U.S. COAST AND GEODETIC SURVEY.

T. H. Thorne, Superintendent.

State: California.

DESCRIPTIVE REPORT.

Topographic Sheets, Nos. 1825, 1826 & 1827.

LOCALITY:
San Pablo Bay.

1888.

CHIEF OF PARTY:
Jas. J. Lawson.
Captain and Mrs. John C. Chater of Los Angeles, California, have
recently been awarded the distinguished recipient of the State's Honor Award for their outstanding service in
promoting the values of the decoration of the State. The award recognizes their tireless efforts in raising funds
for the restoration and maintenance of the historical structures in the area. The Chaters have been instrumental
in preserving the heritage of their community and have been instrumental in raising awareness about the
importance of historical preservation.

In addition to their work in community service, the Chaters are long-time patrons of the local museum and
have contributed significantly to its operation. Their dedication to the community has been recognized
through various awards and recognitions, including the recent distinction of being named as the Ambassadors of
Cultural Heritage.

The Chaters' commitment to preserving the history of their community is evident in their personal lives as well,
with a strong focus on family values and community involvement. Their contributions to the community have
been recognized both locally and nationally, with numerous awards and honors bestowed upon them for their
dedication and commitment to the betterment of the community.
as operated, and total amount of each modification agent used.

The penalty for conviction of violating Public Law 92-205, and rules adopted under its authority, is a fine of not more than $10,000.

NOTE: For the next few months, space that ordinarily would be devoted to Length of Service Awards will be devoted to retirements. Award columns will be resumed as soon as possible.

Richard A. Wood, former Weather Service Specialist at the Weather Service Forecast office in Denver, Colo., is the new Official in Charge of the NWSO in Winnemucca, Nev.

He served earlier in Washington, D.C., Texas, and North Carolina, and was in the U.S. Navy from 1950 to 1953.

Jno. Lawson
Assistant
These shots bear the same number as the projections sent from the Office. One of these (No. 37) was defective, and a substitute therefore was made at the Sub-Office, San Francisco.

The work embraced in this survey is from Vallejo, thatward on North side of San Pablo Bay, including Upper Ida, Ulleys of Sonoma, Solay and Petaluma Creeks, to Novato Creek, where operations were stopped on account of refudiation of allotments.

Each shot is described individually, in order of number.
Sheet No. 2.

From town of Vallejo, Westward to Point Sur, including Mare Island Navy Yard.

The survey of the shore line of Napa Creek was made from nearly two miles N. and W. from Vallejo and Mare Island Navy Yard to Contra Costa Point. On the Eastern side very few changes have been made since the survey of 1851 to save those necessary in the growth of the towns of Vallejo and South Vallejo, by the building of wharves, boat landings, and the construction of the Napa Branch Railroad. At South Vallejo these are most prominent by the building of the R. R. wharf, over a quarter of a mile long, some lumber wharves North of the R. R. wharf, and the erection of the Starflower mill and wharves adjacent.

On the Western shore (Eastern face of Mare Island) there are a number of artificial changes as in the construction of buildings, removal of sentinel docks, etc., and some slight natural ones by the growth of the tide. Northward from the Navy Yard a belt of this growth extends for three-fourths of a mile, and 100 metres wide, outside of
the High Water Mark of the previous survey. A small
growth of the same nature has made at the south-
ern end the Navy Yard. The shore line of the fast
land of the island shows no material change.
If the hydrography of this portion of Napa
Auk, had been expected, great changes would have
been found at South Valley. When formerly 30 ft.
of water was found at end of wharves, dredging is
now necessary to permit the docking of vessels;
so also at the sides of these wharves, small blind
channels, to serve as bays for discharging vessels, are
dredged, outside of which beds, the water was so
shallow that my whole boat would ground before
low water.

At the entrance to Napa Auk from
Conjuring Straits, the width is greatly contracted
through the extension of the Stan Mill
wharf on the Eastern, and the Naval Magazine wharf
on the Western sides.

The shore line of the Western side of
the fast land of Ulms Isle shows little or no
change. It is proper, however, to state that on
account of dense fogs prevailing at the times of
the lowest low waters, it was impossible to obtain
the outline of the small reef near the Western shore and parallel thereto, and from three-quarters to one mile N. and W. of Cape Is. Light House. Unless this reef was fully developed in the hydrography of San Pablo Bay, I suggest that the full extent as shown in the original work by Smith Cutts. be retained.

At a point on the shore line of San Pablo Bay, about a mile and a half N. W. from N. end of the fast land of Mare Is. it will be seen that the marsh shore begins to deviate considerably from the previous survey. This is the result of a washing away, a few years ago, during a very heavy stormy gale. At the Western limit of the chart a difference of 120 metres is shown between the position of the former and present shore line.

No contours were run on this sheet, as no apparent changes had taken place.
Sheet No. 3.

From Western limit of Sheet No. 2 to Mouth of Toyota Creek, including Mouth of Sonoma Creek.

The concluding remarks for Sheet No. 2 as to the changes of the Wharf line, hold good for Sheet No. 3 to the Mouth of Sonoma Creek, and thence S.W. to Toyota Creek, although the cutting has not been so extensive. The seaward appearance of the mouth shore, where the work has occurred, is rather peculiar.

Inside the mouth of Sonoma Creek there has been comparatively little change, except that the southern half of a large marshy island between Sonoma and Toyota Creeks has been dyked, though as yet insufficiently for perfect reclamation. That portion extending from Sonoma to Toyota Creek east of Point St. Pete Bay is not dyked. On the easterly part with that bank of Sonoma Creek, a little over a mile inside of the mouth, are shown some improvements belonging to the A. L. Stits. At this place an extensive well was torn 250 ft. deep, but instead of fresh water as was desired a flow of natural gas appeared. This has been utilized for illuminating, heating and cooking.
The survey of Tolay Creek was continued beyond the limits of the former work to show its junction with Sonoma Creek.

The name "Tolay" Creek seems to be a misnomer. It was adopted by Mr. Rodgers when he made the original survey, but for what reason he does not now recollect. It is a name, as applied to this slough, entirely unknown there even to "ye oldest inhabitant." There formerly existed a small, insignificant water course, emptying into the main slough several miles above the mouth, and which was called Tolay Creek because it was the outlet of a small pond which was called Tolay Lake; this having been drained, no longer exists. Whatever else "Tolay Creek" is universally known as "Wildshipmen Slough" for the reason that in the very early California days two midshipmen went there murdered by the boat's crew.

The sheet show of Tolay Creek is dyked so far as shown on this sheet; and all the marsh land from where the first land approaches close to the creek, has been reclaimed and is under cultivation.
On the Western part of the sheet is shown a portion of the Sonoma Valley Rail Road, Narrow Gauge, which continues up the Valley, through the town of Sonoma, one of the oldest towns in the State, to the Village of Glen Ellen.
Sheet No. 4.
From Solye Auk to Nvato Auk, including
Worth of Petaluma Auk.

From Solye Auk, Northeast to Petaluma Auk and along the Eastern shore of the latter, a large amount of marsh has been reclaimed by ditches and ditches, and is successfully cultivated. About three-fourths of a mile E. of the Entrance to Petaluma Auk is the Sonoma Landing, where steamboats from San Francisco connect with the Sonoma Valley R.R. This landing is connected with the main shore 700 miles distant by a track built on piles. At lowest tides the flats are bare from the shore to the inner side of the landing.

Generally, the shore on North and East side of Petaluma Auk presents no greater change than might naturally be expected from the reclamation of marsh, except in the greatly reduced area of a large slough on the East side and two and one half miles from mouth. Though this slough steamboats formerly passed at high water; now the marsh has so grown by deposit of sediment that in places a boat can hardly be pulled through, and at its North end is dyked off.
On Western side of Petaluma Creek, 1½ miles inside of Entrance, a considerable portion of the marsh between the shore line and fast land has been reclaimed, and part of it cultivated. Wherever the fast land is immediately contiguous to the shore, no marked change has occurred.

Formerly, the marsh from Novato Creek (North side) extended Westward of the island of fast land called Petaluma Pt., and opened on the shore line of Petaluma Rt. This arm of marsh is now cut off by a dyke, and is reclaimed.

On both sides of mouth of Novato Creek extensive changes will be seen from the great growth of the tide, or rather the Ephyma Maritima; on the South side this has extended 1300 metres Eastward of the shore line of the previous survey. The positions of the stations "N. Grass" and "S. Grass" give a good idea of the extent of this growth. South of the mouth of Novato Creek, it takes root and increases quite rapidly, and by retardation of the currents causes a large portion of the muddy sediment held in suspension in the waters, to be deposited, thus forming new marsh, which, in the course of years can be reclaimed and utilized for agricultural purposes.
As will be seen from the sketch a great amount of the
work on the side of the Creek has been dyked and
is under reclamation, and the owner proposes to
carry the work into the tule as far as practicable.

By instructions from Resident Director I
was directed to continue the work necessary to include
the track of the San Francisquito and North Pacific R. R.,
but on account of the refund time of the allotments for
the reason this could not be done. The work is
resumed, this can readily be made and then also
the branch line now being built can be added.

This latter line, which was only under consideration
when I was at work in that locality, branches off
from the main line at a point near the R. R. station
called "Pacheco" (not our Pacheco A), near N. E. 4
crossing the Uvaso R. and the Marsh on W. side
thereof, passes through the largest arms of the
marsh, penetrating the hills W. of Petaluma R.,
and will cross the Petaluma R. by means of a
bridge with a draw; then crosses the reclaimed
ground on E. side of Petaluma R. until it makes
a junction with the Sonoma Valley R. R. about
two-fifths of a mile S. S. W. from Sonoma R. R.
in the branch of the R. R. had not been commenced.
at the time my operations ceased, but is now going on, with the prospect of extending the line across the
reaches from Polay Ck. to Amapa Ck., and possibly
to Benicia.

The determination of the Low Water
Mark in connection with the work on San Pablo
Bay, was found to be so unsatisfactory that I aban-
donned the attempt. The bottom rises so very grad-
ually that a change of a few miles in fall of the
tide would make a large change in the location
of the Low Water, and in many places would be
so far off as to be beyond the use of the tides-\n\end{quote}

ometry, and at the same time the water would be so
shallow that a boat could not reach the places
I deemed it best, therefore, that the Low Water
should be located from the hydrography.

Respectfully Submitted

[Signature]

[Signature]

San Francisco, Cal.
May 22, 1855.