

PROJECT STAKEHOLDERS

- California Department of Water Resources
- Kiewit Construction
- SSEC (Selby's Soil Erosion Control)
- Ewing Irrigation
- Total Site Supply Co.

CHALLENGES

- The solution had to be installed within 165 days
- Sensitive water bodies needed to be protected
- The site was declared a state of emergency and was under public scrutiny

APPLICATION

- CocoFlex™ ET-FGM™:
4,500 lb/ac (5,040 kg/ha)

RESULTS

- CocoFlex prevented further erosion issues, including hillside washouts and sediment flow into nearby sensitive waterways
- The project has been nominated as one of 10 outstanding civil engineering projects for the 2020 Outstanding Civil Engineering Achievement Gala



Applying CocoFlex to the slopes

In February 2017, sections of the Oroville Spillway in northern California washed out, threatening to flood communities downstream. Officials started to divert flow to an emergency spillway, but the water crested the sides and carved a path down the hillside, washing debris into the river. Thousands of residents had to be evacuated. With the pressure on, SSEC (Selby's Soil Erosion Control) was tasked with repairing the erosion issues and preventing further damage while construction crews rebuilt the spillway. With heavier than normal snowpack upstream and rain in the forecast, SSEC worked day and night to quickly reseed the slopes with Profile's CocoFlex™ Extended Term-Flexible Growth Medium™ (ET-FGM™).

Designed with the strength of coconut fibers, CocoFlex is the highest-performing, longest-lasting hydraulically applied erosion control product on the market. It requires no cure time and provides superior slope protection compared to erosion control blankets and Bonded Fiber Matrix (BFM) products. SSEC applied the CocoFlex at 4,500 pounds per acre (5,040 kg/ha).

In May, SSEC returned to the site to stabilize bare soil near newly built haul roads along the main spillway. Once again, SSEC applied CocoFlex to the site to keep the roads in place. In follow-up inspections, CocoFlex held the soil in place, preventing hillside washouts and sediment from flowing into nearby waterways. The solution also allowed construction teams to more easily access the site without fear of additional erosion issues. In 2019, the Oroville Dam successfully reopened. The American Society of Civil Engineers nominated the rebuild as one of 10 outstanding civil engineering projects for the 2020 Outstanding Civil Engineering Achievement Gala.



Nearly 210 tons of CocoFlex was used to stabilize the site



Selby's team worked day and night to apply CocoFlex to prevent further damage