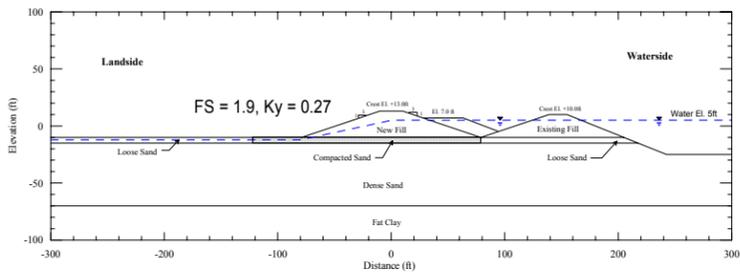
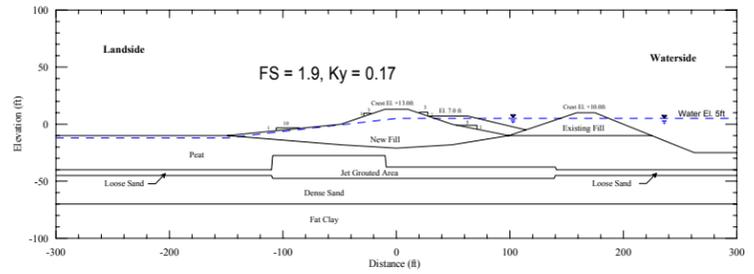


**Typical Setback Levee Cross Sections**

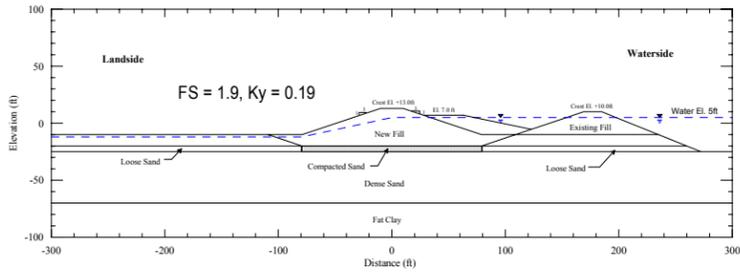
(1) No Peat



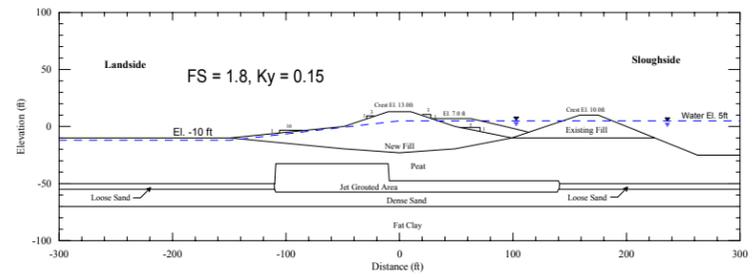
(4) 30-foot-thick peat



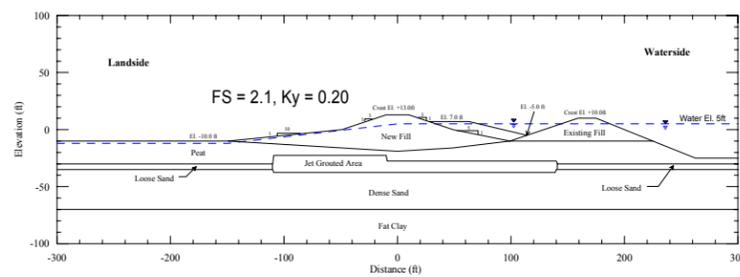
(2) 10-foot-thick peat



(5) 40-foot-thick peat



(3) 20-foot-thick peat



Note:

Select 10, 20, and 50 miles of levees to restore shaded riverine habitat by constructing seismically resistant setback levees.

Crest width of a typical setback levee is 20 ft  
Peat thickness represents thickness of free field peat

**Project Information:**

- Select 10 miles, 20 miles, and 50 miles of levees to restore shaded riverine habitat
- Setback levee to the following standards
  - 300-year return period earthquake design
  - Maximum waterside slope 3H:1V
  - Maximum landside slope (varies with peat thickness and levee height) 3H:1V to 10H:1V
  - Minimum crest width 20 ft
  - Improvements: 1) Excavate soft peat, if peat thickness < 10 ft and in-place compaction of loose sand  
2) Jet grout of loose sand layer, if peat thickness > 10 ft
  - 3 feet of freeboard above the 100-year flood stage
- Levee lengths for upgrade
  - (1) 10 miles
  - (2) 20 miles, and
  - (3) 50 miles

**Benefits**

- Restoration of shaded riverine habitat
- Reduce seismic risk of 10, 20, and 50 miles of selected levees
- Reduce seismic induced deformation to acceptable level

**Project Costs**

- (1) 10 miles: \$0.6B
- (2) 20 miles: \$1.2B
- (3) 50 miles: \$3.1B

