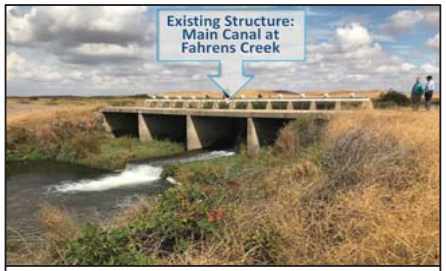
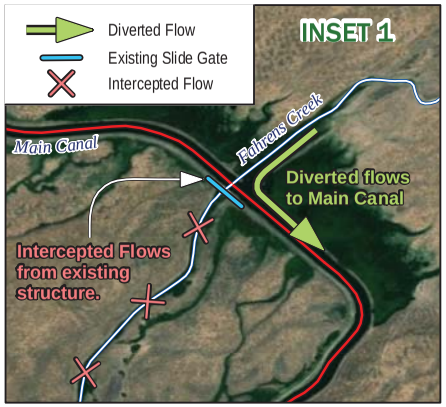
CONFLUENCE OF Main Canal & Fahrens Creek

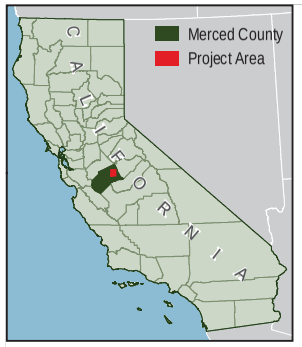
PROPOSED ACTIONS: Utilize the existing side gates on Main Canal to intercept high flood flows from the 9 square miles of Fahrens Creek and divert into Lake Yosemite using the Main Canal during the wet season when canal flows and Lake Yosemite are lowered.



Looking upstream (NE) towards the Main Canal from Fahrens Creek (Fahrens Creek flows directly into the Main Canal and is able to pass through the canal back into the downstream creek through the existing slide gates)

Looking (NW) along the Main Canal at the Fahrens Creek Confluence (Fahrens Creek comes into the Main Canal from the right and the gates are opened to release flood flows back into the creek to the left. The proposed project would close these gates during high flood flows, diverting them to lake Yosemite)





Proposed Flood Flow Diversion & Storage Optimization

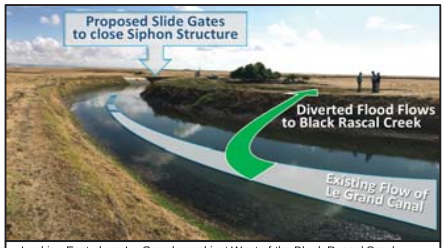
to Reduce Flood Risk Primarily on Fahrens Creek

*Merced County * The City of Merced * Merced Irrigation District*

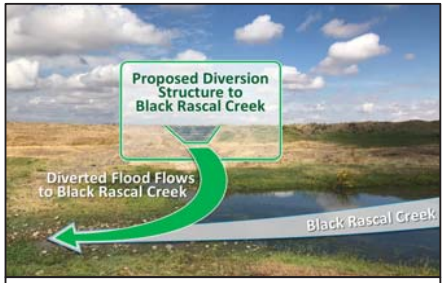
Main Canal
Le Grand Canal
Streams
Fairfield Canal
Effective Special Flood Hazard Area (SFHA)
Existing Flow
Intercepted Flow
Diverted Flow

Le Grand Canal Siphon (Existing) at Black Rascal Creek

PROPOSED ACTIONS: Construction of a remotely operated side gate on the south bank of Le Grand Canal and addition of slide gates to the existing siphone structure to close off LeGrand Canal and divert intercepted flood flows from Fahrens Creek into Black Rascal Creek after floods subside and flows can be released in a controlled manner from Lake Yosemite into the canal. This will delay timing and take attenuated flows around the high flood risk areas.



Looking East along Le Grand canal just West of the Black Rascal Creek Siphon (Le Grand Canal goes under Black Rascal Creek through the Siphon. The proposed project would allow the Siphon to be closed using new slide gates, backing up attenuated flood flows through the new side gates to Black Rascal Creek)



Looking North towards the Main Canal from Black Rascal Creek (The proposed side gates for the diversion structure would release attenuated flood flows directly into Black Rascal Creek)