Comments By George Basye[1] for the Forum Section of next Sunday's Bee challenging the claim of Mount and Lund in the Forum on 5/15/2011 claiming that we need more "floodways" and essentially ignoring what exists.

The Sacramento Valley has very effective floodways.

In the Forum section on May 15, Professors Mount and Lund suggested that the Sacramento Valley does not have adequate floodways "for very large floods, the kind that come perhaps once in a generation or two."

I beg to disagree. Will Green, editor of the Colusa Sun from 1863 to 1905, tried, in the 1860s and 1870s to persuade the "experts" that flood water on the Sacramento River could not be held between the levees. He was not an engineer, so no one paid attention.

In 1894, local engineers Manson and Grunsky agreed with Green. They proposed a system of "bypasses" (a new term) to carry flood flows. The Corps of Engineers did not approve. Presumably they wanted to scour the Riverbed for navigation, the main concern at the time.

Fortunately, in 1912, an engineer named Colonel Jackson abandoned the federal view. He adopted the Manson and Grunsky approach with bypasses to accommodate the 1907 and 1909 floods of 600,000 cubic feet per second ("cfs"). Those flood flows have been exceeded, barely, only once since the present bypass system was installed about 80 years ago. The system held, though there were some local failures, but none was overtopped.

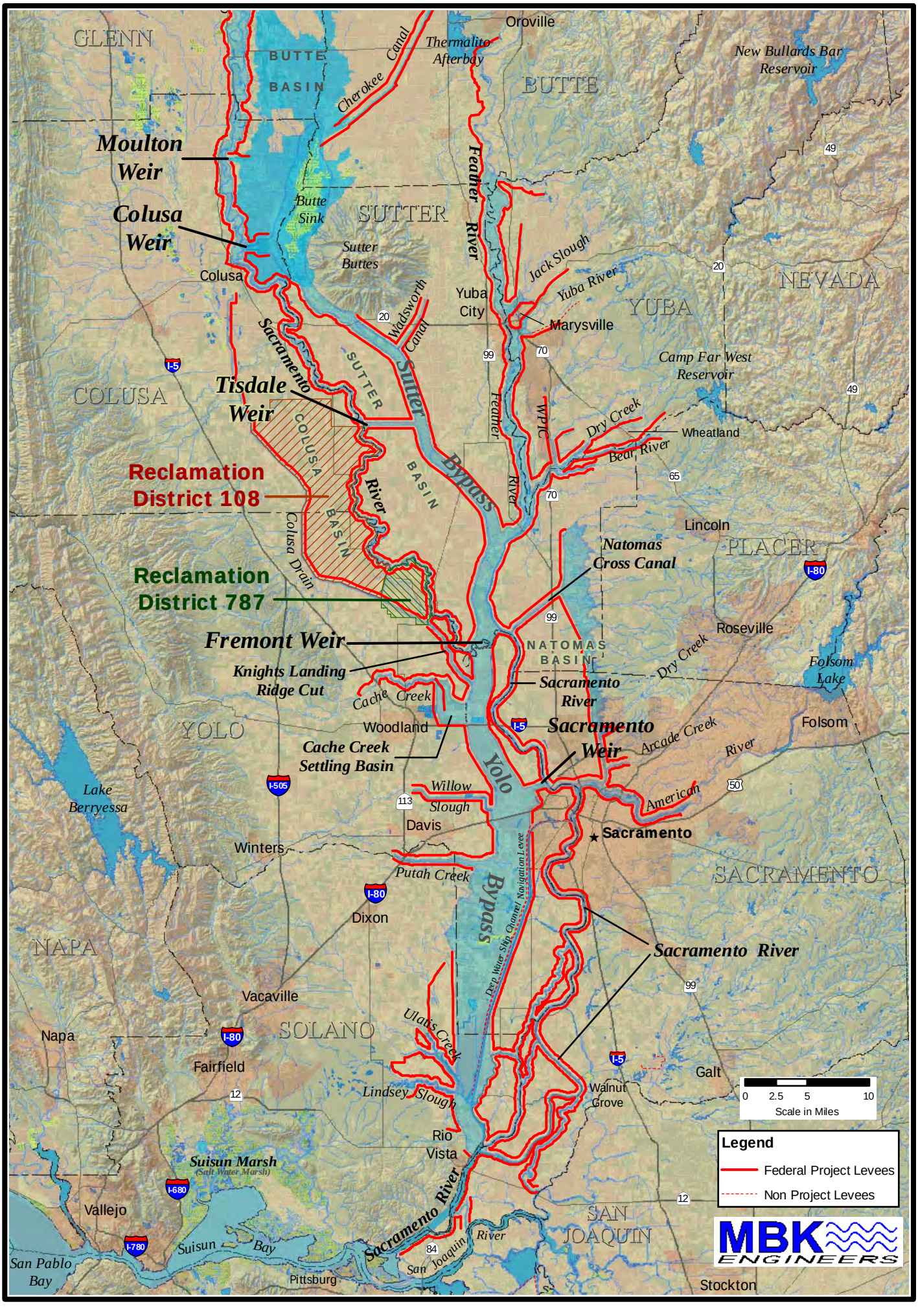
The accompanying illustration shows how extremely small the Sacramento River appears when compared to the capacity of the Bypasses at flood stage! They have been adequate for nearly 100 years.

[1] George Basye, retired from Downey Brand, was a Sacramento flood control lawyer for nearly 50 years,

Our Bypasses allow no buildings. No obstacle over three feet may be built. Unfortunately, the "floodways" on the Mississippi, which began after the 1927 Mississippi flood, appear to have no such restriction.

The City of Sacramento is in a different situation, however, since the 1907 and 1909 floods, the basis for the system design, produced only 100,000 cfs on the American River. The joint Corps of Engineers and Bureau of Reclamation Project is adding a second spillway to Folsom Dam to accommodate 160,000 cfs, estimated to be a 200 year flood, now considered appropriate for cities.

Three major dams have been added to the system since its design, and it is estimated that it could now accommodate a total flood of 1,000,000 cfs. The present system is clearly, therefore, adequate for very large floods which are defined in the May 15 article as coming "perhaps once in a generation or two."


Moulton Weir
Colusa Weir
Tisdale Weir
Reclamation District 108
Reclamation District 787
Fremont Weir
Knights Landing Ridge Cut
Cache Creek Settling Basin
Sacramento Weir
Natomas Cross Canal
Sacramento River
Sacramento River
Feather River
Yolo Bypass
Sutter Bypass
Colusa Basin
Butte Basin
Natomas Basin
Deep Water Ship Channel Navigation Levee
Oroville
Thermalito Afterbay
New Bullards Bar Reservoir
Butte Sink
Sutter Buttes
Colusa
Yuba City
Marysville
Jack Slough
Yuba River
Camp Far West Reservoir
Wheatland
Dry Creek
Bear River
Lincoln
Roseville
Folsom
Folsom Lake
Arcade Creek
American River
Cache Creek
Woodland
Willow Slough
Davis
Winters
Putah Creek
Dixon
Vacaville
Fairfield
Napa
Lake Berryessa
Suisun Marsh
(Salt Water Marsh)
Vallejo
Suisun Bay
San Pablo Bay
Pittsburg
Rio Vista
Ulatis Creek
Lindsey Slough
Walnut Grove
Galt
Stockton
San Joaquin River
Sacramento River
Colusa Drain
Wadsworth Canal
Cherokee Canal
WPIC
GLENN
BUTTE
SUTTER
COLUSA
YUBA
NEVADA
PLACER
YOLO
NAPA
SOLANO
SACRAMENTO
SAN JOAQUIN
I-5
I-80
I-505
I-680
I-780
99
70
65
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0 2.5 5 10
Scale in Miles
Legend
Federal Project Levees
Non Project Levees
MBK ENGINEERS