pipes, pole		Erosion along entire bank slope. Bank heavily vegetated. Tree popout that has removed a large of bank.
SAC 143.5 R	Sacramento River	143.5	0	R	Sacramento River West Side Levee District	Colusa Basin	Eroding	2011	602	10	Fluvial, Tree Pop-outs	Cobbles in Fair Condition	Likely	None	2011 - Multiple scallops, one tree pop out. Old cobble site starting to unravel at midbank. 2012 - Mid bank slumping continues to worsen but cobble at the toe appears stable.	New erosion along lower slope.
SAC 152.6 L	Sacramento River	152.6	0	L	Maintence Area 1	Butte Basin	Eroding	2008	1,555	0	Whole Bank Failure, Fluvial	None	Unsure	Overhead utility	2008 - Large rotational/mass failure in the bank with tree slump. 2009 - Minimal new erosion, the tree is leaning further into the river. 2011 - Site extended downstream. 2012 - Minor new erosion and tree roots are further exposed.	Access Issues - Could not observe
SAC 152.8 L	Sacramento River	152.8	0	L	Maintence Area 1	Butte Basin	Eroding	2006	299	10	Fluvial, Tree Pop-outs	None	Likely	Utility pole, pipes, and pump	2006 - Large rotational/mass failure in the bank with tree slump. Tough clayey toe material. 2007 - Site is between stone revetments with a pump station at the downstream end. 2010 - Erosion is into the levee toe. 2011 - Minor new erosion. 2012 - Minor new erosion.	Minor new erosion observed.
SAC 157.7 R	Sacramento River	157.7	0	R	Maintence Area 1	Colusa Basin	Eroding	2004	484	15	Whole Bank Failure, Fluvial	None	Likely	pipelines	2004 - Slowly eroding but near vertical with no vegetation to hold it. 2005 - Erosion is close to levee toe but not into the levee section yet. 2010 - Some new toe scour.	Vertical face of clay sand bank, new tree popout. Bank continues to erode.
SAC 164.3 R	Sacramento River	164.3	0	R	Maintence Area 1	Colusa Basin	Eroding	2009	1,200	20	Whole Bank Failure, Fluvial	None	Likely	PG&E gas line through levee	Erosion site added in 1997 and removed in 2005. 2009 - Site added back in, hard toe with slow moving erosion. Potential geotechnical failure. 2011 - Site extended downstream.	New erosion along entire site.
SAC 164.7 R	Sacramento River	164.7	0	R	Maintence Area 1	Colusa Basin	Eroding	2009	1,117	5	Fluvial, Whole Bank Failure	None	Likely	overhead poles	2009 - Very slow retreat, hard toe, encroaching into the levee projection. 2010 - Slowly eroding. 2011 - Site extended downstream.	New erosion along entire site.
SAC 172.0 L	Sacramento River	172	0	L	LD 3 Glenn County	Butte Basin	Critical	2007	1,628	0	Fluvial, Whole Bank Failure	None	Unsure	None	2007 - Getting close to the levee. Bank is clayey silt with clayey/silty toe. 2008 - Looks a little worse at the upstream end. 2009 - Some new erosion and slumping. 2010 - Some new erosion upstream of site, actively eroding at low flow. New bank swallow colony noted. 2011 - Significant erosion since last year, with an estimated 10 to 15 feet of berm lost. Large sections of the bank have slumped off. 2012 - Part of the site appears to be stabilizing, but still minor slumping in other locations. 2013 - Minor new erosion at toe.	Significant erosion in last year. Erosion is entering levee prism, at current erosion rate, one more large storm and the levee will be comprised. Upgraded to critical.
STM 15.5 L	Steamboat Slough	15.5	0	L	RD 003 - Grand Island	Grand Island	Eroding	2016	379	0	Wave Wash, Whole Bank Failure	Quarry Stone in fair condition	Likely	None	2016 - Large erosion pockets observed.	No observed change.
STM 15.7 R	Steamboat Slough	15.7	0	R	RD 501 -Ryer Island	Ryer Island	Eroding	2008	338	0	Whole Bank Failure	Concrete Rubble in poor condition	Likely	None	2008 - Overstepped levee section with multiple small pockets of erosion 10 - 20 ft wide. 2013 - Site has fresh erosion and taller vertical sections.	No observed change.
STM 21.2 R	Steamboat Slough	21.2	0	R	RD 501 -Ryer Island	Ryer Island	Eroding New	2016	318	0	Fluvial	Quarry Stone in good condition	Likely	None	2016 - Large slump section.	Difficult to observe due to high vegetation.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
STM 22.8 R	Steamboat Slough	22.8	0	R	RD 349 - Sutter Island	Sutter Island	Eroding	2010	643	0	Fluvial, Wave Wash	None	Likely	None	2010 - Slumping sections on the lower bank, appears to be scouring around the trees. 2011 - Soil beach at toe.	No observed change.
STM 23.6 R	Steamboat Slough	23.6	0	R	RD 349 - Sutter Island	Sutter Island	Eroding	2011	768	0	Whole Bank Failure, Wave Wash	None	Likely	None	2011 - Toe scour at the tidal zone. 2015 - New tree pop-out and minor new erosion. 2016 - New erosion at upstream end.	Previously observed quarry stone at the downstream end is now gone. Significant erosion at upstream end. Fresh sedimentation on the downstream end.
STM 23.9 R	Steamboat Slough	23.9	5	R	RD 349 - Sutter Island	Sutter Island	Eroding	1997	168	0	Fluvial	None	Likely	Pipe and pump house	1997 - Top right bank has retreated into the levee. Site is between two rock sites. 1999 - Downstream half of the reach repaired with rock. 2000 - Trees leaning into the water. 2010 Site appears worse. 2011 - New erosion at the toe. 2013 - Short vertical sections observed at upstream end. 2015 - Minor new erosion.	No observed change.
STM 24.1 R	Steamboat Slough	24.1	0	R	RD 349 - Sutter Island	Sutter Island	Eroding	2011	55	0	Erosion Pockets	None	Likely	None	2011 - Small scallop caused by erosion and wave wash.	No observed change.
STM 24.7 R	Steamboat Slough	24.7	0	R	RD 349 - Sutter Island	Sutter Island	Critical	1997	949	0	Wave Wash, Whole Bank Failure	Scattered Quarry Stone in poor condition	Likely	Pump and Pipe	1997 - Erosion of very sandy levee behind large stand of riparian vegetation on top right bank. Dry ravel of sand. 1999 - Quarry waste rock was dumped down the levee slope; poor repair job; still eroding in places. Eroding at midslope off fabric. 2005 - Length revised, only the middle 150 - 200 ft are eroding. 2006 - Some rock/small material dumped down the bank but it is slowly unraveling. Upstream end is unraveling faster. Steep slope with poor gradation so fines are washing out. 2010 - Lots of overhanging trees and erosion pockets. 2011 - This site is upgraded to CRITICAL. Near vertical bank at the downstream end. New erosion at various locations throughout the site.	No observed change.
STM 25.0 L	Steamboat Slough	25	0	L	RD 003 - Grand Island	Grand Island	Critical	1997	1,037	0	Whole Bank Failure, Eddy Scour	None	Likely	Pipes	1997 - Erosion of sandy levee on top left bank. Site is downstream of a rock section. Large riparian trees on the bank. 1999 - Upstream half of the reach repaired with rock, except for a 30 ft reach at the upstream end. 2001 - Rock repair on the upstream and downstream ends; no revetment at the trees. 2002 - Rock repair is starting to slide off the geotextile at the upstream end. 2005 - One new small tree has fallen. 2006 - 50 ft pocket at the downstream end and at the upstream end with new rock in between. 2007 - Upstream end has been repaired. 2008 - Area closed sign on bank. Newly fallen trees at both ends and pop outs along the bank. 2010 - Site extended downstream. 2011 - New erosion at the toe. More trees popouts. 2013 - Short vertical sections observed at the downstream end. 2015 - Significant new erosion, large oak tree on verge of popping out. 2016 - Sites 24.8 and 25 were combined.	Upgraded to critical. Site has eroded to near vertical at upstream end.
STM 25.5 R	Steamboat Slough	25.5	0	R	RD 349 - Sutter Island	Sutter Island	Eroding	2010	580	0	Wave Wash, Tree Pop-outs	None	Likely	None	2010 - Small maintenance, erosion into the toe. 2011 - Minor new erosion at toe. 2015 - Minor new erosion at toe, new tree pop-out. 2016 - Fresh scarp at downstream end.	No observed change.
STM 25.8 R	Steamboat Slough	25.8	0	R	RD 349 - Sutter Island	Sutter Island	Critical	2007	243	0	Whole Bank Failure, Wave Wash	Quarry Stone in fair condition	Likely	None	2007 - Slow erosion, probably due to wave wash and fluvial erosion. Site has likely been here for awhile but was unseen due to boats parked in front. 2015 - Large tree popout. Erosion scarp now reaches the crown of the levee.	Upgraded to critical. Significant bank erosion.
STM 26.0 L	Steamboat Slough	26	0	L	RD 003 - Grand Island	Grand Island	Critical	1997	312	8	Whole Bank Failure, Wave Wash	None	Likely	None	1997 - Mass failure of berm slope and wave wash erosion. Large trees on top of berm, some failed trees. New area of low rock to on the upstream end. 2000 - Some minor erosion near the downstream end. 2005 - One new small tree has fallen. 2009 - Minimal new erosion. 2010 - Minor new erosion. 2013 - Observed new animal holes and vertical sections at middle of site. 2015 - Minor new erosion.	Upgraded to critical. Significant bank failure on upstream end.
STR 24.7 R	Sutter Slough	24.7	0	R	RD 999 - Netherlands	Clarksburg	Critical	1997	2,180	0	Whole Bank Failure, Toe Scour	Quarry Stone in fair condition	Likely	Pipe	1997 - Intermittent over-steepened sections. Large riparian vegetation along the length of the entire reach. Attempts to repair with rock on bank have failed. 1999 - New rock repair at the downstream end. 2002 - Some minor spot repairs. 2009 - Minimal new erosion. 2010 - Appears that fresh rock placed on downstream portion of site. Toe scour and overhanging trees with some overturned. 2012 - Minor new erosion at the toe. 2013 - Site upgraded to CRITICAL. Severe slumping into levee at downstream end of site. Fresh erosion into bank toe. 2015 - New slumping, tall vertical sections. 2016 - Upper slumped section continues to worsen.	Locals have placed rock in worst sections. Fresh erosion at toe. New tall vertical sections observed.
STR 25.2 R	Sutter Slough	25.2	0	R	RD 999 - Netherlands	Clarksburg	Eroding	2008	694	0	Wave Wash, Erosion Pockets	None	Likely	Pipe	2008 - Over steepened levee section. 2009 - Significant new erosion. 2010 - Minor new erosion.	Minor new erosion at toe.

Site Name	Waterway	River Mile	Levee Mile	Bank	Levee Maintaining Agency	Economic Impact Area	Erosion Status	Year Added	Site Length (ft)	Berm Width (ft)	Erosion Mechanism(s)	Revetment Details	Veg Variance Required?	Encroachment Details	Site History	2017 Field Notes
STR 25.7 R	Sutter Slough	25.7	0	R	RD 999 - Netherlands	Clarksburg	Eroding	2011	709	5	Toe Scour, Whole Bank Failure	None	Likely	None	2011 - Toe scour along length of site and erosion pockets. 2012 - Site extended slighty upstream due to new erosion pocket. 2013 - Tall vertical sections at upstream end of site.	Large erosion scarp near downstream end.
STR 26.1 R	Sutter Slough	26.1	0	R	RD 999 - Netherlands	Clarksburg	Eroding	2015	253	0	Toe Scour, Wave Wash	None	Likely	None	2015 - Tall vertical sections into the levee slope and erosion along the toe. 2016 - New tree pop-out observed.	No observed change.
STR 26.5 L	Sutter Slough	26.5	0	L	RD 349 - Sutter Island	Sutter Island	Eroding	2002	621	0	Toe Scour, Erosion Pockets	Quarry Stone in poor condition	Likely	None	2002 - Original rock over geotextile is sliding off and the end is coming unraveled. 2003 - Some minor new erosion on the downstream end. 2004 - Site has gotten worse. Underlined geofabric is exposed. 2005 - Still looks bad with exposed geotextile fabric. 2006 - Still have some new unraveling and exposed fabric. Site lengthened upstream. 2009 - Minimal new erosion. 2010 - geotextile fabric placed since last year, possible flood fight. 2012 - Exposed geotech style fabric, assume rock on top slid off. 2015 - Erosion pockets covered with plastic.	There appears soil under geotech fabric that appears to be failing but hard to tell.
STR 26.9 R	Sutter Slough	26.9	0	L	RD 349 - Sutter Island	Sutter Island	Eroding	2015	636	20	Toe Scour, Wave Wash	None	Likely	Pipe	2015 - Large Tree popout and tall vertical sections into the levee slope.	new erosion at toe. new erosion pocket at upstream end.
STR 27.3 R	Sutter Slough	27.3	0	R	RD 999 - Netherlands	Clarksburg	Eroding	2011	1,440	0	Wave Wash, Whole Bank Failure	None	Likely	Pump and pipes	2011 - Multiple erosion pockets. Some likely from tree popouts. 2013 - Tall vertical sections. 2015 - New tree pop-out and significant new erosion. 2016 - New erosion at toe.	site extended downstream. section of lower bank has slumped off. fresh toe erosion. pipe encroachment. fresh tree popout
SYC 9.3 L	Sycamore Creek	0	9.3	L	Maintenance Area 12	Grimes	eroding	2011	98	0			Unlikely	culvert	2011 - Erosion occurring upstream and downstream of an irrigation diversion structure.	Access Issues - Could not observe
WAC 2.1 L	Wadsworth Canal	0	2.1	L	DWR Sutter Maintenance Yard	Yuba City	Eroding	2011	3,422	5	Fluvial	None	Likely	Pipes and utility pole	2011 - Whole bank is starting to unravel, with failure from poor soils.	Minor new erosion observed.
WAC 2.1 R	Wadsworth Canal	0	2.1	R	DWR Sutter Maintenance Yard	Sutter Town	Eroding	2011	3,376	5	Fluvial	None	Likely	Pipes and utility pole	2011 - Whole bank is starting to unravel, with failure from poor soils.	Minor new erosion observed.
WAC 2.4 L	Wadsworth Canal	0	2.4	L	DWR Sutter Maintenance Yard	Yuba City	Eroding	2010	4,603	5	Fluvial	None	Likely	PG&E gas line, bridge, and power poles	2010 - Over steepened levees, some slumping, reach-wide problem. 2011 - Still a reach-wide problem.	Significant new erosion along lower bank.
WAC 2.4 R	Wadsworth Canal	0	2.4	R	DWR Sutter Maintenance Yard	Sutter Town	Eroding	2010	4,617	5	Fluvial	None	Likely	Pipe, bridge, and power poles	2010 - Over steepened levees, some slumping, reach-wide problem. 2011 - Still a reach-wide problem.	Significant new erosion along lower bank.
WAC 4.3 R	Wadsworth Canal	0	4.3	R	DWR Sutter Maintenance Yard	Sutter Town	Eroding	2011	6,795	0	Whole Bank Failure, Fluvial	None	Unlikely	Pipes, overhead utility, bridges	2011 - Small erosion pocket.	Site extended downstream. Significant lower bank erosion.
WAC 4.4 L	Wadsworth Canal	0	4.4	L	DWR Sutter Maintenance Yard	Yuba City	Eroding New	2017	6,776	5	Whole Bank Failure, Fluvial	None	Unlikely	Pipes, overhead utility, bridges		Significant lower bank erosion and overall slumping.
WPC 0.1 R	Western Pacific Interceptor Canal	1.6	0	R	RD 784 - Plumas Lake	Arboga	Under Construction	2017	31,652	0			Unlikely	Pipe		Entire levee was under construction.
YAS 1.7 L	Yankee Slough	0	1.7	L	RD 1001 - Nicolaus	Rio Oso	Eroding	2011	147	0	Fluvial	None	Likely	Pipe	2011 - New erosion site. Steep eroding slope. Fairly old scarp with vegetation growth.	No observed change.
YOL 1.2 R	Yolo Bypass	0	1.2	R	RD 2035 - Conaway Tract	Woodland	Eroding	2011	215	0	Toe Scour	None	Unlikely	AT&T fiberoptic cable under levee	2011 - Small sections of slumping, likely from wind wave.	Small amount of toe erosion.
YOL 2.0 R	Yolo Bypass	0	2	R	RD 2035 - Conaway Tract	Woodland	Eroding	2006	267	0	Toe Scour, Wind Wave	None	Unlikely	Poles	2006 - Wave wash erosion and some saturation slumping occurring. Tension/separation cracks evident in fine grained levee slope materials. 2011 - Small sections of slumping lower bank, just downstream of bank rock. 2016 - New cracks observed a the mid-slope.	Toe continues to erode.
YOL 2.2 R	Yolo Bypass	0	2.2	R	RD 2098 - Cache-Haas Area	Moore Tract	Eroding New	2017	202	0	Whole Bank Failure, Erosion Pockets	Scattered Quarry Stone in poor condition	Unsure	None		POTENTIALLY UNDER REPAIR; full landslide from levee crown down, revetment failure , additional slumping ds and slump cracks observed.
YOL 2.3 R	Yolo Bypass	0	2.3	R	RD 2035 - Conaway Tract	Woodland	Eroding	2011	1,822	0	Wind Wave	None	Unlikely	Wells	2011 - Erosion from wind waves along entire length of the levee toe. Several sections of slumping bank along the toe. 2016 - Fresh cracks observed.	Minor new toe erosion.
YOL 2.8 R	Yolo Bypass	0	2.8	R	RD 2035 - Conaway Tract	Woodland	Eroding	2011	2,502	0	Wind Wave, Toe Scour	None	Unlikely	Pipe and wells	2011 - Wave wash erosion and several sections of slumming bank along the toe.	Erosion creeps further into levee toe.
YOL 3.5 R	Yolo Bypass	0	3.5	R	RD 2035 - Conaway Tract	Woodland	Eroding New	2016	1,517	0			Unsure	None	2016 - Erosion observed at levee toe.	Unable to view due to access issues.
YOL 4.2 R	Yolo Bypass	0	4.2	R	RD 2035 - Conaway Tract	Woodland	Eroding	2006	1,652	0			Unsure	None	2006 - Wave wash erosion and some saturation slumping occurring. Several small scallops present in lower levee slope/toe due to saturation slumping. Tension/separation cracks evident in fine-grained levee slope materials. 2011 - Small pockets of erosion throughout the site. Site formerly called 3.8.	Unable to view due to access issues
									355,992							