

1645

a File under T-1645

1646

a

1738

1898

1899

1900

2013

2014

2015

2016

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: _____

11-5613

DESCRIPTIVE REPORT.

Topog. _____ Sheet No. _____

LOCALITY:

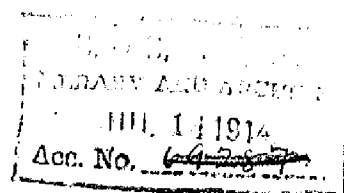
Southern

California

1914
192

CHIEF OF PARTY:

J.W. Maupin



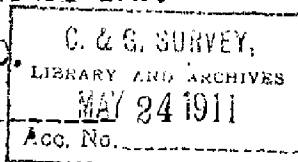
~~Season~~
and
Descriptive Report
of
Chart Revision Work in Southern California.
to
Accompany Original Topographic Sheets.
(Photo Reproductions)
1 to 10 inclusive.
by
John W. Maupin - Season Jan 21 to May 31
1914.

Topo = 1645^a
1646^a
1738^a
1898^a
1899^a
1900^a
2013^a
2014^a
2015^a
2016^a

} to map

DESCRIPTIVE REPORT TO ACCOMPANY REVISED SHORE LINE,
COAST OF SOUTHERN CALIFORNIA, FROM NEW RIVER TO NEWPORT BAY.

SHEETS 1345, 1369 & 1392 - Scales 1/40 000.



Sheet 1345:a

The control of this sheet is based on a scheme of triangulation expanded from the base "Scallop Pt. - Clam Pt." lying across the valley of the Santa Ana River. These old stations were recovered with considerable difficulty, after extensive digging and grading with teams and scrapers.

The triangulation was extended westward as far as the Pavilion at Anaheim Creek, and the corrections along the shore line connected to points trigonometrically determined.

The pleasure pier at Bay City was located on revised chart No. 5/43 by triangulation from the westward but on sheet No. 1345 submitted herewith it has been independently located by the new triangulation.

There is but little change in the shore line at the mouth of Anaheim Creek. The spit at the eastern point of the entrance has moved inshore slightly but is probably subject to frequent small changes.

There is a pleasure pier and about 30 residences at Sunset Beach.

The inlet at Bolsas Creek has been closed for some years, and the creek is now connected by a canal with Anaheim Creek. A dam has been built by the Bosa Chica Gun Club at the point of the bluff as shown. This dam has an automatic gate permitting an outflow from the marsh above it but closing against an inflow from below. The result of this action is that the area above the dam is now practically a fresh water marsh being fed by drainage from the peat land above.

There is a conspicuous high red water tank on the county road about 1/2 mile inshore as shown.

The high water mark throughout this sheet has been corrected by

Season and
Descriptive Report of
Chart Revision work in Southern California
To accompany Sheets (original topographic)
1 to 10 inclusive.

Season Jan 21 - May 31 - 1914.

Limits and General Remarks.

The ground covered by this Season's work extends from a point just south of Newport Bay, where Assistant Rhodes left off in 1910, to (but not including) the town of La Jolla. The revision work covers the territory within the limits shown on the original topographic sheets. The work of recovering and re-marking the old triangulation stations (A.F. Rodgers 1884-86 & 87 and A.W. Chase 1874-75) consumed more time and effort than did the topographic work. Relatively speaking, the area contained in this work, is not at present, of very great importance from a mariner's standpoint, as vessels plying the coast set a straight course from San Pedro Channel to clear Pt Loma (or vice versa), thus passing the greater part of this coast too far out to see ordinary objects.

Prominent Objects.

For future use, and for vessels passing closer inshore, a number of prominent objects, such as

conspicuous ware houses, water tanks, barns, school houses, etc, were determined by sextant angles taken at the triangulation stations and plotted on the sheets. There were no light houses or beacons on this ^{Coast}, Towns and Villages.

Generally speaking, the towns in Southern California, have remained quite inactive since the original topography was done. Oceanside, San Juan Capistrano, Encinitas, Carlsbad (now called Carl) and Del Mar have shown very little advancement, while many of the smaller places have almost become depopulated. Laguna (and additions) has grown some, and a small village called Cardiff, between Encinitas and Del Mar, is being promoted. San Juan, Mateo, San Onofre, Las Flores, Seda, La Costa, and Merle should not be shown as villages on Chart 5100, for there are practically no tenanted houses at any of these places and they are merely crossroad flagging stations for local trains. Oceanside should be given the most prominence on the chart, and Laguna, Encinitas, San Juan Capistrano, Del Mar, Cardiff and Carl, are all about on a par. There are many Realty promoters in Southern California, but not enough people to utilize all of the

sub-divisions. Much of the topography shown on the original sheets was omitted from the copy of Chart 5100 in my possession.

Roads.

A number of new roads, near the coast, were surveyed and many roads and buildings were removed from the chart. Some of the old roads, running back from the coast, ~~and~~ are scarcely ever used, but they were left on the chart under possibility of a revival of their usage. The new coast state highway is the most important road which traverses this territory. This new highway is being concreted and, at the present time, the portion between Las Flores and Oceanside and from South Oceanside to Del Mar has been completed. It is very much traveled and on this account most of the other roads parallel to the coast are falling into disuse. The Coast roads in San Diego county are in much better condition than in Orange County.

Change of Coast line.

With only one exception, there was not evidence of sufficient change in the shore line to affect the accuracy of the published charts. The old triangulation stations, along the coast, which

were recovered, gave excellent evidence of this, and from these old stations the shore line was tested by angles and tangents. The beach at the mouth of San Juan River was the only change of any note.

Methods.

The general method, followed in doing the work, was to recover the triangulation stations first and from these take sextant angles to prominent objects. Roads etc were often run in by compass and distance obtained by counting the revolutions of the wagon wheels. Local maps were obtained, whenever practicable, for correction of roads, streets, etc.

Recovery of old Triangulation Stations.

A total of 92 old triangulation stations were recovered, and, out of this number 86 were re-marked with standard station and reference marks set in concrete piers. There were no considerable stretches where none of the old triangulation stations could be recovered, therefore it was not deemed necessary to establish new ones. The old stubs were usually decayed and were often missing, but, in some cases, they were in fairly good preservation, depending on the kind of

soil they were in. Strange to say, one of the old signals (A Tower) was still standing in its original position, and was so rotten it offered very little resistance, but toppled over, when pushed, and broke in numerous pieces as it fell to the ground.

John W. Maupin
Asst C & G Survey.

Season Jan 21 to May 31-1914.

1900

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey *Topographic*
Field No. _____ Office No. *1900*

LOCALITY

State *California*
General locality *Vicinity of*
Locality *Oceanside*

1887-8

-194-

CHIEF OF PARTY

A. F. Rodgers

LIBRARY & ARCHIVES

DATE _____



1900



U. S. COAST AND GEODETIC SURVEY.

F. M. Thorn, Superintendent.

State: *California.*

DESCRIPTIVE REPORT.

Topographic Sheet No. *1900.*

See 1645

LOCALITY:

*Vicinity of
Oceanside.*

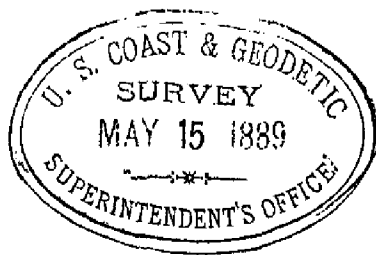
1887-8.

CHIEF OF PARTY:

A. F. Rodgers.

1900-1

3
next 15
6.



DESCRIPTIVE REPORT

To Accompany Original Field Sheet, Entitled

TOPOGRAPHY, PACIFIC COAST

in vicinity of

OCEANSIDE, SAN DIEGO COUNTY, CALIFORNIA.

----- 1887-3 -----

Scale $\frac{1}{10,000}$

Locality,

Lats. $33^{\circ}10'$ to $33^{\circ}17'$,

Central Merid. $117^{\circ}23'$.

Survey by, AUG. F. RODGERS,

Asst. U.S.C. & G.S., Chief of Party.

DESCRIPTIVE REPORT

To accompany Original Field Sheet entitled, Topography, Pacific
Coast in Vicinity of Oceanside, California 1887-8, Scale $\frac{1}{10,000}$

Party of Aug. F. Rodgers.

Reg. No. 1900.
-----:O:-----

Locality.

The locality embraced is upon the Coast of San Diego
County, California between Latitudes $33^{\circ}10'$ and $33^{\circ}17'$. The Cen-
tral Meridian of the Sheet is $117^{\circ}23'$.

Climate.

The Coast climate of San Diego County is a very equable
one, extreme temperature of Winter 32° and of Summer 90° though
ice is not often seen thicker than a window pane. The seasons are
divided into "Wet" and "Dry", November, December, January, Febru-
ary and March, may be classed as belonging to the "Wet" season, and
April, May, June, July, August and September, as "Dry" although
showers are expected both in October and April.

Rainfall.

The average annual precipitation is stated at 12 inches
upon the coast though the interior of the County, 15 miles from,

and at elevations of from 3000 to 6000 feet above, the ocean it is claimed that 30 to 40 inches rainfall is not infrequent.

Winds.

The winds of the dry season from May to October inclusive, are nearly always from the North West, though occasionally varied by light airs from the South.

The North West winds are indicative of invariable clear weather, the sky may be overcast by a thin covering of fog but the North West wind ^{never} ~~ever~~ fails to blow at some time in the 24 hours, from May to October, and rarely at higher rates than from 5 to 10 miles per hour. From November to April, North West winds are no longer certain in duration or force and Southeasterly winds are frequent and bring with them the rainy period of the year.

Barometric Range.

The normal range in San Diego County is upon the Coast from 29.ⁱⁿ70 to 30.ⁱⁿ30.

Below 30.ⁱⁿ10 in the Rainy months the weather is uncertain, and lower than 29.ⁱⁿ80 South East storms are indicated etc.

Topographic Detail, etc.

The topography is broken and somewhat complex, indicating former ocean submergence, shown by the smooth benches which occur at intervals of elevation while these are worn

at right angles to the ridges or axis lines of greatest elevation by successive ages of rain erosion.

Character of Soil, etc.

Much of the surface is composed of argillaceous sand stone and conglomerate, the latter when weathered showing a layer of loose rounded pebbles, lying upon the surface, wherever the outcropped stratification is horizontal. The hill soil is usually the decomposed result of the above stated formation, fertilized by ages of vegetable mould.

The valley soils are alluvial and in low elevations, a joint contribution from sea and stream, and generally clayey, and well known in California under the name of "A-do-be". These valley soils are of great depth and extremely fertile.

Coast line, formation, etc.

The Coast line within the limits of the sheet is formed by a bluff from 20 to 40 feet in height, of original drift, inlaid with shells and shingle. The bluff is broken at short intervals by deep valleys at right angles to the direction of the coast line and notably by those of La Santa Margarita, San Luis Rey and Loma Alta. These valleys must have been but "recently" in a geologic sense, deep esteros and lagoons, into which the ocean ebbed and flowed a mile or more from the present high water-mark.

Depths off shore.

The depths along the shore are not bold, but increase apparently by a gradual slope from 0 at low water to 10 fathoms from one to one and a half miles from shore.

Lines of Breakers, etc.

Owing to the comparative shoalness there are several lines of breakers, but from May to November they are rarely of sufficient height or force to endanger the safe landing or launching of the smallest boat.

Beach formation, etc.

The beach is formed of siliceous sand and generally free from rocks, ledges or shingle. It is hard and firm with an approximate width of 100 meters from high to low water mark and at low tides, is the preferred highway of travel along the coast.

Rocks, Ledges, etc.

There are no ledges within the limits of the sheet visible above the plane of low water and but one isolated rock. The latter is about half a mile southeasterly from the Oceanside wharf and 150 meters from the line of high water.

Danger to stranded vessels, etc.

There is no experience to guide to

an opinion as to the survival of a stranded vessel along these shores, but the evidence of climate and character of formation would appear to favor the indefinite survival of any ~~staunch~~ vessel; and with reasonable care and especially in daylight, there would rarely be risk to life in landing from boats.

Traveling Dunes.

There are no traveling or other dunes upon or within the limits of the sheet.

Shingle Levees, etc.

There are shingle levees at the debouchures of the Margarita, San Luis Rey and Loma Alta; the latter quite local and small. Between Margarita and San Luis Rey the shingle line is continuous, and apparently resting upon the beach sands.

The crest is from 5 to 8 feet above ordinary H. W. M. and inclined with longest slope shoreward. It has a berm^e in front formed by the gravitation ~~shoreward~~ ^{toward the Ocean} of the material when disturbed by winter storms.

Size of Shingle, etc.

The sizes vary from that of a large pebble to the largest cobble used in street paving. These are mingled where exposed, without much evidence of sorting but generally with the larger material underneath the mass.

Where ~~this~~ shingle, which does not appear to increase or dimin-

ish from year to year, and is never seen to move, except in slight changes of the fore slope during winter storms, came from, is an interesting question, but where from, how far, and when, can only be determined by careful geologic study.

In its entirety, the present situs of this material seems to have been fixed for an indefinitely long period. If it came from the interior the valley water^s must have been of torrential force to carry it, and the ocean fortified with tempest strength to have been able to place it where it appears to have been practically undisturbed for ages.

Rivers and River Beds.

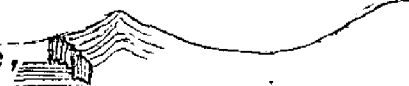
The present so called "Rivers" of San Luis Rey and Margarita, when compared with cross sections of their former beds, suggest the idea of a child, in his father's clothes.

Both of these streams close in the dry season, the San Luis Rey entirely, while the Margarita has a narrow opening and a thin film of salt water only, running out at low tide.

Like many of the streams in southern California, these two sink beneath the surface in the dry season before reaching the ocean. The sun, in the longer days of summer, pumps water into the atmosphere faster than the stream can supply a surface current; there is however always a supply to be had a foot or two under the apparently dry sandy bed. As the nights lengthen with the sun's

increase of southern declination, these streams resume a surface flow, and often long before the advent of the rains of Autumn.

Recession of the Coast Line, etc.

There is no known rate for the recession of the coast line, and nothing to prove that it does recede except the evidence of bluffs eroded by winter rains and waves, and the inference drawn from rounded forms of ridges where these occur parallel and adjacent to the coast line,  with long interior, inshore slopes, and those exposed toward the ocean indefinitely shortened. We may reasonably infer that in the ordinary symmetries of nature, these slopes were of nearly equal length. (This suggestion of evidence is quite strong upon the sheet northward from San Dieguito Valley). The material thus eroded from the land has probably been washed seaward and has thus changed original bold depths to the present gentle outward slope.

Salt Marsh Lands, etc.

There is a small area of marsh land next the ocean in nearly all the valleys bordering the coast of San Diego County. Within the limits of the Oceanside sheet, that at the mouth of Loma Alta Valley, is small in extent and that at San Luis Rey not much greater, but between San Luis Rey and Santa Margarita, there is an area of about one square mile; these however, are being reclaimed, probably in advance of other necessity, by the nat-

ural process of raising them above sea level, through sediment deposited each year during winter freshets.

Natural Vegetation, etc.

The natural vegetation within the limits of the Oceanside sheet, is mostly confined to the native grasses and forage plants of California. There is little forest growth; there are sycamore and alder trees in the valleys of San Luis Rey and Santa Margarita and the Alisq̄s, at the northern extremity of the sheet limits, but the number of the trees is inconsiderable. There is little chapparal or brush and that of small size.

Of the forage plants "*Medicago denticulata*", commonly known as "Burr Clover", said to have been naturalized in Europe from its home in Asia; is now one of the most valuable plants of California. Except under pressure of hunger it is not eaten by horses or cattle in its green state, but when harvested by Nature, with its seed wrapped in spiral, burry, coils, covering the ground where the growth is luxuriant, it is eagerly sought for and in the months of Autumn forms a staple of food for range herds, after all green forage has succumbed to the long droughts of California's summer, and invariably dry season.

"Al-fil-a-ril-la", so known by the Mexicans, the "Fil-a-ree" of California herdsmen, ("*Erodium cicutarium*" of the botanist) is another remarkable and valuable forage plant, a native of Europe and like the wild oat and the wild horse himself, attributed in

distribution to Cortez, his cavalry stores and his cavalry, it grows all along the coast of California. It supplements other forage growths by its early luxuriance after the first rains of the wet season have well moistened the ground.

Thus, the first big mouthfuls of green herbage, which reach the hungry herds of southern California, in December are Alfilarilla, and the last satisfying feeds in October, are the pods and seeds of Burr Clover above mentioned, which Nature, as suggested above, is generally allowed to harvest in her own way and unmolested.

At this Autumn season when the inexperienced stranger asks, "What can be found edible on that bare looking ground?" the range cattle of California and San Diego County are in best condition, largely due to Nature's harvested stores of Burr Clover, ("Medicago denticulata").

Fruits, Fruit trees, etc.

Two thirds of the area of the Oceanside sheet is the property of a single estate, everything north of the San Luis Rey being so owned and devoted almost exclusively to the raising of cattle and horses, although within the limits of the tract referred to there is a vineyard, formerly belonging to the Mission San Luis Rey, said to be some seventy years old and still in full bearing.

All the semi-tropical and citrous fruits and the fruits of the

temperate zone, the Cereals, Indian Corn, and Vegetables of all kinds, may be found growing in luxuriance in San Diego County and many of them in small plantations between San Luis Rey River and Loma Alta Valley. Intelligent husbandry has only within the past few years attempted to develop the resources of this region.

Settlements, etc.

The only town within the limits of the sheet is Oceanside, situated upon the coast between the San Luis Rey and Loma Alta Valleys, with the suburb known as "South Oceanside", south of the Loma Alta.

In 1881, the present site of Oceanside was still government land and considered valueless except as sheep pasture. The Atchison, Topeka, and Santa Fe R. R. laid its branch line the "California Southern" through the tract and in 1882 a single settler built his cabin upon and preempted the land. The town has now a population of about 500 and fair prospects of future development owing to large areas of rich agricultural lands in the adjacent San Luis Rey Valley. It is quite a resort in the summer months for the population of the hot interior valleys of Los Angeles, San Diego, and San Bernadino Counties.

Rail Roads, etc.

The California Southern Rail Road, (a branch, as before mentioned, of the Atchison Topeka and Santa Fe R. R.), hav-

ing its terminus at National City, four miles south of the city of San Diego, comes north through Oceanside over a route 40 miles in length and upon the Mesa or Plateau, one mile north of the town, bifurcates, one branch following up the windings of the Santa Margarita river, heads northeasterly for Temecula Canon and the town of Colton, and thence makes connection via the Southern Pacific Rail Road with Los Angeles and San Bernardino.

To avoid the heavy grades and sharp curves of this route from Oceanside to Colton, the new branch of the California Southern was located along, and under the ocean bluffs, northwesterly from Oceanside, until reaching the valley of San Juan Capistrano and passing through the old Mission village of that name, reaches Santa Ana and thence Los Angeles, this branch is officially known as the "California Central R. R.", but is popularly called "the short route, Los Angeles, San Diego".

A "feeder" of the California Southern, is built and operated over a route 20 miles long, between Oceanside and Escondido, where it taps a large and fertile agricultural valley.

Wagon Roads, etc.

The country embraced within the limits of the sheet is intersected in all directions by passable roads, which owe their general good character to qualities of climate, soil, and natural grades, much more than to the offices of the Engineer or Road Master.

These local roads make connections and give access in all directions to the interior of the County.

Wharves, etc.

There is but one wharf within the limits of the sheet and that an unfinished one at Oceanside, at present 330 meters in length, and terminating at a depth of 18 feet at low water.

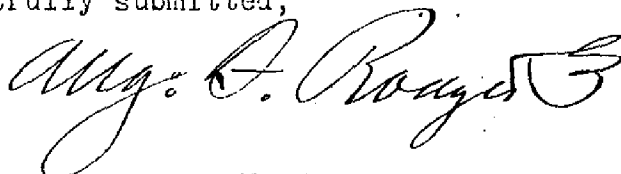
Bridges, etc.

Bridges are few and generally of the most primitive kind. In summer they are not needed, while in winter none but expensive structures would securely meet the conditions of freshet and flood, which at times, between December and March, may change these motionless, sandy beds, of the dry season, into raging torrents. The county is too sparsely settled as yet, to appropriate money for permanent bridges, except near the centers of population.

Elevations, etc.

All the elevations upon the sheet and the contours of level are referred to Mean High Water.

Respectfully submitted,



Assistant U. S. C. & G. Survey.

1900^a

Examination of Topographic Sheets

by the

Divisions of Field Work and Field Records.

1. Has the magnetic meridian been determined? *No*
2. Is the point occupied for the determination of magnetic meridian designated?
3. Is the approximate or rodded location of high water mark in back of mangroves shown?
4. Have navigable rivers been surveyed?
5. Is interior information given by descriptive legends or otherwise?
6. Is the inking of the sheet legible? *yes*
7. Is projection properly shown?
8. Are methods of surveying fully described? *No Descri. Report.*
9. Are descriptive legends given concerning conspicuous islets, objects, rocks, and other features given in blank areas?
10. Are geographic names given?
11. Is full information regarding geographic names given in the descriptive report in accordance with paragraph 557 of the Instructions for Field Work?
12. Are the names of topographic signals given?
13. Does the sheet have a neat appearance?
14. Is sufficient contouring shown, some of which could be obtained by sextant directions from boat positions?

1900^a

- 2 -

15. Is the control good?
16. Is the sheet well laid out?
17. Is the accuracy of traverses between triangulation stations stated
in the descriptive report? *No Descrip Report*
18. Are the elevations of prominent rocks or islets given?
19. Are the description of reefs, as bare, awash or covered at high or
low water given?
20. Are objects useful for future surveys indicated? *No DR*
21. Is there a record of marking topographic stations?
22. Is the character of the beach shown in various places?
23. Is the plane of reference for elevations given?
24. Is the low water line determined at important places?
25. Is there a full list of data affecting sheet given on title sheet?
.....
26. Is there a list of plane table positions? *No*
27. Are the elevations whether that of tree-top or ground indicated? .
.....
28. Does the descriptive report give date of instructions? *No*
29. Is a sketch given showing contouring of interior mountainous country
beyond limits of sheet?
30. Is the general description of the coast given?
31. Is there information about obtaining fresh water?
32. Have standard symbols for various features been used?

1900^a

33. Is the survey complete?
.....
34. Is there a note as to cultivations, roads and other improvements?
.....
35. Is commercial information given in descriptive report?
36. Is there a list of landmarks? *No.*

Remarks

Scale somewhat small for class of work.
.....
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.....