

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
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.
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.
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 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
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 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 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 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.

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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 prism.
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.
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 7.9 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 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.
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 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.

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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 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 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 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 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.

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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.
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