

PROPOSED REVISIONS TO ARTICLE 2

(k) “Controlled Low Strength Material (CLSM)” means a flowable fill comprised of Portland Cement, fine aggregates, fly ash, admixtures, and water, designed to be placed or poured into a self-leveling, self-compacting, low strength, cementitious material. CLSM shall have a unit weight of between 90 and 110 pounds per cubic foot, a 28-day unconfined compressive strength between thirty (30) and ~~200~~one hundred fifty (150) pounds per square inch (psi), and a maximum hydraulic conductivity of 5×10^{-6} centimeters per second at 28 days.

(q) “Design Water Surface Elevation (DWSE)” means the highest of the following water surface elevations:

- (1) The water surface elevation at Design Flood flow as determined by the USACE or the Board, typically from design profiles developed by the USACE in 1955 for the San Joaquin River and tributaries and in 1957 for the Sacramento River and tributaries;
- (2) The water surface elevation recognized by the Board based upon best available information;
- (3) The water surface elevation corresponding to the 100-year flood as determined by the Federal Emergency Management Agency outside of Urban Criteria Areas; or
- (4) The water surface elevation corresponding to the 200-year flood in Urban Criteria Areas, following the Urban Levee Design Criteria.

(ii) “Levee Right of Way” means the Levee Section and appurtenant Levee features (such as a Seepage Berm, Stability Berm, relief well, or Revetment), plus land parallel to the Levee ten (10) feet in width landward from the landside Levee Toe and appurtenant Levee features, plus land parallel to the Levee fifteen (15) feet in width waterward from the waterside Levee Toe and appurtenant Levee features, except where either (1) a USACE operation and maintenance manual or as-built drawing furnished pursuant to Title 33 Code of Federal Regulations section 208.10 or permission issued pursuant to Title 33 United States Code section 408 provides otherwise, (2) real property rights acquired for Levee operation and maintenance provide otherwise, or (3) the Board, Local Maintaining Agency, or an agency constructing Levee improvements is actively pursuing acquisition of real property rights beyond ten (10) feet from either Levee Toe. In the case where the Board, Local Maintaining Agency, or an agency constructing Levee improvements is actively pursuing acquisition of real property rights beyond ten (10) feet from either Levee Toe, “Levee Right of Way” means the Levee Section and appurtenant Levee features (such as a Seepage Berm, Stability Berm, relief well, or Revetment), plus land parallel to the Levee consistent with the proposed acquisition, generally a minimum of fifteen (15) or twenty (20) feet in width landward from the landside Levee Toe and appurtenant Levee features, and/or land parallel to the Levee consistent with the proposed acquisition a minimum of fifteen (15) feet in width waterward from the waterside Levee Toe and appurtenant Levee features. Fifteen (15) feet landward generally applies for repair or rehabilitation projects that are outside of Urban Criteria Areas. Twenty (20) feet landward generally applies for federal projects, projects receiving federal credit, and Urban Criteria Areas. For the Board, Local Maintaining Agency, or an agency constructing Levee Improvements to be actively pursuing acquisition of real property rights, at least one of these entities shall have provided a public notice of the acquisition goals in the area, and such acquisitions shall be pursued with coordination between these entities.

(oo) "Maintenance Activities" means any work required to retain or maintain the maximum benefits of flood control facilities and of existing Permitted Encroachments. Maintenance Activities of Local Maintaining Agencies include but are not limited to controlling Encroachments (with or without a Permit), maintaining Project Works, limiting unauthorized Encroachment activity and reporting concerning Encroachment matters to the Board, controlling unauthorized vehicular access, managing vegetation, dredging, removing sediment deposits, controlling implementing erosion, drilling (according to an approved drilling plan), control measures, controlling rodents, repairing rodent damage, painting, coating, patching, and similar activities; but do not and include without, with prior written approval from notification to the Board staffany.

- (1) Any significant excavation into the Levee Section, or (2) any generally excluding, but not limited to the following exclusions:
 - (A) Excavation of the Levee crown above the DWSE;
 - (B) Excavation of stumps; and
 - (C) Excavation of posts, poles, and footings.
- (2) Any excavation into the Levee during Flood Season;
- (3) Drilling according to an approved drilling plan;
- (4) Replacement or lining of authorized pipelines;
- (5) Dredging;
- (6) Removal of sediment deposits; and
- (7) Placement of any dredged, spoil, or waste material within the Levee Right of Way or Floodway.

If a response to a written notification from a Local Maintaining Agency on proposed maintenance work sent to the Board is not received within fifteen (15) business days, the maintenance work may proceed as a Maintenance Activity. Written notification shall include, at a minimum, the location of work, schedule of work, scope of work, extents of work and appropriate plans for the work being undertaken; all such work shall be performed in accordance with Board Standards. Maintenance activities of public agencies Local Maintaining Agencies consistent with the operation and maintenance manual for flood control facilities within their jurisdiction generally do not require a Board Permit and are authorized and defined by Water Code sections 8361, 8370, 12642, and 1264212980 –12992.

PROPOSED REVISIONS TO ARTICLE 8

Section 111(e) The Board may relax or waive Board Standards, as deemed appropriate in the sole judgment of the Board, for Encroachments on or near a non-SPFC Levee in consideration of the construction, operation, and maintenance standards and practices for the non-SPFC Levee that may differ from standards and practices for SPFC Levees, provided that the Encroachment must not create an unreasonable risk to the public or a SPFC Levee.

Section 120(a)(6) All drains, abandoned conduits, and other penetrations not protected in place shall be removed from the proposed construction site prior to or during construction.

Section 120(a)(9) An inspection trench shall typically be excavated to a minimum depth of six (6) feet beneath Levees being constructed or reconstructed to a height of six (6) feet or greater. The inspection engineer may allow a lesser depth based on material competency. If necessary to ensure a satisfactory foundation with competent material, the depth of the inspection trench may be required to exceed six (6) feet.

(A) If the Levee to be constructed or reconstructed is less than six (6) feet in height, the depth of the inspection trench beneath the Levee shall be at least equal to the Levee height.

(B) The inspection trench shall have a minimum bottom width of ~~twelve (12)~~ six (6) feet, and the side slopes shall be no steeper than 0.25h:1v, or flatter if required for worker's safety.

(C) The centerline of the inspection trench shall be located approximately under the outer edge of the shoulder of the waterside Levee crown, unless justified with a geotechnical analysis, subject to Board approval, to be located under the waterside Levee slope.

(D) A seepage cutoff wall under the Levee that exceeds the depth requirement for an inspection trench by five (5) feet or more may be considered an adequate substitute for the inspection trench.

Section 120(a)(21) Field density testing by an Approved Soils Testing Laboratory will be required to confirm the minimum relative compaction of Levee embankment fill and trench backfill. If the compaction of trench backfill near a conduit cannot be verified by testing, alternatively a California registered civil engineer who observed the compaction may verify its adequacy. Levee embankment fill material index properties, strength tests, and/or permeability tests may be required to verify material suitability.

Section 123(b)(17) Replacement of an existing pipeline, conduit, or utility line within the Levee Right of Way or Floodway, including in-kind replacement and liner installation, requires a ~~new~~ Permit unless such replacement is performed on Project Works maintained by a Local Maintaining Agency under Maintenance Activities and ~~prior written approval from Board staff~~ notification has been provided to the Board pursuant to the notification procedure for Maintenance Activities.

Section 123(e)(5) Levees located within the Delta Lowlands may only be cut below the DWSE after Board approval of either appropriate engineering studies ~~are performed and approved~~ or appropriate work windows for the depth of cut.

Section 123 and Section 124 were combined as part of a Microsoft Word formatting error. The two sections, and their headers, have been properly divided and are reflected independently.

Section 126(a) New fences shall not be constructed on the Levee Section, except as necessary for preventing unauthorized Levee access ~~and/or~~ protecting structures owned or operated by a public agency.

Section 126(a)(2) Where the distance between fences would be ~~asso~~ close as to interfere unreasonably with Levee inspection, channel inspection, Maintenance Activities, flood fight activities, and inspection or maintenance of any feature of an Adopted Plan of Flood Control, the Board may deny approval for additional fences.

Section 130(a)(2) Aggregate base surfacing for Patrol Roads on Levee crowns shall be compacted to the same relative compaction standard as required for Levee fill pursuant to section 120(a) minimum one hundred (100) percent of Standard Proctor dry)(13). If this relative compaction cannot be verified with density according to ASTM D698 or ninety five (95) percent of Modified Proctor dry density according to ASTM D1557, or equivalent. Moisture control limits are to be within minus one (-1) percent to plus three (+3) percent of optimum and zero (0) percent to plus four (+4) percent of optimum for ASTM D698 and ASTM D1557, respectively, or equivalent. Alternatively testing, the Permittee may opt to provide relative compaction sufficient to withstand a load of sixty eight thousand (68,000) pounds from two consecutive sets of tandem axles without significant rutting during periods of seasonal precipitation roll the aggregate base surfacing until it provides a firm and unyielding surface for vehicle travel.

Section 130(a)(3) The top twelve (12) inches of subgrade supporting the aggregate base on Levee crown Patrol Roads shall be compacted to the same relative compaction standard as the aggregate base surfacing required for Levee fill pursuant to section 120(a)(13).

Section 136 It is the Board's policy to regulate by Permit or other action agricultural land use and the development of suitable wetlands within the Yolo Bypass and Sutter Bypass. Irrigated and non-irrigated pastures and croplands are allowed without Permit from the Board when consistent with the Board's Flowage Easements. The supplemental standards protect the flood control functions of the Yolo and Sutter Bypasses, safeguard existing agricultural land use, and control the development of proposed wetlands.

(a) Final detailed plans for all Proposed Work involving construction, grading and planting shall be submitted to and approved by the Board prior to the start of work.

(b) A detailed operation and maintenance plan shall be submitted to and approved by the Board prior to the start of work.

(c) A profile of the existing Levee crown roadway and Access Ramps that will be utilized for access to and from the construction area shall be submitted to the Board prior to the start of work.

(d) Any damage to the Levee crown roadway or Access Ramps attributable to the construction or maintenance of croplands or wetlands shall be promptly repaired by the Permittee.

(e) The planting of vegetation or the impoundment of water is not allowed within one thousand (1,000) feet of the Fremont Weir structure.

(f) The planting of vegetation or the impoundment of water shall not be allowed in any area unless a hydraulic analysis demonstrates no adverse hydraulic impact. The Hydraulic Impact Evaluation Procedure shall apply for evaluating any hydraulic impact. The Board may deny a Permit if the hydraulic impact is deemed significant.

~~(g) Irrigated and non-irrigated pastures and croplands are allowed without Permit from the Board when consistent with the Board's Flowage Easements.~~

~~(h)~~(g) The planting of vegetation is generally allowed for the development of native marsh, riparian vegetation, and wetlands.

~~(i)~~(h) Rooted vegetation and aquatic beds of floating (non-rooted) or submerged vegetation are generally allowed to be established in ponded water.

~~(j)~~(i) The depth of ponded water shall be controlled to prevent the growth of unauthorized vegetation that could adversely affect the operation of an Adopted Plan of Flood Control.

| (k~~j~~) No permanent Berms or dikes are allowed above natural ground elevation without a detailed hydraulic analysis except where otherwise expressly provided for in reservations contained in easement deeds to the Sacramento and San Joaquin Drainage District.

| (k) Required maintenance may include removal, clearing, thinning, and pruning of all vegetation directly or indirectly resulting from the Permitted Work.

DRAFT