### Descriptive Report

**Form 504**

**U. S. Coast and Geodetic Survey**

**Department of Commerce**

**DESCRIPTIVE REPORT**

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Topographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>1847</td>
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<tr>
<td>Office No.</td>
<td>1848</td>
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</tbody>
</table>

**Locality**

- **State**: California
- **General locality**: San Francisco Bay
- **Locality**: 

**Chief of Party**

- **L. A. Seigle**

**Library & Archives**

**Date**: 

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U. S. COAST AND GEODETIC SURVEY.

F. M. THORN, Superintendent.

State: California.

DESCRIPTIVE REPORT.

Topographic Sheets Nos. 1847 + 1848.

LOCALITY: Suisun Bay.

1888.

CHIEF OF PARTY: L.A. Lentzeller.
No. 7.

Superintendent U.S. Survey
Washington, D.C.

Sir,

In the Procurement (Topography) of Kitsco Bay Sheet No. 1 of the eighth edition before this day forwards, present perhaps, the most marked and important subject in the Series, and for which I respectfully submit the following descriptive report.

The essential features in changes or improvements on compasses and other original works of locality (excepting about 20 years ago) are first, the quick and rapid formation of Sals, bordering the marsh, and second, the reclamation of marsh lands and attendant construction of levee and dam.

Regarding the subject, formation of tidal and its consequent incroachment, I would call particular attention to the méasures recently obtained at the Heads of Kitsco Bay.
From the mouth of Fleming River, northward and passing the entrance to Grizzly Slough, thence along the shore of Grizzly Island to Newton (B) t. after examination, the greatest accumulation of tide will be found to shift off the mouth of Grizzly Slough, the head of the bay. As soon as the spreading beach was made, it has not only and practically appeared, but so rapidly advanced into the nature of a beach that now it extends at that point seven miles outside of the original shore line. Again from Fleming River, passing Grizzly Slough, and following the tide shore of Grizzly Island thus east a half degree latitude, which it is quite apparent in but five years will become connected with the present definite tidal line, or shore.

The formation of tide as represented by the topography, naturally includes but a part of the accumulations, for the settlement of mud, sand, and all charactistics of debris flowing in or out upon reaching, as it is natural to expect, at the head of such a bay, water an influence by currents must become rapidly deposits, but that determination can only be obtained from hydrographic operations as the rise and fall of bar one inch in the tidal zone such gradual step may make a difference of many
yards in distance, while it would also state from the soft
character of mud, landing or treading an impracticable to
the Topographers, and consequently low water levels, indeterminate
High water levels are equally as approachable or
indeterminate from the same reason, but from my observation,
generally, operating at ordinary or mean high tide, but
latter of any water flow in or beyond the edges of tidal land.
while the latter is usually found two or three hour after N.W.

Regarding the reclamation of these marsh lands, it is
quite evident, the construction of dikes and dam from
a serious factor in the apparent destruction of natural
ways, and an attendant effect in proportion at their sources
of outflow. The reclamation upon Longly and Hammond
Islands have existed for some years, and I find the stream
of both below sitting dikes to have much filled up with sediment
while above the dike where level raised upon one or both sides
of a creek its filling in is now greater, but upon Simons
Island un-reclaimed, its creeks much more nearly retain their
original values. This Island, however, since the work was
done has been reclaimed by a thorough construction of
dikes and dam, the material for which is obtained from
the marsh, cut into blocks of mud, cut as near as possible
to the site of construction and in the loose form into such
which eventually flank them by ditch

The commercial interest or value of these lands may entirely confine to stock raising and grazing, and seem to be specially adapted to the purpose, given first being available through the entire year by occasional changes of pasture upon which each many varieties of agricultural growth, Cyperaceae, Gramineae, Juncaceae, Umbelliferae, and others. Now that pasture during the summer and fall months are liable to afford good feed to stock, it is well known that it is well known within the above points the approach of

Properly, uplands offer little or no food to stock. If

Winter, are not essentially driven, adopting that during the presence of rain storms, the only shelter available to stock is the sea of tule, which under the condition they may not particularly need or find.

Periodically and subsequent to rain storms, a cold spell may prevail for two or three days, and very

Skeptically, as during last Winter, a cold wave prevailed for about the consecutive days.

From my observations during the presence of

Storms or subsequent cold spells, stock is so exposed, that heavy losses are not infrequent. Protection or protein comfort and safety to stock could be readily brought about.
by the introduction or grouped introduction of any kind
of rapid growth susceptible of efficient improvement, as they would at least reduce and very soon afford
stock, necessary shelter, as well as relieve the owner
from a larger investment. Perhaps larger letters.

Upon such lands, I have observed the Eucalyptus
Willow, Poplar, and some varieties of hardy trees; the first
mentioned is doubtless the most applicable, its growth being
particularly rapid; roots would soon furnish the desired shelter
and shade, after a few years, full.

The text limit upon this print will be found
indicated by a faint line, owing to the fact that the
inking of the block was commenced before the circular
printing otherwise was rendered.

Plant No. 1 also transmitted is practically a
departure from Plant No. 1, and does not seem to call for a special
description Report.

Yours very respectfully,

[Signature]

[Inscrption]