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# **ANNUAL REPORT**

OF

# **THE SURVEYOR-GENERAL**

FOR

# **THE YEAR 1860.**

[CHARLES T. BOTTS, STATE PRINTER.

# ANNUAL REPORT.

STATE LAND OFFICE, Sacramento, December 21<sup>st</sup>, 1860.

To His Excellency,

JOHN G. DOWNEY, Governor of California:

SIR: - In accordance with the requirements of the act concerning the office of the Surveyor-General, I have the honor to submit the following annual report of this office for the past year.

Respectfully,

H. A. HIGLEY, Surveyor-General and Register of Land Office.

### SCHOOL, SEMINARY, AND PUBLIC BUILDING LANDS.

The operation of the office with reference to these lands will be shown in the following tables:

Description.	Acres.
The following disposition has been made of the 500,000 acre grant - Sold under School Land warrants Sold for cash, under Act of 1858	237,760.00 261,197.83
Total disposed of Balance unsold	498,957.83 1,042.17
Total	500,000.00

This balance has been applied for, and can be sold at any time. It is kept as a margin to cover erroneous locations, etc. lest we exceed the grant.

Of the ten sections granted for public buildings, four thousand six hundred and fifty-eight and eighty-two one-hundredths acres have been sold and the balance applied for.

Of the seventy-two sections granted for a Seminary of Learning, thirty-eight thousand eight hundred and forty-six and eighty-two one-hundredths have been sold. Of the balance, five thousand two hundred and seventy-five acres have been applied for. The remaining one thousand nine hundred and fifty-eight acres will be readily sold, as soon as the other locations are adjusted.

# SCHOOL LANDS.

Amount of five hundred thousand acre grant, sold under act of April twenty-third, eighteen hundred and fifty-eight:

Where Located.	Acres.	Acres.
Balance of grant to be sold at the date of the passage of the Act		262,240.00
Stockton District, corrected returns embraced in last report	160,341.10	
Humboldt District, embraced in last report	68,088.99	
Visalia District, embraced in last report	4,160.00	
Marysville District, embraced in last report	28,533.05	

Maryville District, located since last report	74.69	
		261,197.83
Balance of 500,000 acre grant unsold		1,042.17

There have been payments made during the past year, as shown by the State Treasurer's certificate, as follows:

Manner of Payment	Acres.	Amount.
Principal in full		\$5,006 21
Twenty per cent. and one year's interest on	12,638.08	4,439 08
Second, and portion of third, year's interest		25,393 25
Total		\$34,838 54

At the close of the year eighteen hundred and fifty-nine some fifteen thousand acres of school land, already selected, remained on the hands of the State, on which no payments whatever have been made. These lands, in many instances, have been applied for anew. The locations that have been returned to this office, and approved so far in the several land districts, comprised a total of five thousand acres. The United States officers have also canceled a number of these selections, and permitted the State to take the same quantity of land elsewhere, to the extent of three thousand five hundred acres.

The main difficulty, in the way of finding immediate purchasers for these forfeited tracts is, that under the wording of the act of April twenty-third, eighteen hundred and fifty-eight, parties have been compelled to pay up to the arrearages of interest from the date of the location in the United States Land Office. This is a great hardship, and an obligation that was not intended to be exacted by the framers of the law. I would call respectfully your attention to the propriety of amending this clause. Perhaps, as in the present Swamp Land Act, the sate of the Surveyor General's approval would be the proper time from which to direct the payment of interest to be made.

## PUBLIC BUILDING LANDS.

In the Visalia and Humboldt Land districts, the entire amount of the two sections allotted to them have been sold. In the other districts, the balances still unreturned to this office have been applied for. The following amount has been approved:

Where Located.	Acres.
In the Visalia District	1,294.24
In the Humboldt District	2,283.80
In the San Francisco District	320.00
In the Stockton District	480.00
In the Stockton District, embraced in last report	320.73
In the Marysville District	640.00
In the Marysville District, embraced in last report	320.00
Total	4,658.82

On the above there has been paid to the State, as certified by the State Treasurer:

Manner of Payment	Acres.	Amount.
At date of last report, 20 per cent. with one year's interest on	640.87	\$224 27
During the past year, 20 per cent. with one year's interest on Paid in full at \$1 25 per acre on Second year's Interest on	2,898.04 320.00 640.00	1,014 31 400 00 64 00
Total received from sales of these lands		\$1,702 58

# SEMINARY LANDS.

Sold for cash under Act of April 23, 1858.

Description.	Acres.	Acres.
Amount of grant of 72 sections		46,080.00
Total located in the several land districts at date of		
last report, Dec. 14, 1859	33,762.90	
Located in Humboldt District since Dec. 14, 1859	3,161.36	
Located in San Francisco District since Dec. 14,		
1859	1,922.56	

Total returned to this office at date	 38,846.82
Unreturned to this office at date	 7,233.18

Of this balance, five thousand two hundred and seventy-five acres were allotted, some time since, to the different land districts. I am without any advices from the Agent of the State in Los Angeles. The officers in Humboldt, Marysville, Visalia, and San Francisco, inform me that they have received application, and filed selections in the United States Land offices, for the entire amount they were instructed to locate. When complete returns are received, the remainder of the grant (nineteen hundred and fifty-eight acres) can be properly distributed.

But a very small portion (some fifteen hundred acres) of these lands already located, have been allowed to forfeit, by failure to pay the first advance of purchase money and interest. The yearly accruing interest has, in most instances, been paid promptly. The third year's interest, not being due, is not included in the following.

As shown by the State Treasurer's certificates, on file in this office, there has been paid, in the past year, to the State:

Manner of Payment	Acres.	Amount.
Principal in full Balance of Principal on Twnety per cent. and one year's interest on Interest	960 320 4,580	\$1,200 00 320 00 1,603 17 1,523 66
Totals	5,860	\$4,646 83

#### SCHOOL LAND WARRANTS,

Located under Act of April 23, 1858.

Where Located.	Acres.
Humboldt Land District	320
Stockton Land District	1,600
Marysville Land District	960
San Francisco Land District	640

Total returned for 1860	3,520
Located under this Act at date of Annual Report of 1859	11,680
Total	15,200

# SCHOOL LAND WARRANTS,

## Located upon Unsurveyed Lands under Act of April 18, 1858.

There have been returned to this office during the past year thirty-three surveys, comprising acres, as follows:

Counties.	Acres.
Alameda	1,600
Butte	1,280
Los Angeles	320
Marin	1,280
Monterey	640
Napa	2,240
Sacramento	480
San Diego	320
San Joaquin	640
San Luis Obispo	800
San Mateo	640
Santa Clara	2,080
Santa Cruz	640
Sutter	640
Total	13,600
Located under this Act at date of Annual Report of 1859	17,760
Total	31,360

### SWAMP AND OVERFLOWED LANDS.

Surveys returned to the Surveyor-General's Office, and approved during the year ending December fifteenth, eighteen hundred and sixty:

Counties.	Acres.
Alameda	169.36
Del Norte	80.00
Colusa	2,658.75
Contra Costa	672.13
Frezno	30,469.76
Humboldt	2,607.22
Marin	7,857.44
Merced	1,736.80
Monterey	829.58
Napa	10,344.65
Placer	6,160.00
Sacramento	43,925.47
San Joaquin	20,509.92
Solano	29,881.52
Sonoma	8,537.69
Sutter	19,379.56
Stanislaus	772.33
Tulare	20,485.00
Yolo	14,917.00
Total	221,994.18

Of the above amount thirty-five thousand two hundred and seventy-five acres are embraced in resurveys of forfeited lands.

## TIDE LANDS.

Surveys returned to the Surveyor-General's Office, and approved during the year ending December fifteenth, eighteen hundred and sixty:

Counties.	Acres.
Humboldt	644.08
Marin	102 52

Since the passage of the first Swamp Land Act in eighteen hundred and fifty-five, surveys to the amount of seven hundred and thirty-seven thousand four hundred and fifty-one acres of swamp lands have been returned to this office and approved, of which amount forty-six thousand nine hundred and forty-seven acres are embraced in resurveys of forfeited lands, made during the past two years, leaving six hundred and ninety thousand five hundred and four acres actually sold.

## SWAMP LAND FUND.

In Swamp Land Fund, December 15 <sup>th</sup> , 1860	\$170,761 52
In General Fund, from sales of swamp lands	48,136 95
Total amount derived from sales	\$218,898 47
Of this sum there was paid as principal: Under Act of 1855. Under Act of 1858. Under Act of 1859. Under Act of 1859 (twenty per cent.).	23,657 12 54,278 03 17,420 33 39,638 76
Total paid on principal	\$134,994 14
Total paid as interest	83,904 33
Total	\$218,898 47

Thus, it will be seen, that the interest alone amounts to the handsome sum of eighty-three thousand nine hundred and four dollars and thirty-three cents.

COUNTIES.	SOLD UNDEF	R ACT OF 1855.	SOL	D UNDER ACT OF 185	<b>9</b> .	TOTALS.
	Paid as Interest.	Principal.	Prin'l and Int'st.	2d year's int'st.	Principal	
Alameda	\$83 96		\$436 34	\$93 82	\$554 47	\$1,168 59
Colusa	76 00		89 60	54 40		220 00
Contra Costa	174 32		6,021 64	580 57	851 86	7,628 39
Del Norte	204 00	\$80 00	44 80	6 40	160 00	495 20
Frezno	1,369 45	37 50	7,460 40			8,867 35
Humboldt	86 02		344 45	29 66	240 00	700 13
Marin <sup>*</sup>			361 56		599 80	961 36
Merced	7 98	61 11	702 93	58 24	873 46	1,703 72
Napa	21 00		798 96		366 78	1,186 74
Placer			921 40		1,104 00	2,025 40
Sacramento	2,146 60	600 00	10,175 72	580 03	1,534 53	15,036 88
San Joaquin	4,444 10	880 00	2,846 44		1,355 31	9,525 85
Sonoma	177 42	28 36	2,205 19			2,410 97
Solano	1,261 57	477 64	5,041 84	92 86	667 06	7,540 97
Stanislaus	284 71	95 18	125 39		802 70	1,307 98
Sutter	1,785 16	160 00	6,908 70	33 64	160 00	9,047 50
Tulare <sup>†</sup>						
Monterey					72 30	72 30
Yolo	280 00		5,104 28	635 86	2,982 97	9,003 11
Totals	\$12,402 29	\$2,419 79	\$49,589 64	\$2,165 48	\$12,325 64	\$78,902 44

Table giving Receipts from Sales of Swamp and Overflowed Lands, from December 15, 1859, to December 15, 1860, as shown by State Treasurer's Certificates on file in this Office.

NOTE – the above exhibit shows the gross receipts. \* No statement received from Marin at the last settlement in November. \* No statements have been furnished by the County Treasurer of Tulare for the past year.

#### SEGREGATION OF SWAMP LANDS.

I must again earnestly call the attention of the Legislature, through your Excellency, to the condition of our swamp lands, with reference to title. In my former reports, I urged the necessity of the immediate segregation and selection of these lands, that the State and individuals might be protected in their rights. If the necessity existed then, it certainly does now, and to a greater degree. In order to show the unfortunate state of affairs arising from a lack of legislation in this matter, I will state that the President has offered for sale in June next, thirteen thousand five hundred and ninety acres in five townships alone (Yolo and San Joaquin counties,) which have already been sold and title issued by the State, and which at least two competent witnesses have sworn is swamp and overflowed land. If the purchasers of these lands are not protected they will be at the mercy of capitalists at the land sales. I here repeat what I had the honor to submit in my report of eighteen hundred and fifty-eight, "that should the United States again sell lands which have been purchased from the State in good faith, supposing them to be swamp, which have been leveed and drained, and upon which valuable improvements have been erected, she would be inflicting upon the settler great injustice and injury. He, relying upon his title derived from the State, of course never dreamed of the necessity of securing it by pre-emption; and the consequence will be that should the United States authorities insist upon offering these lands for sale in June next, the settler, who has spent much money and time in making the land valuable, will be at the mercy of the heartless speculator, who, of course, would bid the tract off at the full value of improvements and land. It has always been the policy of our government to assist the actual settler and tiller of the soil. The money to be derived from the sale of the lands referred to is a matter of responsibility of saying, that if these lands are really the property of the United States, the Legislature of California would willingly agree to refund ten times their original cost, rather than the hard-working citizen should suffer so great an injustice as to be despoiled of them."

In order to come to some definite understanding with the Federal Government in regard to the true intent and meaning of the term "Swamp and Overflowed," of the act of eighteen hundred and fifty, I last year visited Washington at my own expense – the Legislature having made no provision. My letter to the Commissioner of the General Land Office, and the result of my mission, was shown in my report of last year, from which I extract the following:

"WASHINGTON CITY, November 29, 1859.

To the Hon. SAMUEL A. SMITH, Commissioner General Land Office:

Sir: - By an act of the Legislature of California, it is made the duty of the Register of the State Land Office to ascertain the extent, limits, and boundaries, of all lands to which the State is entitled, and have the title vested in the State, and, when necessary, to agree upon the same with the proper officers of the United States. The United States Surveyors in California have already, in many localities, established what they deem the true line of segregation of the swamp lands. As the agent of the State, I am not willing to adopt their field notes as the basis of any list of selections, for reasons set forth in my letter of twenty-fourth November, eighteen hundred and fifty-eight, to Governor Weller, a copy of which was sent to your office. The State has already sold many thousand acres of swamp lands, which are now held by the Federal authorities, under the returns of the U. S. Surveyors, to be the property of the United States. Consequently, conflicts as to title have already arisen, which will lead to endless difficulty and litigation, unless the matter is speedily arranged between the Federal and State authorities. The whole trouble has grown out of a difference of opinion as to the true signification of the term 'Swamp and Overflowed.' The State does not ask that the mere opinion of her agents as to the true character of the lands, be conclusive in the matter, nor is she willing to attach more weight to that of the United States agents.

No one can, at this time, go upon the ground, unless familiar with its gradual changes, and say which portion, under the act of eighteen hundred and fifty, belongs to the State, and which to the United States.

In March, eighteen hundred and fifty-eight, the Legislature of California passed a Concurrent Resolution instructing our Senators, and requesting our Representatives, to urge upon Congress the passage of a law authorizing the State to segregate from the United States domain the Swamp and Overflowed Lands granted by act of Congress, at her own cost, the State taking reliable testimony, under oath, and furnishing maps of the same to the proper department at Washington.

During the next session of the Legislature, the State will make provision for sending out her agents to make these selections. As the agent of the State, I ask of you to furnish me with the exact nature of the evidence you will require to satisfy the department that the land in dispute is really of the character contemplated by the act of eighteen hundred and fifty. I ask that I be furnished forms required for our lists, and that when these lists are transmitted to your department, with the affidavits of the State Surveyor, his chainmen, and persons who have lived in the neighborhood for a length of time, as to the facts, and a statement of these facts prove to you that the land is the property of the State, that no further action be necessary, and that the land be immediately patented to the State. I ask that where parties mentioned above subscribe to the following facts the evidence be considered conclusive."

It is not necessary to here show the form of the affidavits which I submitted, as they were modified by the Commissioner, as will be shown hereafter.

> GENERAL LAND OFFICE, December 13, 1859.

J. W. MANDEVILLE, ESQ., Surveyor-General, San Francisco, California:

SIR: - Referring to my communication to you of the tenth instant, respecting the selection of the Swamp and Overflowed Lands in California, under the grant of

September twenty-eighth, eighteen hundred and fifty, I have now to inclose, herewith, the forms of affidavits to be required from the State authorities, in reporting to you the lands selected from examination in the field, the form of your report of the selections made by you from the field-notes of the surveys, and the form of reporting the selections made by the State. In order that you may fully understand the course to be observed. I have designated these forms as A, B, C, and D. A is the form of the affidavit to be made by the Deputy United States Surveyor who made the survey of the lands in the particular township described therein, and must be presented unless it is impossible to obtain it; in this case, the affidavit of the Agent of the State, for the county in which the lands are situated, must be presented, setting forth the fact that the Deputy's affidavit could not be obtained, and the reasons therefore. The necessary alterations to be made in the form to cover this case, are apparent. B is the form of the affidavit to be made by the assistants of the Deputy, and in case these cannot be obtained, then the affidavits of two respectable residents in the vicinity of the land, may be presented, with the same requirements as to the necessity therefore. This form, in this event, may be used, the proper changes to be made being apparent. C is the form of the report to be made by you, in making up the list from the field-notes; a copy of this list will be furnished by you to the local officers of the district in which the lands are situated, with instructions to them to withhold the lands from sale or other disposition, unless under express instructions from this office. You will also direct them to note the tracts on their plat-books, with some convenient mark, referring to the words 'State Act, September twenty-eighth, eighteen hundred and fifty.' D is the form of the report to be made by you of the tracts selected by the State, with columns in which the number of the affidavit made by the Deputy, or the Agent, is to be entered; with another column, to write the number given to the corroborating testimony. A copy of the list alone, in this case, is to be furnished to the local officers, with instructions to them similar to those last above stated.

I will here remark that the department reserves to itself the right of determining upon the testimony presented, whether the lands are really and truly such as are conveyed by the grant, or otherwise – the law making the grant expressly delegating to the Secretary of the Interior the proper adjustment thereof,

Very respectfully, your obedient servant

S. A. SMITH, Commissioner.

[A]

I, the United States Deputy Surveyor who made the survey of the lands in township, , of range, of meridian, hereinafter particularly described, [or if the Deputy's affidavit cannot be obtained, in that case this affidavit must state the facts,] I, the Agent for the State of California, duly appointed under an Act of the Legislature thereof, to select the 'Swamp and Overflowed Lands' within the county of , being duly sworn, depose and say, that I am well acquainted with the mode and manner of surveying and marking the public lands; that I have made a personal examination on the ground, of each of the several tracts described, to wit:

And from such personal examination on the ground, have ascertained and know, and hereby make oath that the greater part of each one of the *quarter-quarter sections* of the foregoing tracts, is 'Swamp and Overflowed Land, made unfit for cultivation,' and is in fact unfit for cultivation without 'necessary levees and drains to reclaim the same;' that they are made such by reason of the overflow of, [here give the name fo the river, the cause of the overflow, etc.,] in such a manner that no crop can be raised thereon, by reason of its overflowed and swampy condition; that they are not shallow lakes or ponds, which may, by natural causes, become dry; and that such was the character thereof on the twenty-eighth September, one thousand eight hundred and fifty, the day of the passage of the grant. And, further, that I have not interest, direct or indirect, present or prospective, in the issue, or in any parcel of land herein described.

[Signature.]

Subscribed and sworn to before me, this day of , one thousand eight hundred and and I hereby certify that the deponents are persons of respectability, and reside in the vicinity of the lands hereinbefore described.

J. P.

# [B]

We, and Assistants to the United States Deputy Surveyor who made the survey of the lands in township , of range of meridian, hereinafter particularly described, (or if the affidavits of the Assistants cannot be obtained, and in that case this affidavit must state the fact: -

We, and residents of , in the vicinity of the lands in the county of , on the twenty-eighth September, one thousand eight hundred and fifty,) being duly sworn, depose and say, that we are well acquainted with the mode and manner of surveying and marking the public lands; that we have made a personal examination on the ground of each of the several tracts herein described, to wit::

And, from such personal examinations on the ground, have ascertained and know, and hereby make oath, that the greater part of each one of the *quarter-quarter* sections of the foregoing tracts is 'Swamp and Overflowed Land, made unfit for cultivation,' and is in fact unfit for cultivation, without 'necessary drains and levees to reclaim the same,' that they are made such by reason of the overflow of [here give the name of the river, the cause of the overflow, etc.] in such manner that no crop can be raised thereon by reason of its overflow and swampy condition; that they are not shallow lakes or ponds, which by natural causes may become dry; and that such was the character thereof on the twenty-eighth September, one thousand eight hundred and

fifty, the day of the passage of the grant; and, further, that we have no interest, direct or indirect, present or prospective, in the issue, or in any parcel of land herein described.\*

[Signature.] [Signature.]

Subscribed and sworn to before me, this day of , one thousand eight hundred and and I hereby certify that the deponents are persons of respectability, and reside in the vicinity of the lands hereinbefore described.

J. P.

It will be seen by the above instructions that the State can now bring forward testimony to prove the true character of the lands which she was about to lose, from the hasty surveys of the United States Surveyor, made in the midst of the dry season. Still, I think the General Land Office requires too much from us. Among other things to which I objected in the instructions, was that portion of the affidavit which required that the affiants should swear that they were not in any way interested in the issue.

Now, every citizen of the State is, directly or indirectly, interested in the matter. I represented to the department that the only persons really competent to become witnesses in the matter of swamp lands were those who had resided upon the lands in question since one thousand eight hundred and fifty; those who had witnessed the various floods, and who were conversant with the many means of reclamation adopted from year to year, by which the morasses of eighteen hundred and fifty are now converted into blooming gardens and fields. Men, to be able to testify to these facts, must have been residents upon the lands in question, and the natural supposition is that no man would be an inhabitant of a tule swamp unless he was interested in it, and expected, by various improvements, to make it a fit place for the home of his family and himself. These inhabitants, the most competent to testify to the true character of the lands, have undoubtedly taken some means to secure title, either from the State or United States.

It was represented to the department that our State did not desire that the mere opinion of her agents should be received as testimony, nor was she willing that the dictum of the United states Surveyors should deprive her citizens of property made valuable by their labor and improvements.

The Commissioner agreed to append to the affidavit a note, stating that if the witness could not conscientiously state he had no interest in the issue, then to state what that interest is, and they, at Washington, will decide upon the weight to be attached to the evidence.

At any rate, we have gained this much, that the federal authorities are now prepared and willing to receive evidence.

<sup>&</sup>lt;sup>\*</sup> If the deponent, from tender conscience, thinks that his interests in some way might be involved in this matter, let him state distinctly what that interest, directly or indirectly, is, accompanied by his statement under oath whether such interest, so far as he can determine, affects or biases his judgment in the case, and then his testimony will go for what it is worth in the preliminary action of the Surveyor-General and final decision of the department.

I advise now, what I had the honor to submit in my report of last year, which is as follows:

'If our next Legislature provides for the immediate selection of the swamp lands of the State, the acts of Congress, above referred to, will work by little injury to her, for she has disposed of only a small portion of the lands now offered for sale by the government; and in cases where sales have already been made, I think arrangements may be entered into by which those holding a title from the State will be entirely protected from loss. If the government should dispose of any other of our swamp lands, we can recover back the purchase money. The selections should have been made several years ago. Every hour's delay is a loss to the State. By the erection of levees, and other improvements, the waters of many streams have been confined within their banks; and by the shutting of water off from sloughs, and ditching, much of the land which, a few years ago, was submerged three-fourths of the time, has been reclaimed, and is now fit for cultivation. In the Tulare Valley, much of the land which was almost constantly overflowed, in years past, is now dry the greater portion of the year, from the fact that beaver-dams and other obstructions which prevented the flow of water through its natural channels, have been removed.

Of course, the State will claim all lands which were swamp, or subject to overflow, at the time the grant was made. To enable her to do this successfully, it will be necessary to produce evidence as to the character of the lands at that time. The delay of each year renders this more difficult. In Sacramento County, for instance, the flood of the present year could not be considered an indication of the extent of the natural overflow, because the river is leveed for miles below Sacramento City; while the embankments and causeways which have been thrown up from the river to the high land back, protect that country from the floods which have heretofore entirely inundated it. The population of California being somewhat migratory in its habits, makes it important that the testimony of a witness, as to the true character of these lands, should be procured before a change takes place in their residence which may possibly carry them beyond the limits of the State.

In this matter, we are far behind the other State. Had we sent out lists to Washington in time, they would have been confirmed, and patents issued to the State before this, under the general act of eighteen hundred and fifty-seven, which granted to the States all the swamp lands selected by State authority, not otherwise previously disposed of by the General Government. The different States have adopted various methods of making these selections. In Florida, agents were appointed to examine the lands in the State, and mark upon the plats in the United States Land offices all such as they believed to be swamp. They received one cent for each acre thus selected. In Illinois, the agents were directed to make the selections as above, and, when necessary, to make surveys, and return the plats and notes to the State Land Office. Thirty thousand dollars were expended in doing this. In these, and the other States, surveys of all the lands had been made by the United States Surveyors previous to eighteen hundred and fifty; and selections could be made by sections. Here, however, the swamp lands have not been sectionized, and have been townshiped in but few localities; consequently, it will be necessary to run the line of segregation, and continue the township lines through the tule as far as practicable. I do not think it would be advisable, at this time, to sectionize, as the cost would be too great. The township lines should be run, if possible. The County Surveyors must have these lines established to base their subdivisions upon; and, by carefully noting all sloughs, rivers, character of land, etc. on line, some idea might be formed of the best means to reclaim those immense bodies of tule lands, which, in the language of Mr. Beaumont, County Surveyor of San Joaquin County, "are as little known to the people of this State, as the territory of New Mexico."

It would be impossible for me to correctly estimate the cost of the survey. I think, however, it would hardly exceed one cent per acre. The act of eighteen hundred and fifty, provides that the proceeds of the sales of these lands shall be applied exclusively to the purpose of reclaiming them. The survey, then, would be the first step towards the reclamation; for without it, we could not ascertain how this could be best accomplished.

In March last, the Legislature passed a concurrent resolution, instructing our Senators, and requesting our Representatives, to urge upon Congress the passage of a law authorizing the State of California to segregate from the United States domain the Swamp and Overflowed Lands granted her by the act of Congress, at her own cost the State taking reliable testimony, under oath, and furnishing maps of the same to the proper department at Washington. There is a probability that such a law will be passed by Congress during its present session. The better to enable the State to make the selections next summer, let the Legislature authorize the Surveyor-General, by Deputy, to make the necessary surveys; fix the price to be paid per mile or acre; appropriate twenty thousand dollars from the Swamp Land Fund, and authorize the issuance of twenty thousand dollars of swamp land scrip; pay for the surveys partly in scrip, and partly in cash; and allow this scrip to be taken in payment for swamp lands. Parties holding it would, of course, soon purchase; and thus, in each scrip holder, the State would have an agent whose interests would be promoted by bringing these lands early into market. The accounts of the Deputies, sworn to, and certified by the Surveyor-General, would necessarily go before the Board of Examiners for allowance. The field notes could be accompanied by evidence as to the character of the lands required by the United States, and be made under the instructions of the Surveyor-General, subject to the approval of the Governor."

The above suggestions, made in my report for the last year, I have the honor to renew, nothing having transpired to change my views on the subject.

#### SWAMP LANDS,

In Yolo County which have been sold by the State, and which are advertised for sale by the General Government, in June, 1861.

Description.	Acres.
Township 9 North; range 2 East - The E ½ and NW ¼ of Section 12	480

Section 11 NE quarter of Section 14 E ½ of Section 36	640 160 320
<ul> <li>Township 9 North; range 3 East - NW and SW quarters; W ½ and NE ¼ of NE quarter and W ½ of SE quarter of Section 4</li> <li>N ½; and SE quarter of Section 6</li> <li>NW quarter of Section 7</li> <li>S ½; and SW ¼ of NE quarter of Section 9</li> <li>W ½ of NW quarter; W ½ and SE ¼ of SW quarter of Section 15</li> <li>S ½ of Section 17</li> <li>N ½ of Section 20</li> <li>Section 21</li> <li>NW quarter; N ½ and SW ¼ of SW quarter Section 22</li> <li>E ½ Section 28; SE quarter Section 29, and Section 30</li> <li>N ½ of Section 31; and N ½ of Section 32</li> <li>E ½ and NW quarter of Section 33</li> <li>NW quarter, SE quarter, and SW ¼ of NE quarter of Section 34</li> </ul>	480 480 160 360 200 640 320 320 640 280 1,120 640 480 360
Township 10 North; range 2 East - NE quarter Section 8 Section 13 SE quarter of Section 23 E <sup>1</sup> / <sub>2</sub> and NW quarter of Section 24 E <sup>1</sup> / <sub>2</sub> of Section 25; and N <sup>1</sup> / <sub>2</sub> and SE <sup>1</sup> / <sub>4</sub> of Section 26 NE quarter Section 27; S <sup>1</sup> / <sub>2</sub> of Section 35	160 640 160 480 800 480
<ul> <li>Township 6 North; range 3 East - Section 4 and E ½ of SE quarter Section 5</li></ul>	720 80 360 40 240 320 200 80
	12,840
IN SAN JOAQUIN COUNTY. Township 4 North; range 7 East -	

Fractional W <sup>1</sup> / <sub>2</sub> of NW quarter SW quarter, and E <sup>1</sup> / <sub>2</sub> of SE quarter	
of Section 25 and fractional E $\frac{1}{2}$ of Section 26; fraction in SE	
quarter Section 34; fraction in NE and SW quarters of Section	
25; W $\frac{1}{2}$ and NE $\frac{1}{4}$ of NW quarter, and NW $\frac{1}{4}$ of NE quarter of	
Section 36 – containing	750
Total amount in five townships	13,590
	1

#### SWAMP LAND FUND.

Up to the present time there has been derived from the sales of swamp lands, about two hundred and fifteen thousand dollars; from this amount, about forty-eight thousand dollars is now in the General Fund, and will, I suppose, at a proper time, be restored to the fund to which it should at first have been credited. The whole amount in February will probably reach two hundred and thirty-two thousand dollars.

That this money must be used for the purposes of reclamation, I suppose no one will doubt. The second section of the act of Congress, making the grant, provides, "That the proceeds of said lands, whether from sale or by direct appropriation in kind, shall be applied *exclusively*, as far as necessary, to the purpose of reclaiming said lands by means of the levees and drains aforesaid." Now, there can be no doubt that the whole of this sum, and much more, will be required to accomplish this work. I am unable at the present time, to make any suggestions in regard to a general system of reclamation. Had the Legislature of last year provided for the segregation and survey of the swamp lands, the Surveyors would have been directed to have made such examinations and reports as would have now enabled the State to work knowingly in the matter. This much I can say, however, that with every person who has purchased swamp lands, there was a tacit understanding that the money paid in by him would be expended in the manner required by the act of Congress. That the reclamation of these lands is feasible, there can be no longer any doubt. Successful experiments have been made in many counties, and the purchaser, with the assistance of judicious legislation, will soon convert these now useless swamps into fertile and productive fields. The one dollar per acre paid to the State is as a mere nothing compared to the benefits she will derive from the conversion of these wastes into productive lands. I think it would be well for the Legislature, as an incentive to early reclamation, to refund the purchase money, in whole or in part, to those who reclaim their lands within a given time – particularly those lands most difficult to bring under subjection. I refer to you to the communications of Messrs. Beasly and Sidwell, and the reports of Surveyors Beaumont, Dresher, and DeWoody, on the subject of reclamation of swamp lands.

#### FORFEITED LANDS.

A very considerable portion of the purchasers of swamp and school lands from the State, I have good reason to believe, never read or saw a copy of the law under which they made their purchases. What little information they possess in regard to the same, has been obtained from some neighbor, or other person supposed to be familiar with the law. In many cases they have been misinformed, or did not properly understand what was told them. The result has been that they have, through ignorance, failed to comply strictly with the law, and have thereby forfeited their land. The Swamp and School Land Acts, under which these purchases have been made, require the interest on the balance of the purchase money due to be paid annually in advance. Many purchasers supposed that if they paid their second advance interest within one year from the time they made their first payment of twenty per cent. and interest on the balance, the law had been complied with. Such was not the case, however, for purchasers of school lands are required to pay interest annually in advance, dating from the time of location in the United States Land Office, and the interest due on the balance of the purchase money for swamp lands, purchased under the act of April eighteenth, eighteen hundred and fifty-nine, is made to date from the approval of the survey by the Surveyor-General. The parties who have thus forfeited, are, many of them, settlers upon the land which they have purchased, and can ill afford to lose their claims, or the payments which they have made upon them. I would recommend the passage of an act making valid such payments as have not been made strictly in accordance with law, for lands purchased from the State, provided that eh rights of third parties are not interfered with.

## FRONTAGE OF SWAMP LANDS ON BAYS AND RIVERS.

The restriction to a frontage of one-half mile on bays and navigable streams, has caused much complaint among applicants for purchase of swamp lands. I now recommend what I had the honor to submit in my report of last year, which is a follows:

"The Swamp Land Act, passed April twenty-first, eighteen hundred and fifty-eight, authorized the purchase of three hundred and twenty acres of land by one person, but restricted the purchaser to a frontage of one-half mile, by legal subdivision, on any bay, lake, or navigable stream.

The act of eighteen hundred and fifty-nine authorizes the sale of six hundred and forty acres to one individual, but makes no provision for a greater frontage. The object of the restriction was to prevent the monopoly of the narrow strip of land along the margin of water-courses, which is generally higher and more valuable than that back of it, and probably, also, to prevent the settler on the margin of the water courses from shutting out those purchasing in the rear, from communication with the water. The law, so far as it applies to such cases, should not, in my opinion, be changed. In many of the large tracts of swamp land, especially those near the junction of the Sacramento

and San Joaquin rivers, there are innumerable sloughs, many of which are navigable. In consequence of their sinuosity, it often occurs that when a person desires to purchase six hundred and forty acres, in the locality in which he wishes to select the same, it is impossible for him to get one hundred and sixty acres, even, without having a greater frontage of two miles. The cost, per acre, of reclaiming swamp lands, by levees or ditches, depends upon the amount reclaimed. It is very evident that, the smaller the tract, the greater will be the cost of reclamation, per acre; consequently, the purchaser who is compelled to take up his three hundred and twenty, or six hundred and forty acres, in separate tracts, labors under a great disadvantage. To avoid this difficulty, I would suggest that the law be so amended as to allow the purchaser, in such cases, to take six hundred and forty acres, with the additional frontage requisite to secure that amount; *provided*, that the Surveyor-General is satisfied that the interests of the State do not suffer thereby, and that the rights of individuals are not interfered with."

It will be seen, by reference to the report of Mr. Beaumont, Surveyor of San Joaquin County, for this year, the importance of having the law amended so as to do away with this difficulty.

## COUNTY BOUNDARIES.

By an act of the Legislature, passed April thirtieth, eighteen hundred and sixty, the Surveyor-General was required to survey and establish the boundary lines between the counties of Sierra and Plumas, and the counties of Plumas and Shasta.

I notified the Boards of Supervisors of those counties, that I was prepared to make the surveys as soon as an appropriation was made to pay the expenses of the same.

A communication was received from the Board of Supervisors of Shasta County, declining to take any action in the matter. No notice has been received of an appropriation having been made by either of the other counties; consequently, the surveys have not been made.

## STATISTICS.

There have been received at this office this year, reports from seven County Surveyors. They are from –

William S. Green	County Surveyor of Colusa County.
A. D. Eastkoot	County Surveyor of Marin County.
T. J. Dewoody	County Surveyor of Napa County.

Duncan Beaumont	County Surveyor
J. B. Wood	County Surveyor
Phil. E. Drescher	County Surveyor
Ebenezer Hadley	County Surveyor

County Surveyor of San Joaquin County. County Surveyor of Sonoma County. County Surveyor of Sutter County. County Surveyor of Los Angeles County.

Valuable communications have been received from Messrs. G. S. Beasley and J. M. Sidwell, of Solano County, upon the reclamation of swamp lands. They are herewith transmitted.

As directed by law, I issued circulars to the County Assessors, desiring them to furnish me with the information required to be transmitted to this office at an early day. Similar circumstances were also sent to Clerks of Board of Supervisors, requesting their aid in obtaining the necessary information. These officers, in the counties of Humboldt, Napa, Placer, Sacramento, Frezno, and San Bernardino, have supplied me with tables of statistics taken from the books of the Assessor.

Thirty-one reports have been received at this date from Assessors. Quite a number of these are merely statistics, which will be found complied in the general tables. They are from -

Klamath	Thomas H. Rector, Assessor
Merced	Unsigned
Sacramento	E. B. Ryan, Assessor
San Joaquin	W. H. Neal, Assessor
San Luis Obispo	B. P. Brown, Assessor
Santa Cruz	M. V. Bennett, Assessor
Shasta	B. Gartland, Assessor
Siskiyou	Austin Hawkins, Assessor
Sonoma	Charles C. Snider, Assessor
Stanislaus	E. B. Beard, Assessor
Tulare	T. C. Hayes, Assessor

The following furnished reports, more or less elaborated, in addition to the tables of statistics:

Alameda	M. G. Higgins, Assessor
Amador	Fred. P. Smith, Assessor
Calaveras	Robert C. Dowling, Assessor
Butte	W. D. Vantine, Assessor
El Dorado	Lewis Foster, Assessor
Trinity	F. D. Ketcham, Assessor
Marin	J. B. Jacobs, Assessor
Mariposa	S. B. Thomas, Assessor
Monterey	Uriah Burns, Assessor
Nevada	Martin Brennan, Assessor
Placer	T. B. Harper, Assessor
Jan Diego	James McCoy, Assessor
San Francisco	Charles R. Bond, Assessor

Santa Clara	
Solano	E. H. Von Pfeister, Assessor
Tehama	S. B. Shaw, Assessor
Tuolumne	David Hays, Assessor
Yolo	James McCauley, Assessor
Yuba	John Rule, Assessor
Contra Costa	J. J. White, Assessor

#### ALAMEDA.

The crops in this county have been good. Many of the ranch-owners are inclosing the valley tracts extensively, thus limiting the range for pasture. Much attention has been given to sheep raising. Some superior imported stock has been introduced this year. The wool clip is generally of a fine quality.

#### AMADOR.

The amount of taxable property in this county is sixteen thousand six hundred and eighty-one dollars less than last year. This falling off is reported by Mr. Smith to be owing to depreciation in the value of live stock. The value of real estate is advancing, especially in the agricultural portion of the county. Among other matters touched upon the report of Mr. Smith, which will be found in the appendix, is the want of a wagon-road to the extensive mineral region beyond the Sierra Nevada. Such a one, he contends, can advantageously be constructed to the summit from some eastern point in Amador County, and will thus afford a market, at once, to the farmers of Sacramento and San Joaquin counties, as well s those of Amador.

#### CALAVERAS.

In addition to the statistics compiled in the general tables, the County Assessor mentioned the following improvements: - Two foundaries; nine churches; four theaters, value, six thousand dollars; seven breweries, value, ten thousand, two hundred dollars; two printing offices; two telegraph offices; twelve livery stables; four soda factories; two Sing Verein halls, value, four thousand dollars. His report will be found in the appendix.

#### BUTTE.

The crops have been fair, and the several branches of industry, the Assessor states, are prospering. The assessment of property is not as large as that of eighteen hundred and fifty-nine, by one hundred and seventy-nine thousand, two hundred and eighty-eight dollars, owing to depreciation in the value of live stock. Mr. Vantine, in his report, which is herewith annexed, alludes to the necessity of establishing, prior to March first, eighteen hundred and sixty-one, the boundary lines between Butte County and the adjoining counties of Sutter, Colusa, and Plumas. Much difficulty is now experienced by the Assessors of the several counties, in making their assessments. The extent of the line to be run, he says, will be about sixty miles.

#### EL DORADO.

As an evidence of the prosperity of this county, it is gratifying to see an increase in the present, over last year's valuation of property, of one million forty thousand two hundred and twenty-two dollars. In the way of improvements, there are two foundaries, two tanneries, twelve breweries, three soda factories and three brick kilns. Quartz mining is represented to have entirely ceased.

#### FREZNO.

Report received from J. D. Johnson, County Auditor. Increase in valuation of property over last year, three hundred and twenty thousand, three hundred and fifty dollars.

HUMBOLDT.

A table of statistics, compiled from the Assessor's books, has been received from A. W. Hanna, Clerk of Board of Supervisors.

MARIN.

The amount of taxable property returned is two hundred and three thousand, seven hundred and thirty-seven dollars more than in eighteen hundred and fifty-nine. Mention is made of the establishment of the pioneer paper mill, value, twenty thousand dollars.

MARIPOSA.

Comparison with the report of last year shows a gain of one hundred and seventy thousand three hundred and forty dollars in the amount of taxable property within this county. Quartz mining is extensively and profitably carried on. From careful examination, Mr. Thomas represents that twenty-seven dollars and fifty cents is an average yield of gold to the tun of rock crushed. Mariposa boasts, also, of her inexhaustible supply of excellent timber.

MONTEREY.

The interesting report received from this officer will, I trust, be printed. Among other matters he speaks of the existence of a contagious disease which has prevailed among the horses in that section of the State for the past two years. He also points out the necessity of establishing more clearly the line between the counties of Monterey and San Luis Obispo, which has never been surveyed, or marked out. Increased valuation of property over last year is seventy-six thousand six hundred and fifty dollars. Increase in live stock since eighteen hundred and fifty-nine: American horses, thirty-nine; half-breed horses, two hundred and twenty-five; American cows, two hundred and nine; American stock cattle, six thousand four hundred and fifty-seven; Spanish stock cattle, seven thousand one hundred and six; half-breed stock cattle, two thousand one

hundred and eighty seven; Spanish oxen, eighty-seven; sheep, five thousand one hundred and fifty-six; hogs, one thousand seven hundred and thirty-one.

#### NAPA.

A table of statistics, compiled form the Assessor's books, has been received from Robert Crouch, Esq. Clerk of Board of Equalization. While there is an increase in the amount of property returned this year, of four hundred and fourteen thousand four hundred and ninety-eight dollars, the amount of land cultivated appears to be less by one-half than in eighteen hundred and fifty-nine. And, notwithstanding the past season has been one of uncommon yield in other portions of the State, the returns of Napa County, in the great staples, wheat and barley, do not compare favorable with those of former years.

#### NEVADA.

Remarking that but little change had occurred since the publication of his last annual report, the Assessor deemed it unnecessary to transmit more than a statistical report, which will be found in the general compiled tables. Comparison with that of last year shows a decrease of five hundred and seventy-eight thousand and eighty-five dollars in the amount of taxable property returned.

#### PLACER.

Tables of statistics were received from George L. Anderson, Clerk of the Board of Supervisors, as well as from Mr. Harper, the Assessor, whose report will be found in the appendix. Valuation of live stock is given as five hundred and forty-five thousand nine hundred and fourteen dollars. Amount of taxable property returned is ninety-three thousand two hundred and ninety-three dollars more than in eighteen hundred and fifty-nine.

#### SANTA CLARA.

Among other matters of interest, the Assessor alludes in his report to the several schools and colleges for the education of the youth of both sexes, located within the county. The Enriquita and Guadalupe mines of quicksilver, are in successful operation; the former making an average of one thousand flasks per month, the latter about two hundred. The total amount of taxable property returned is five million eight hundred and twenty-two thousand six hundred and sixty-three dollars, being one hundred and thirty-four thousand eight hundred and thirty-seven dollars more than reported in eighteen hundred and fifty-nine.

#### SAN FRANCISCO.

A variety of branches of industry, mentioned by the Assessor, that afford employment to a large number, are not embraced in the accompanying table of statistics. Such as, foundaries and machine shops, nineteen; number of men employed, four hundred and fifty; value, two million dollars. Carriage factories employ one hundred and twenty men; value of work, two hundred and fifty thousand dollars. Two woolen factories, employ thirty men, twenty women; four hundred thousand pounds of wool manufactured; thirty-six thousand pairs of blankets; cost of one mill, thirty-five thousand dollars. Rope walk, one; employs forty men; two million pounds hemp manufactured. Eighteen breweries, employ one hundred men; making one million five hundred thousand gallons of beer per annum. One sugar refinery; ten million seven hundred thousand pounds of sugar manufactured. Two million thirty-two thousand five hundred and sixty-four dollars more taxable property reported than in eighteen hundred and fifty-nine.

#### SAN DIEGO.

The report of James McCoy, Assessor of this county, will be found in the appendix.

#### SOLANO.

The very full and complete report of E. H. Von Pfeister, Assessor of this county, recommends itself to your attention; evincing, as it does, that care had been bestowed in preparing it. It is certainly deserving of publication.

#### TEHAMA.

The report for the year eighteen hundred and sixty represents, that there has been a large increase in produce of every kind. There has been a corresponding increase in live stock of every description. The latter have, however, depreciated about one-fourth in value. Increase of taxable property is reported at over half a million dollars.

#### TRINITY.

The yield of the different agricultural products are given per acre; of wheat, thirteen bushels; barley, twenty-five bushels; oats, thirty bushels; corn, twenty bushels; buck-wheat, fifteen bushels; peas, thirty bushels; beans, thirty-five bushels; potatoes, one hundred and thirty bushels; onions, one hundred and sixty bushels. A large portion of the wheat, barley, and oats, was cut for hay, it being more profitable than grain.

#### TUOLUMNE.

Real estate is reported as not increasing in value. Improvements of a substantial character are, however, going on. Total valuation of taxable property is, five hundred and forty-three thousand four hundred and ninety-five dollars more than in eighteen hundred and fifty-nine. Mining of every description is successfully carried on; the yield of gold from quartz alone being over half a million dollars.

The report of the Assessor, herewith appended, states that the grain crops in this county, for eighteen hundred and sixty, exceed those of any other since eighteen hundred and fifty-two. As a comparison he gives the yield of wheat to have been eight bushels; barley, ten bushels per acre, in eighteen hundred and fifty-nine; whereas we have, in the present year, thirty-five bushels of wheat and sixty bushels of barley to the acre. The assessed valuation of property is thirty thousand three hundred and eighty-two dollars less than last year, caused by depreciated value of live stock.

#### YUBA.

A full and interesting report was received from this officer; it is herewith transmitted. Increased valuation of taxable property, is given at six hundred and one thousand two hundred and eighty-seven dollars over the year eighteen hundred and fifty-nine.

Comparison with the reports made to this office in eighteen hundred and fiftynine, shows for the present year in the counties of -

Sacramento, an increase of taxable property over 1859 of	\$376,519
San Luis Obispo, an increase of taxable property over 1859 of	315,987
Shasta, an increase of taxable property over 1859 of	23,207
Siskiyou, an increase of taxable property over 1859 of	301,540
Stanislaus, an increase of taxable property over 1859 of	221,624
Tulare, an increase of taxable property over 1859 of	663,137
San Joaquin, decrease of taxable property since 1859 of	297,998
Santa Cruz, decrease of taxable property since 1859 of	9,513
Sonoma, decrease of taxable property since 1859 of	798,639

Klamath, Merced, and San Bernardino, have not reported the amount of taxable property for the year eighteen hundred and sixty.

# STATISTICAL TABLES.

	Acres Inclose	Acres of L Cultivated	WH	EAT.	BAR	RLEY.	0/	ATS.	R	YE.	CC	DRN.	BUCKV	VHEAT.
COUNTIES.	Acres of Land Inclosed.	of Land ated.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Alameda	-	75,000	20,000	440,500	20,000	630,750	9,080	449,000	75	2,250	650	26,000	160	2,400
Amador	28,692	12,195	2,044	61,320	2,271	80,840	667	20,010	-	-	764	38,200	-	_
Butte	63,127	31,400	5,963	126,550	5,969	241,340	378	14,450	76	3,520	150	4,250	-	-
Calaveras	-	6,037 ½	524	18,340	1,456 ½	36,412 ½	204	3,264	-	-	-	-	-	-
Colusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	27,000	-	23,347	-	11,396	-	7,011	-	59	1,759	170	-	31	-
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frezno	2,669	2,669	260	6,850	536	21,440	-	-	-	-	123	4,650	-	-
Humboldt	10,975	3,547	1,564	40,563	58	1,991	542	15,723	-	-	63	1,990	-	-
Klamath	3,783	3,327	1,100	19,800	-	-	490	9,800	5	100	30	600	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	93,947	14,704	11,429	42,870	1,415	42,450	4,369	174,760	-	-	58	2,900	28	500
Mariposa	1,895	1,895	819	1,790	802	3,720	121	-	38	760	16	240	-	-
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	15,000	12,575	3,500	52,500	6,718	134,360	360	7,200	35	700	361	9,025	-	-
Monterey	100,449	13,500	2,250	92,000	2,000	62,000	150	7,500	-	-	400	4,000	50	500
Napa	154,000	35,909	26,114	652,850	3,403	102,090	1,183	35,490	14	394	1,480	44,400	6	76
Nevada	88,000	30,000	4,360	100,000	7,000	207,000	1,900	7,000	-	-	-	-	-	-
Placer	-	-	5,000	170,000	4,450	130,400	80	3,274	4	-	6	-	-	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento	77,989	57,983	11,562	175,000	18,050	300,683	808	25,992	34	420	283	9,447	14	70
San Bernardino	13,232	7,489	1,322	-	1,346	-	44	-	263	-	1,404	-	-	-
San Diego	4,500	3,500	700	14,000	1,200	36,000	30	-	-	-	25	-	-	-
San Francisco	26,000	1,500	30	-	300	-	200	-	-	-	-	-	-	-
San Joaquin	238,305	158,970	59,665	895,000	45,625	912,500	1,850	37,000	690	13,800	640	19,200	1,500	30,000

San Luis														
Obispo	13,000	6,500	460	20,000	700	50,000	100	7,500	250	12,000	500	35,000	50	3,000
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara	250,000	70,000	20,000	400,000	14,000	300,000	1,500	30,000	50	500	200	3,000	50	1,000
Santa Cruz	38,400	26,827	9,000	243,000	7,300	219,000	6,557	262,000	75	1,800	600	19,000	350	6,200
Shasta	18,000	6,240	1,680	34,240	2,121	32,125	650	11,200	-	-	485	9,550	-	-
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	-	-	-	54,187	-	22,586	-	80,774	-	-	-	4,936	-	-
Solano	115,774	44,454	14,256	-	15,687	-	580	-	320	-	970	-	36	-
Sonoma	117,013	148,347	9,285	275,062	2,518	125,862	9,463	187,968	8	324	2,132	89,959	62	1,634
Stanislaus	29,442	12,062	3,257	65,140	4,362	140,860	-	-	40	800	328	9,840	-	-
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	23,750	13,194	5,709	142,725	5,026	150,780	127	3,810	30	900	252	10,080	1 1-2	50
Trinity	3,370	3,000	1,212	17,756	265	6,625	239	7,170	10	-	75	1,500	6	90
Tulare	9,312	6,307	3,247	81,175	1,930	38,600	159	4,770	-	-	869	4,345	-	-
Tuolumne	13,784	9,000	1,655	3,440	845	1,985	486	210	47	-	58	-	-	-
Yolo	80,000	39,698	13,236	459,360	25,694	1,541,640	120	3,600	114	2,280	120	-	10	-
Yuba	48,574	28,704	7,192	223,302	6,764	243,700	702	35,415	15	785	905	71,580	-	-

	PE	AS.	BEA	ANS.	POTA	ATOES.		NEET ATOES.	ONI	ONS.	HA	Υ.	FLAX.	
COUNTIES.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tuns.	Acres.	Pounds.
Alameda	40	1,000	1,400	28,000	1,830	73,200	7	500	25	1,000	5,260	6,000	-	-
Amador	10	-	20	-	347	-	-	-	20	-	5,554	5,554	-	-
Butte	-	-	-	-	-	-	-	-	-	-	6,545	6,532	-	-
Calaveras	-	-	-	-	-	-	-	-	-	-	3,680	3,680	-	-
Colusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	27	-	397	-	497	-	69	-	31	-	6,500	11,000	3	-
Del Norte	_	_	_	-	_	_	_	-	-	_	_	_	_	-
El Dorado	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Frezno	-	_	10	_	-	800	-	1,400	-	100	_	475	-	-
Humboldt	833	31,584	3	575	208	56,632	-	-	-	-	744	1,233	-	-
Klamath	10	300	20	600	40	12,000	-	-	5	-	10	-	_	_
Los Angeles	_	-	_	-	-	_	-	-	-	-	-	_	_	-
Marin	74	2,200	16	440	3,125	240,000	-	-	9	750	2,795	5,193	-	-
Mendocino	_	_	_	_	-	_	-	-	_	1,478	_	_	-	-
Mariposa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	52	1,560	96	3,840	-	_	-	-	5	2,000	1,475	2,212	-	-
Monterey	200	2,000	900	2,700	200	20,000	15	1,000	150	10,500	_	_	-	-
Napa	38	760	47	1,410	31	930	-	-	4	160	1.183	1,774	-	-
Nevada	_	-	-	-	500	40,000	-	-	-	-	3,000	3,000	-	-
Placer	-	-	-	-	8	-	-	-	-	-	2,200	1,877	-	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento San	-	1,493	-	1,860	850	263,274	140	52,743	-	22,640	13,000	13,153	-	-
Bernardino	_	_	29	_	63	_	_	_	2	_	1,781	3,562	_	_
San Diego	- 5	-	29 50	-	20	- 500	_	-	- 2	-	-	3,502 800	_	-
San Francisco.	5	-	50	_	500	- 500	-	_	-	-	_		_	-
San Joaquin	- 25	2,500	20	- 200	1,200	- 12,000	- 10	- 300	- 100	- 500	40,000	- 37,600	_	-
San Luis	20	2,000					10	500			+0,000		-	-
Obispo	-	-	75	2,500	400	50,000	-	-	20	800	-	700	-	-
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara	20	200	200	2,000	200	10,000	-	-	100	6,000	12,000	18,000	-	-

Santa Cruz	100	3,000	550	18,000	975	13,000	-	-	70	4,000	1,200	1,800	-	-
Shasta	55	685	43	825	212	9,250	-	-	-	-	-	3,985	-	-
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	-	886	-	940	-	54,339	-	-	-	1,700	-	8,680	-	-
Solano	120	-	-	-	1,473	-	-	-	462	-	42,160	-	-	-
Sonoma	95	5,475	53	3,215	3,025	314,367	6	300	35	1,175	11,000	17,473	-	-
Stanislaus	-	-	20	500	10	300	-	-	-	-	4,046	4,046	-	-
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	8 1-2	425	10 1-2	530	47	7,520	10	1,720	12 1-2	1,920	2,595	2,394	-	-
Trinity	18	540	16	560	296	38,480	-	-	14	2,240	1,000	1,500	-	-
Tulare	15	-	12	-	12	1,200	19	3,800	-	_	-	-	-	-
Tuolumne	7	-	-	-	145	21,931	-	-	5	-	2,019	1,729	-	-
Yolo	-	-	21	-	426	-	76	-	24	-	12,000	18,000	1	-
Yuba	-	1,462	-	1,463	-	17,031	-	585	-	-	11,395	14,701	-	-

	HEN	/IP.	ТОВ	ACCO.	ALF	ALFA.	СОТТ	ON.	RIC	CE.	Acres of	Acres I	Pound	Pounds	Dozens	Pound
COUNTIES.		Pounds.	Acres.	Pounds.	Acres.	Tuns.	Acres.	Pounds.	Acres.	Pounds.	of Sugar Cane.	Broom Corn.	Pounds of Butter.	s of Cheese.	s of Eggs.	Pounds of Wool.
Alameda	-	-	-	-	-	-	-	-	-		-	15	79,250	103,700	462,300	710,900
Amador	-	-	-	-	-	-	-	-	-	-	-	150	14,000	400	2,500	35,910
Butte	-	-	-	-	-	-	-	-	-	-	-	-	48,000	4,050	32,800	67,000
Calaveras	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colusa	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-
Contra Costa	-	-	5	-	-	39	-	-	-	-	-	21	37,000	35,000	201,000	41,000
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-
Frezno	-	_	-	-	-	-	-	-	-	-	-	-	2,700	-	-	16,900
Humboldt	-	-	-	-	-	-	-	-	-	-	-	-	34,400	6,800	-	_
Klamath	-	_	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-
Marin	-	-	-	-	6	18	-	-	-	-	-	-	226,954	170,000	29,961	29,750
Mariposa	-	-	-	-	-	-	-	-	-	-	-	-	17,428	1,400	6,960	-
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	-	-	-	-	140	280	-	-	-	-	-	-	800	1,000	-	1,660
Monterey	-	-	-	-	-	-	-	-	-	-	-	-	32,000	27,500	12,000	450,000
Napa	-	-	-	-	140	-	-	-	-	-	-	20	20,750	19,000	20,000	37,565
Nevada	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Placer	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento	-	-	-	-	-	-	-	-	-	-	-	50	148,944	122,330	110,116	76,165
San													,	,		,
Bernardino	-	-	-	-	28	84	-	-	-	-	-	-	62,815	13,600	29,680	8,300
San Diego	-	-	-	-	25	75	-	-	-	-	-	-	5,000	3,000	10,000	20,000
San Francisco.	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	
San Joaquin	-	-	-	-	30	50	-	-	-	-	-	-	83,040	6,175	100,000	74,728
San Luis													,	, -	,	, ,
Obispo	-	-	-	-	10	60	-	-	-	-	-	-	9,670	13,000	1,250	256,000
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Santa Clara	-	-	-	-	-	-	-	-	-	-	-	50	220,000	300,000	300,000	40,000
Santa Cruz	-	-	-	-	-	-	-	-	-	-	-	-	18,000	25,000	150,000	17,935
Shasta	-	-	-	-	-	-	-	-	-	-	-	-	32,240	1,025	6,000	2,500
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	-	-	-	-	-	-	-	-	-	-	-	-	84,692	13,383	-	1,150
Solano	-	-	-	-	23	-	-	-	-	-	-	170	-	-	-	-
Sonoma	-	-	-	-	-	-	-	-	-	-	-	25	203,175	103,090	6,500	83,943
Stanislaus	-	-	-	-	-	-	-	-	-	-	-	-	10,000	5,000	25,000	25,036
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	-	-	-	-	25 1-4	50	-	-	-	-	-	10	4,000	2,000	3,445	31,876
Trinity	-	-	-	-	-	-	-	-	-	-	-	-	11,550	300	3,680	-
Tulare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuolumne	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,600	-
Yolo	1	-	1-2	-	-	-	1-2	-	-	-	56	-	-	-	70,000	77,427
Yuba	-	-	-	-	525	-	-	-	-	-	-	25	92,874	5,745	-	75,000

	Bee Hives	Pounds (						LI	VE STO	OCK.					
COUNTIES.	ÿ	of Honey.	Horses, American	Horses, Spanish (Tame).	Horses, Spanish (Wild).	Horses, Total Number.	Mules.	Asses.	Cows.	Calves.	Stock Cattle.	Beef Cattle.	Oxen.	Total Number of Cattle.	Sheep.
Alameda	124	-	1,028	1,934	5,020	7,982	394	85	18,276	7,000	20,732	3,000	218	49,226	26,700
Amador	123	-	789	752	456	1,997	279	77	3,305	2,161	4,860	-	679	11,005	11,302
Butte	-	-	1,718	1,450	1,650	4,818	900	150	6,428	3,100	6,128	2,414	536	18,607	24,600
Calaveras	44	-	378	3,180	182	3,740	328	75	3,806	2,382	5,214	549	608	12,559	10,131
Colusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	-	-	2,689	3,190	-	5,879	511	3	3,689	2,110	15,590	432	715	22,536	27,000
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	-	-	-	-	-	2,060	1,524	150	3,490	2,380	5,012	-	1,220	12,102	4,017
Frezno	17	700	425	1,810	905	3,140	97	39	-	7,788	20,771	2,408	188	31,155	-
Humboldt	60	-	263	1,375	-	1,638	528	4	4,845	4,511	8,620	460	769	19,205	523
Klamath	-	-	-	-	-	144	864	7	1,122	396	1,378	200	27	3,123	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	119	250	242	1,449	1,714	3,405	87	1	7,523	7,663	12,427	5,200	565	33,378	14,362
Mariposa	-	-	96	754	-	850	287	67	1,808	1,808	4,059	-	444	8,119	6,567
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	495	1,200	-	968	1,757	2,725	118	20	-	-	36,021	1,528	500	38,049	5,215
Monterey	79	-	342	2,221	7,427	9,990	196	30	4,552	696	62,523	-	549	68,320	99,550
Napa	700	300	2,540	1,800	1,852	6,192	100	4	8,402	8,793	8,317	1,100	457	27,069	17,025
Nevada	-	-	858	-	-	-	275	-	2,723	-	-	-	-	-	521
Placer	-	-	-	-	-	2,195	470	18	2,241	673	8,490	-	510	11,914	24,634
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento San	1,327	-	4,078	5,240	-	9,318	1,271	159	8,884	6,312	34,357	4,475	1,413	55,441	37,155
Bernardino	-	-	125	465	1,274	1,864	119	30	1,324	900	11,449	-	272	13,945	65,013
San Diego	2	-	30	700	2,000	2,730	450	100	10,000	6,000	-	5,000	250	21,250	10,000
San Francisco.	-	-	-	-	-	5,000	200	-	2,500	800	-	-	100	3,400	2,000
San Joaquin	300	1,000	3,000	4,000	4,332	11,332	2,792	30	11,840	5,000	73,040	-	1,048	90,928	37,364
San Luis															
Obispo	-	-	650	1,000	11,000	12,650	100	40	700	-	141,000	-	450	142,150	23,000
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Santa Clara	2,500	2,000	2,500	2,000	4,000	8,500	600	100	7,000	5,000	20,000	4,000	700	36,700	20,000
Santa Cruz	148	2,500	481	963	617	2,061	77	-	2,442	2,000	4,000	1,935	391	10,768	7,483
Shasta	-	-	275	750	-	1,025	185	17	1,945	1,100	5,845	2,551	815	13,256	1,980
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	10	-	-	-	-	2,881	708	-	6,317	4,200	25,000	-	600	36,117	2,000
Solano	-	-	1,343	2,667	-	4,010	269	-	-	-	-	-	169	29,455	132,000
Sonoma	463	135	-	-	-	9,660	396	13	13,670	13,238	27,974	2,875	1,536	59,293	36,225
Stanislaus	-	-	289	974	1,050	2,313	218	5	1,828	1,638	18,060	-	208	21,734	6,259
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	78	506	250	646	773	1,669	912	35	4.326	4,000	4,903	2,118	2,337	17,684	12,637
Trinity	-	-	80	98	-	178	479	32	713	406	987	241	194	2,241	226
Tulare	-	-	499	672	2,484	3,655	321	10	16,345	9,360	18,114	-	563	44,382	29,730
Tuolumne	30	-	381	935	-	1,316	481	163	1,718	1,262	-	1,309	432	4,721	3,165
Yolo	537	-	-	-	-	3,940	373	5	-	-	-	-	-	23,480	30,971
Yuba	500	1,625	-	-	-	3,250	1,615	25	3,846	3,400	10,802	-	1,014	19,062	46,600

		L	IVE STO	CK. (con	ťd)			STOC	K SLAU	JGHTERI	ED.	
COUNTIES.	Goats	Hogs	Chickens	Turkeys	Ducks	Geese	CAT	TLE.	НС	)GS.	SH	EEP.
			ens.	/s			Number.	Value.	Number.	Value.	Number.	Value.
Alameda	300	2,785	22,708	1,117	1,193	138	2,170	-	330	-	820	-
Amador	653	6,201	11,295	952	277	177	5,534	\$138,350	2,835	\$34,020	2,399	\$9,596
Butte	250	34,148	44,100	850	300	400	2,250	96,400	3,200	28,450	1,050	7,300
Calaveras	498	6,168	11,801	1,222	731	187	4,628	138,840	3,965	36,125	3,900	20,200
Colusa	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	521	19,000	36,000	1,900	1,100	310	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	200	6,017	-	-	-	-	-	-	-	-	-	-
Frezno	-	5,992	-	-	-	-	325	6,500	500	6,000	700	2,100
Humboldt	18	1,894	4,306	5	27	6	800	28,000	900	14,400	-	-
Klamath	-	710	-	-	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-
Marin	107	4,191	15,310	1,984	2,051	187	2,500	-	1,500	-	400	-
Mariposa	-	1,762	10,217	679	100	-	1,560	46,800	400	5,400	559	2,880
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-
Merced	175	2,377	25,000	300	100	75	-	-	-	-	-	-
Monterey	489	4,361	6,000	400	300	150	-	-	-	-	-	-
Napa	200	16,506	3,870	740	460	180	1,480	37,000	1,144	6,864	2,184	8,736
Nevada	76	1,860	7,000	-	-	-	-	-	-	-	-	-
Placer	52	11,488	9,230	900	563	342	-	-	-	-	-	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento	1,270	12,821	51,471	4,690	627	570	7,200	230,000	5,670	60,550	-	-
San Bernardino	250	890	7,129	134	327	81	-	-	-	-	-	-
San Diego	1,000	500	3,000	25	150	50	1,200	-	300	-	1,500	-
San Francisco.	500	6,000	-	-	-	-	25,000	-	25,000	-	60,000	-
San Joaquin… San Luis	1,300	31,700	10,000	5,000	2,000	1,000	-	-	-	-	-	-
Obispo	250	2,000	20,000	1,000	500	-	700	8,000	50	600	550	2,500
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-

Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara	1,000	8,000	30,000	3,000	5,000	3,000	6,500	-	3,500	-	3,000	-
Santa Cruz	590	6,302	6,033	250	520	150	400	18,000	650	4,550	400	1,600
Shasta	55	13,375	14,000	278	450	35	2,100	65,000	5,000	50,000	1,500	9,000
Sierra	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	-	7,190	100,000	1,000	-	-	8,620	172,400	3,000	45,000	1,000	6,000
Solano	-	11,737	12,960	2,452	560	128	-	-	-	-	-	-
Sonoma	132	32,624	66,325	1,105	8,790	5,325	-	-	-	-	-	-
Stanislaus	80	2,609	9,081	1,144	40	-	1,000	-	1,000	-	1,000	-
Sutter	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	84	18,775	16,370	297	7	70	1,960	58,800	3,690	33,690	500	3,000
Trinity	40	943	3,153	96	70	-	1,802	71,850	1,645	20,825	600	3,600
Tulare	25	26,052	9,853	650	334	-	1,000	-	2,000	-	100	-
Tuolumne	682	923	2,600	195	-	41	9,855	197,100	7,665	76,350	7,300	21,900
Yolo	-	13,852	34,778	3,399	315	123	1,498	-	-	-	-	-
Yuba	250	17,982	50,000	15,000	700	100	-	-	-	-	-	-

### IMPROVEMENTS.

				GRIS <sup>-</sup>	T-MILLS	S.					SA	W-MILL	S.	
COUNTIES.	Number.	Stem Power	Run of Stones.	Value of Steam Grist-Mills.	Water Power	Run of Stones.	Value of Water Power Mills	Bushels of Grain Ground.	Number.	Value.	Steam Power.	Water Power.	No. of Feet of Lumber Sawed.	Shingles.
Alameda Amador Butte	6 3 3	2 1 -	10 3 -	- \$5,000 -	4 2 3	6 4 7	- \$9,000 19,800	- 79,625 -	- 16 18	- \$25,200 17,500	- 13 10	- 3 8	- 10,000,000 -	- 1,260,000 -
Calaveras Colusa	-	-	-	-	-	-	-	-	11	24,500	7	_ 4	77,200	-
Contra Costa	2	2	-	-	-	-	-	-	-	-	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado Frezno	1	-	-	-	1	3	-	-	30 3	-	22 2	8 1	- 2,880,000	-
Humboldt	4	2	2	8,000	2	2	3,500	16,500	9	25,500	7	2	9,575,000	_
Klamath	1	-	-	_	1	2	6,000	-	6	7,000	-	6	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mariposa Mendocino	-	-	-	-	-	-	-	-	6	52,500	6	-	3,500,000	-
Merced	- 4	-	_	-	- 4	- 10	- 35,500	-	-	-	-	-	-	-
Monterey	-	-	-	-	-	-	-	-	1	15,000	1	-	-	-
								bbls.	-	,				
Napa	7	3	5	11,000	4	7	19,800	24,000	6	-	3	3	1,500,000	-
Nevada	3	3	6	-	-	-	-	-	43	-	27	16	35,627,000	-
Placer	2	1	2	5,500	1	-	4,000	-	22	44,200	13	9	2,056,000	-
Plumas	-		-	-	-	-	-	-	-	-	-	-	-	-
Sacramento	8	7	19	-	1	3	-	-	2	-	-	-	1,250,000	-
San Bernardino	3	-	-	-	3	4	5,000	-	2	-	-	2	-	-
San Diego	-	-	-	-	-	-	-	-	-	-	- 1	-	-	-

San Francisco	12	12	34	80,000	-	-	-	1,000,000	4	-	4	-	5,000,000	-
San Joaquin	8	8	20	40,000	-	-	-	-	1	2,500	-	-	-	-
San Luis Obispo	3	-	-	-	3	4	7,000	-	-	-	-	-	-	-
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara	9	7	15	100,000	2	6	50,000	570,000	7	-	3	4	-	-
Santa Cruz	4	2	6	7,000	2	4	5,000	125,000	10	-	3	7	12,000,000	-
Shasta	3	1	2	3,500	2	4	8,500	18,000	16	-	1	15	3,800,000	-
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	6	1	2	12,000	5	8	75,000	-	19	-	2	17	2,280,000	-
								tuns						
Solano	2	2	7	40,000	-	-	-	3,712	-	-	-	-	-	-
Sonoma	9	5	15	60,000	4	5	15,000	-	12	60,000	10	2	-	-
Stanislaus	2	-	-	-	2	4	21,000	-	-	-	-	-	-	-
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	2	1	3	30,000	1	2	15,000	-	3	10,000	-	3	380,000	264,000
Trinity	3	-	-	-	3	3	10,000	16,000	19	52,000	-	19	3,700,000	-
Tulare	3	1	2	11,975	2	2	6,000	68,350	-	-	-	-	-	-
Tuolumne	4	1	1	2,500	3	6	7,050	-	21	38,300	8	13	9,320,000	-
Yolo	3	3	5	16,000	-	-	-	-	-	-	-	-	-	-
Yuba	7	5	15	50,000	2	6	10,000	350,000	19	61,452	10	9	7,570,000	-

		QUARTZ MIL	LS.	Ν	AINING DITCH	ES.	FEI	RRIES.		TOLL IDGES.			TURNPI	KE ROADS.	
COUNTIES.	Number.	Value.	No. of Tuns Quartz Crushed.	Number.	Value.	Miles in Length.	Number.	Value.	Number.	Value.	Number.	Miles in Length.	Cost.	Income.	Cost of Repairs.
Alameda	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
Amador	36	\$65,700	73,156 162 ½	44	\$246,300	528	-	-	8	\$11,700	1	7	\$3,000	\$400	\$150
Butte Calaveras Colusa Contra Costa Del Norte El Dorado	7 29 - - -	20,600 49,050 - - -	per day " - -	8 64 - - 51	195,000 297,960 - - -	167 583 - - - 1 250	6 6 - 1 -	3,800 5,600 - - -	3 10 - - - 17	25,000 13,100 - - -	- - - - 7		- - - -	- - - -	- - - -
Frezno	_	-	-	-	-	1,250	- 5	- 4,700	- 17	-	- '	-	-	-	-
Humboldt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Klamath Los Angeles Marin	- -	-	-	18 - -	20,000 -	54 -	3-	1,500 -	8 - -	2,000 -	- -	-	-	-	-
Mariposa	22	-	70,320	5	-	42	_	-	3	-	4	14 ½	32,000	9,600	770
Mendocino Merced Monterey	- - -	- - -	-	- - -	- - -	- - -	- - 2	- - -	- - 1	- - 4,000	- - -	- -	- - -	-	- -
Napa Nevada Placer	- 29 5	- - 7,800	- 319,142 -	- 88 28	- - 217,600	- 1,000 394	1 - -	- - -	- 8 3	- - 5,000	- 19 11	- - 35 ½	- - 63,500	- - -	- -
Plumas Sacramento San	- 1	-	- 40	- 12	-	- 155	- 6	-	- 12	-	-	-	- -	-	-
Bernardino San Diego	-	-	-	1 -	-	3	- 2	-	-	-	-	-	-	-	-
San Francisco. San Joaquin	2 -	-	1,500 -	-		-	1 4	- 2,500	1 3	- 3,500	3	8 -	-	-	-
San Luis Obispo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara	-	-	-	-	-	-	-	-	1	-	2	30	20,000	-	-
Santa Cruz	-	-	-	-	-	-	-	-	-	-	3	30	13,000	480	300
Shasta	4	-	-	27	98,000	141	9	6,000	11	13,271	3	16	13,000	-	-
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	6	-	-	15	-	150	-	-	3	-	1	7	15,000	-	-
Solano	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
Sonoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stanislaus	-	-	-	4	-	16	10	-	2	-	-	-	-	-	-
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	-	-	-	-	-	-	4	8,000	2	3,000	-	-	-	-	-
Trinity	-	-	-	168	160,250	142	-	1,000	8	27,050	1	17 ½	-	8,000	-
Tulare	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuolumne	33	86,000	32,124	21	375,700	270	5	-	3	12,500	-	-	-	-	-
Yolo	-	-	-	-	-	-	-	-	-	-	3	6	30,000	12,000	1,000
Yuba	2	5,500	-	22	153,600	952	4	-	10	59,000	5	118	70,000	-	-

#### RAILROADS. Miles Cost. Number. COUNTIES. in Length. Alameda..... ---Amador..... --\_ Butte..... -\_ \_ Calaveras..... ---Colusa..... -Contra Costa.. -\_ Del Norte..... \_ -\_ El Dorado..... -\_ Frezno..... -\_ \_ Humboldt..... --Klamath..... --Los Angeles... -\_ Marin..... --Mariposa..... \_ Mendocino..... --\_ Merced..... \_ -Monterey..... --\_ Napa..... -\_ Nevada..... --\_ -Placer..... --Plumas..... --2 Sacramento.... 30 \$1,500,000 00 San Bernardino..... --San Diego..... --\_ San Francisco. 2 1⁄2 1 -San Joaquin... ---

### IMPROVEMENTS (cont'd)

San Luis Obispo	1 - 1	_	_
San Mateo	_	-	-
	-	-	-
Santa Barbara	-	-	-
Santa Clara	-	-	-
Santa Cruz	-	-	-
Shasta	-	-	-
Sierra	-	-	-
Siskiyou	-	-	-
Solano	1	22	Graded
Sonoma	-	-	-
Stanislaus	-	-	-
Sutter	-	-	-
Tehama	-	-	-
Trinity	-	-	-
Tulare	-	-	-
Tuolumne	-	-	-
Yolo	-	-	-
Yuba	-	-	-
Stanislaus Sutter Tehama Trinity Tulare Tuolumne Yolo			- - - - - - - - - - - -

COUNTIES.	Apple.	Peach.	Pear.	Plum.	Cherry.	Nectarine.	Quince.	Apricot.	Fig.	Aloe.	Citron.	Lemon.	Orange.	Olive.
Alameda	57,264	101,550	62,386	2,000	29,370	7,200	1,250	26,340	5,730	-	-	-	78	368
Amador	32,263	35,596	5,951	693	9,476	1,707	1,359	2,313	597	-	-	-	-	-
Butte	10,750	99,060	5,840	1,172	731	2,000	177	2,227	741	-	-	27	18	-
Calaveras	20,992	33,090	2,479	2,090	1,095	802	522	1,289	553	-	-	4	24	3
Colusa	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contra Costa	23,000	13,000	5,950	1,458	3,090	579	196	1,021	1,800	-	-	2	7	-
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	78,149	73,349	6,013	5,287	2,681	1,314	3,061	1,721	504	-	-	-	-	-
Frezno	570	2,425	-	-	-	25	18	-	21	-	-	-	-	-
Humboldt	15,885	2,330	567	598	336	5	92	169	6	-	-	-	-	-
Klamath	423	360	30	20	30	11	7	9	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	22,732	2,596	979	795	350	40	143	142	67	-	-	-	-	-
Mariposa	1,881	3,901	350	317	168	72	86	249	61	-	-	-	-	-
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	5,065	5,780	1,500	322	339	65	35	93	70	-	-	-	20	-
Monterey	1,890	2,200	2,400	200	200	-	-	-	130	-	-	-	-	-
Napa	41,537	34,280	4,731	2,041	1,936	1,538	246	1,872	525	-	-	6	16	2
Nevada	22,000	324,000	1,900	800	700	289	631	400	99	-	-	-	-	-
Placer	23,360	40,740	7,521	6,436	6,036	1,400	1,000	1,836	400	-	-	-	16	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento San	125,000	180,000	46,570	27,167	21,144	6,104	62,038	17,895	3,630	-	-	210	87	3,760
Bernardino	3,299	14,188	400	479	244	200	375	674	267	-	50	-	-	150
San Diego	200	3,000	2,000	150	-	50	95	100	175	-	40	50	100	1,200
San Francisco.	4,000	4,000	3,000	2,000	2,000	200	1,500	3,000	200	-	-	-	-	-
San Joaquin	17,670	16,840	12,870	750	630	400	150	650	600	-	-	-	-	-
San Luis														
Obispo	780	1,600	960	110	200	40	560	216	45	-	17	46	13	126
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### HORTICULTURAL PRODUCTS. - NUMBER OF TREES AND VINES.

Santa Clara	60,000	32,000	15,000	4,000	3,000	2,000	1,000	5,000	500	100	-	-	100	100
Santa Cruz	11,500	2,500	1,400	1,780	425	280	170	270	60	-	-	2	-	7
Shasta	4,500	13,200	1,500	500	250	550	-	300	-	-	-	-	-	-
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	10,000	15,000	2,000	3,000	1,000	-	500	-	-	-	-	-	-	-
Solano	15,996	32,381	3,573	1,592	1,486	-	-	2,144	1,772	-	-	-	-	-
Sonoma	24,500	22,500	715	1,075	2,075	350	125	20	75	-	-	-	-	-
Stanislaus	3,309	7,426	439	380	425	70	-	500	75	-	-	-	-	-
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	7,630	33,890	1,624	1,515	589	380	263	605	422	-	-	-	-	-
Trinity	30,169	12,589	2,697	2,254	216	537	113	665	-	-	-	-	-	-
Tulare	6,572	8,200	968	600	636	-	101	412	-	-	-	-	-	-
Tuolumne	19,796	39,810	3,724	1,630	1,046	176	45	215	290	-	-	-	-	-
Yolo	43,243	96,400	12,327	23,780	2,899	22,400	480	5,600	800	-	-	-	-	-
Yuba	28,800	61,677	6,223	3,720	4,181	5,331	750	5,532	450	-	-	25	50	10

				1													. <u> </u>
COUNTIES.	Pomegranate.	Pine Apple.	Prune.	Persimmon.	Pecan.	Cherimoya.	Almond.	Walnut.	Filbert.	Gooseberry.	Raspberry.	Strawberry Vines.	Grape Vines.	Tuns of Grape.	Gallons Wine.	Gallons of Brandy	Value of Fruit.
Alameda	-	-	-	-	-	-	720	30	-	13,270	25,650	acr's 204	437,200	-	2,100	-	-
Amador	-	-	-	-	-	-	704	62	-	2,920	4,076	216,304	159,902	-	-	-	-
Butte	-	-	-	-	-	-	127	-	-	1,200	1,750	311,000	238,100	125	300	-	-
Calaveras	98	-	25	-	-	-	283	68	4	1,851	12,366	301,572	169,784	90 ½	460	100	-
Colusa	-	-	-	-	-	-	-	-	-	_	_	_	_	-	-	-	-
Contra Costa	19	-	-	-	-	-	-	-	-	1,328	2,110	11,625	31,715	-	-	-	-
Del Norte	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Dorado	-	-	-	-	-	-	311	-	-	-	-	-	360,258	-	-	-	-
Frezno	-	-	-	-	-	-	-	-	-	-	-	7,000	7,500	-	-	-	-
Humboldt	-	-	-	-	-	-	1	-	-	2,156	1,262	112,000	5,160	-	-	-	-
Klamath	-	-	-	-	-	-	-	-	-	-	-	-	1,500	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marin	-	-	-	-	-	-	27	4	-	1,189	975	22,984	13,791	-	1,500	-	\$5,000
Mariposa	-	-	-	-	-	-	27	-	-	-	-	145,000	15,015	500	-	-	-
Mendocino	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merced	42	-	42	-	-	-	15	25	-	35	60	150,000	55,000	-	-	-	-
Monterey	-	-	-	-	-	-	150	25	-	-	-	-	85,000	-	1,500	-	-
Napa	5	-	12	-	-	-	325	130	-	1,900	50,000	20,000	148,578	465	10,000	800	-
Nevada	-	-	-	-	-	-	-	-	-	-	-	acres 8	9,000	-	-	-	-
Placer	60	-	-	-	-	-	700	80	-	400	7,000	200,000	135,532	-	-	-	-
Plumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sacramento San	220	-	-	-	-	-	2,075	6,200	-	8,510	87,714	360,420	566,320	-	3,967	-	155,900
Bernardino	125	-	-	-	-	-	185	150	-	4	50	300	429,569	-	2,000	100	-
San Diego	160	-	15	-	-	5	75	100	-	35	150	1,000	65,000	-	-	-	-
San Francisco.	-	-	1,500	-	-	-	50	-	-	10,000	3,000	400,000	4,000	-	-	-	-
San Joaquin San Luis	-	-	-	-	-	-	-	150	-	1,500	10,000	50,000	168,250	-	-	-	-
Obispo	38	-	3	-	1	-	36	11	-	500	-	2,000	1,900	-	-	-	3,000
San Mateo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### HORTICULTURAL PRODUCTS. - NUMBER OF TREES AND VINES (cont'd.)

Santa Barbara	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Santa Clara	50	50	100	-	-	-	100	200	50	30,000	20,000	300,000	1,500,000	2,500	20,000	-	400,000
Santa Cruz	-	-	-	-	4	-	38	25	-	300	450	25,000	9,000	-	-	-	12,000
Shasta	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,500
Sierra	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siskiyou	-	-	-	-	-	-	-	-	-	-	-	-	6,000	-	-	-	-
Solano	-	-	-	-	-	-	-	-	-	-	-	-	520,630	-	10,580	460	-
Sonoma	-	-	-	-	-	-	15	120	-	-	-	12,272	45,000	175	3,490	-	-
Stanislaus	-	-	-	-	-	-	10	-	-	128	264	10,755	33,049	5	-	-	6,000
Sutter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tehama	-	-	3	-	-	-	73	23	-	815	25	74,800	56,055	11	-	-	6,100
Trinity	-	-	-	3	-	-	7	17	-	775	836	acres 5 1/2	3,849	-	-	-	-
Tulare	-	-	-	-	-	-	-	112	-	500	500	30,000	52,459	-	-	-	-
Tuolumne	-	-	-	-	-	-	-	-	-	-	-	-	171,172	112	4,820	1,900	-
Yolo	-	-	-	-	-	-	508	20	-	100	84	-	236,480	-	-	-	-
Yuba	50	-	-	-	12	-	125	100	-	800	2,500	acres 5	500,000	-	2,530	-	200,000

COUNTIES.	Real Estate.	Improvements On.	Personal Property.	Total Valuation of Property.
Alameda	\$2,000,000	\$735,000	\$1,520,000	\$4,255,000
Amador	350,955	884,555	1,163,628	2,399,138
Butte	721,470	954,488	2,192,516	3,868,474
Calaveras	396,409	415,625	1,615,761	2,427,795
Colusa	-	-	_	_
Contra Costa	717,605	333,280	1,273,979	2,324,864
Del Norte	-	-	_	_
El Dorado	325,865	1,232,120	2,032,787	3,590,772
Frezno	207,112	52,300	631,765	891,177
Humboldt	287,946	296,674	781,741	1,366,361
Klamath	-	-	-	-
Los Angeles	-	-	-	-
Marin	1,002,684	195,920	1,068,131	2,266,735
Mariposa	265,730	421,939	722,680	1,410,349
Mendocino	-	-	-	-
Merced	-	-	-	-
Monterey	493,914	126,270	877,483	1,497,667
Napa	1,375,159	800,973	1,519,857	3,695,989
Nevada	1,847,276	257,371	1,260,203	4,064,850
Placer	989,953	-	2,088,878	3,078,831
Plumas	-	-	-	-
Sacramento	4,161,112	3,028,110	5,095,545	12,284,767
San Bernardino	-	-	-	-
San Diego	307,659	87,685	332,598	727,942
San Francisco.	25,125,825	-	10,683,814	35,809,639
San Joaquin	1,369,725	1,078,425	2,505,150	4,953,300
San Luis Obispo	425,534	54,790	815,591	1,295,915
San Mateo	-	-	-	-
Santa Barbara	-	-	-	-
Santa Clara	2,258,460	1,305,743	2,258,460	5,822,663
Santa Cruz	392,152	129,553	606,167	1,127,872
Shasta	-	-	-	1,750,000
Sierra	-	-	-	-
Siskiyou	888,339	-	1,923,739	2,812,078

#### ASSESSED VALUE OF PROPERTY.

Solano	1,217,472	704,516	1,960,713	3,882,701
Sonoma	1,277,190	654,463	2,298,352	4,230,005
Stanislaus	161,986	153,225	654,659	969,870
Sutter	-	-	-	-
Tehama	299,006	661,058	1,126,127	2,086,191
Trinity	-	-	-	1,266,280
Tulare	192,645	200,280	1,237,727	1,630,652
Tuolumne	208,800	1,597,925	1,505,675	3,312,400
Yolo	571,898	345,435	1,506,350	2,423,683
Yuba	1,593,873	1,772,983	3,052,172	6,419,028
Totals	\$51,433,754	\$19,180,706	\$56,312,248	\$129,942,988

### COMPARATIVE TABLE.

### Showing the Yield of Wheat and Barley per Acre for the years 1859 and 1860.

COUNTIES.	Acres of Land Cultivated.		Acres of Wheat.		Bushels of Wheat.		Acres of Barley.		Bushels of Barley.	
	1859.	1860.	1859.	1860.	1859.	1860.	1859.	1860.	1859.	1860.
Alameda	-	75,000	21,683	20,000	443,680	440,500	17,404	20,000	522,120	630,750
Amador	10,465	12,195	1,950	2,044	39,000	61,320	1,247	2,271	31,175	80,840
Butte	14,989	31,400	5,268	5,963	109,726	126,550	5,364	5,969	138,886	241,340
Calaveras	-	6,037 ½	-	524	_	18,340	-	1,456 ½	-	36,412 1/2
Colusa	8,500	-	5,250	-	65,625	-	2,625	_	39,375	-
Contra Costa	43,439	50,230	29,160	23,347	583,200	-	10,964	11,396	328,920	-
Del Norte	2,740	-	896	-	29,568	-	35	-	2,100	-
El Dorado	8,000	-	900	-	17,000	-	1,060	-	12,700	-
Frezno	1,950	2,669	500	260	1,000	6,850	800	536	20,000	21,440
Humboldt	-	3,547	-	1,564	-	40,563	-	58	-	1,991
Klamath	-	3,327	1,100	1,100	24,200	19,800	300	-	7,500	-
Los Angeles	11,040	-	2,500	-	4,000	-	2,400	-	7,000	-
Marin	6,349	14,704	1,010	11,429	-	42,870	660	1,415	2,998	42,450
Mariposa	1,200	1,895	200	819	4,000	1,790	400	802	8,000	3,720
Mendocino	13,020	-	4,020	-	-	-	5,000	-	-	-
Merced	15,000	12,575	4,000	3,500	75,000	52,500	7,000	6,718	140,000	134,360
Monterey	10,900	13,500	1,819	2,250	72,760	92,000	1,687	2,000	49,510	62,000
Napa	70,000	35,909	34,684	26,114	867,110	652,850	13,978	3,403	349,450	102,090
Nevada	6,957	30,000	957	4,360	23,915	100,000	2,700	7,000	42,500	207,000
Placer	-	-	4,930	5,000	160,360	170,000	3,686	4,450	110,560	130,400
Plumas	-	-	-	-	-	-	-	-	-	-
Sacramento	57,700	57,983	11,300	11,562	167,200	175,000	23,470	18,050	586,450	300,683
San Bernardino	1,356	7,489	400	1,322	8,000	-	500	1,346	1,500	-
San Diego	-	3,500	-	700	_	14,000	-	1,200	-	36,000
San Francisco	1,000	1,500	25	30	700	-	250	300	7,500	-
San Joaquin	95,900	158,970	42,400	59,665	635,200	895,000	30,150	45,625	527,400	912,500
San Luis Obispo	1,200	6,500	490	460	12,250	20,000	160	700	5,000	50,000
San Mateo	20,000	-	3,200	-	96,000	-	1,300	-	80,000	-
Santa Barbara	-	-	-	-	-	-	-	-	-	-
Santa Clara	81,517	70,000	20,916	20,000	522,900	400,000	3,062	14,000	91,860	300,000
Santa Cruz	38,710	26,827	14,000	9,000	420,000	243,000	5,200	7,300	156,000	212,000
Shasta	4,920	6,240	1,460	1,680	36,500	34,240	1,980	2,121	33,660	32,125
Sierra	554	-	-	-	-	-	-	-	-	-
Siskiyou	19,850	-	6,000	-	90,000	54,187	3,250	-	91,250	22,586

Solano	-	44,454	14,714	14,256	294,300	-	5,450	15,687	119,000	-
Sonoma	124,175	148,347	10,041	9,285	328,525	275,062	6,396	2,518	255,840	125,862
Stanislaus	6,720	12,062	1,878	3,257	20,000	65,140	3,500	4,362	70,000	140,860
Sutter	-	-	-	-	-	-	-	-	-	-
Tehama	-	13,194	-	5,709	-	142,725	-	5,026	-	150,780
Trinity	2,857	3,370	769	1,212	-	17,756	269	265	-	6,625
Tulare	4,085	6,307	2,369	3,247	47,380	81,175	1,059	1,930	26,475	38,600
Tuolumne	5,069	9,000	858	1,655	-	3,440	1,091	845	-	1,985
Yolo	43,573	39,689	15,164	13,236	121,312	459,360	24,536	25,694	245,260	1,541,640
Yuba	30,000	28,704	3,000	7,192	90,000	223,302	5,900	6,764	177,000	243,761
Totals	763,735	937,133	270,111	271,742	5,410,411	4,919,320	194,833	221,207	4,286,989	5,790,800

# **APPENDIX.**

### **REPORTS OF COUNTY SURVEYORS.**

#### COLUSA COUNTY.

WILL S. GREEN.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, COLUSA CO. November 20, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

SIR: - In compliance with the instructions contained in your general circular, and your letter of the twelfth inst., I respectfully submit the following report:

SWAMP AND OVERFLOWED LANDS.

I have made, during the year eighteen hundred and sixty, eleven swamp land surveys, containing in the aggregate, three thousand seven hundred and seventy-eight and seventy-five-hundredths acres. There has been a great deal of swamp land surveyed in this county upon which the principal and interest has not been paid, as required by the statutes. Men dislike to invest money in land when the title is in so *chaotic* a state as is the present title (?) to swamp lands in this State. The Commissioners of the General Land Office say that no land that is "valuable" (that is, worth a quarter of a cent per acre,) will be ceded to the State, while the Legislature claims all that overflows; yet they *refuse*, from year to year, to take any steps to settle the question. The question with the purchaser is not whether the land is worth one dollar per acre, but whether the State's title is worth one dollar, or one cent, per acre.

There has been no particular plan of reclamation adopted in this county, but the land that has been purchased has generally been used for grazing purposes – for late pasturage.

Mr. Pearson has planted fruit trees on the highest portion of his land; they are doing finely. He has, also, for the last two years, raised an immense quantity of vegetables of all kinds – enough to supply the neighborhood for five or six miles around.

In the spring of eighteen hundred and fifty-nine, Mr. Isaac Howell plowed tule land, and on the fourth of June, planted corn, and raised as a fine crop as I ever saw growing in any corn country. He also planted at the same time, among the corn, a crop of melons, one of which took a premium at the State Fair of that year.

The land is, undoubtedly, adapted to the growth of everything known to our climate, and all that is wanting is to prevent the water from standing on the land so late in the spring as to make the growing season too short.

Most of the swamp land on the west side of the Sacramento River could be drained by cutting channels into Sycamore Slough, and into the river, so as to let the water in the tule fall with the river, instead of *drying out*, as it does at present. If the State title was considered good, or if it were perfected, beyond a doubt the land in this county would sell for three times as much as it would cost to drain it.

The Marysville and Vallejo Railroad Company are now building a dam from the most western spur of the Buttes to the Sacramento River. Most of the dam will be in this county. The object of the dam, I believe, is to keep the great quantity of water that runs in sloughs out of the Sacramento, and that runs down Butte Creek, from running across their road; and they also expect to reclaim some land by the operation. This will undoubtedly cause the land above the dam to overflow deeper during the winter; but if they will cut the channel above their dam, as deep as the bottom of the pond, or tule, it will be a benefit to the land above as well as to that below, for it is not the depth of the water that makes the land unfit for cultivation, but the length of time that it stands upon the land.

PUBLIC LANDS.

I have nothing to add to my report of eighteen hundred and fifty-eight, to which refer.

#### IRRIGATION.

The attention of the people of this part of the country has been turned to methods of irrigation, since the failure of the crops for the last four years. We have learned by experience, that if land – even the highest in the Sacramento Valley – is flooded once a year, it will produce good crops of any kind. One good flooding in the winter is better than all the summer irrigation that could be had. All the Sacramento River lands can be flooded in times of high water with but very little expense. There should be a law passed this winter regulating the right of way for ditch companies, etc. Stony Creek might be taken out where it enters the valley, and run down along the middle of the plains for fifty or sixty miles, and irrigate at least one hundred thousand acres of good farming land that is now unoccupied, because people are afraid of the dry seasons. There has been as yet no definite plan of irrigation adopted – every man gets the water on his own land as best he can, without consulting his neighbors.

The county boundary is just where it should be, and if there was a portion of the northern line, from Butte Creek to the Sacramento River, run, the boundary would be well marked. The cost of running and marking it would not exceed one hundred nd fifty dollars.

There are but two grist mills in the county – the "Sico," at Colusa, and the "Grand Island," on Grand Island, about eight miles below Colusa; both of which are propelled by steam. There is one steam saw mill in the north-west corner of the county, and one being constructed on Stony Creek, to be propelled by water.

Very respectfully, Your obedient servant,

WILL S. GREEN, County Surveyor of Colusa County.

#### LOS ANGELES COUNTY.

EBENEZER HADLEY.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, Los Angeles, Jan'y 1<sup>st</sup>, 1861.

Hon. H. A. HIGLEY,

Surveyor-General:

SIR: - In the discharge of the duties imposed by law, and under instructions from your office, I beg leave to submit the following report:

As there are not on file in this office any reports which may have been made by my predecessors, I am unable to know what information, if any, respecting this county, may have heretofore been laid before you. To avoid, therefore, a possible repetition, I shall either entirely omit, or confine myself to a brief summary of the general geographical, geological, topographical, agricultural, and mineral, features of this county. It is bounded on the east by San Bernardino, on the north by Buena Vista, and on the west by Santa Barbara, counties. On the south it is bounded by the ocean, and for a short distance on the southeast it adjoins the county of San Diego.

Los Angeles County has a sea-coast, extending from near the mouth of the San Mateo Creek, where it joins the county of San Diego, to Point Malaga, a distance of nearly one hundred miles. It also includes two habitable islands, named Santa Catalina, and San Clemente. The first has been, for more than thirty years, the pasture grounds of large numbers of wild goats. Although not abundantly watered, it is well adapted to the raising of sheep, and capable of furnishing subsistence to a large number. A few settlers, (about fifteen or twenty at the present time,) have made it their residence for a number of years.

A large part of this county consists of plains, generally fertile, affording luxuriant pasturage, and wherever the means of irrigation are to be found, the soil produces abundant harvests.

In the southeastern part of the county, about twenty-five miles from the ocean, rises the mountain of Santiago, which, running south-easterly, increases in breadth, and approaches the coast near San Diego County. Continuing on towards the southeast, it spreads out in the latter county, and becomes incorporated with the great Sierra Nevada chain, which, traversing the counties of San Bernardino and San Diego, continues through the entire length of Peninsular California, and is lost at Cape San Lucas.

Through the north and western borders of this county, passes a range of mountains, which, issuing from the Sierra Nevada chain in the vicinity of the Peak of San Bernardino, takes a more westerly direction, and dividing the valley or plain of Los Angeles from the plains of Buena Vista County, enters the county of Santa Barbara, and with a regular and well defined base on the north and east, covers, with the aid of numerous spurs, reaching to, or terminating abruptly along the coast, the greater part of the coast counties south of the bay of San Francisco, and forms the Coast Range of mountains, south from *Monte del Diablo*.

With the exception of a small portion of the county lying along the boundary of Buena Vista County, and which is partially protected by the Sierra Nevada, the high mountains on the east, north, and northwest, form an effectual barrier for the protection of the greater part of Los Angeles County from those inhospitable dry and withering winds, which, coming from the arid regions of Utah and the eastern frontier of California, (where the heat of summer and cold of winter, are alike intolerable,) lick up the moisture, and rapidly extract the vital principle from every living and green thing, exposed to their insatiable thirst, with most destructive effect.

Not only do the mountains shelter the greater part of the plains and valleys of this county from the deleterious influences of those winds which blow from the interior of the continent, but they catch and return the genial rays of the sun upon the valleys and plains, thus producing an atmosphere, which for softness and salubrity is unsurpassed.

The rivers of this county are unimportant, except as furnishing water power, and supplies for irrigation. The largest volume of water in this county is found on the Santa Anna River, which has its source in the county of, and near the Peak of, San Bernardino. Its waters flow off southwesterly, through the county of San Bernardino, and sweeping along the northern base of the mountain of Santiago, enters this county. When not swollen by the winter rains the river is lost in the sands of its own bed before reaching the ocean.

This river, where it debouches from the gorge formed by the mountain of Santiago on the south, and a range of hills on the opposite side, presents a body of water sufficient, with proper management, to irrigate a large quantity of the extensive plains upon each side of the river, and between this point and the ocean a distance of about twenty-five miles. These plains now only furnish pasturage for herds, the value of which is yearly diminishing. The point where the waters of this river find the ocean is about forty miles southeast of the city of Los Angeles. The intervening country is a plain, through which the waters of the San Gabriel and Los Angeles rivers seek the ocean.

The San Gabriel River which has its source in the mountains near the boundary line between this and San Bernardino County, issues from the mountain, and enters the plain twenty miles northeast of the county seat, and about fifteen miles west of the eastern limits of the county. This river traverses the plain for a distance of about thirty miles, reaching the ocean about ten miles from, and east of, the port of San Pedro. Its waters are used during the summer for the purpose of irrigating a small portion of the vast area of fertile and productive lands through which it flows, or are evaporated by the sun, or wasted and lost in those sands which, from the beginning, the river has been continually bringing from its remote and mountain sources, form a bed in which to bury itself. About fifteen miles west of the city of Los Angeles the river of that name has its source, and passing the city joins the San Gabriel River about fifteen miles from, and nearly south of, the city. This river, like the two preceding, for a considerable distance from its mouth, is, during the summer, without water. It is fed by springs which rise along its course, and its volume of water is less affected by the droughts of summer than the other streams of this county, and those generally of the State. The large numbers of vineyards and orchards in and about the city of Los Angeles, as well as fields for summer crops, are irrigated from this river. It has some tributaries which, during the rainy season, augment the volume of water, but which are invariably dry during the season when irrigation is required.

The mineral resources of this county have not been developed to that extent which the early discoveries and indications would seem to have warranted.

The first positive indications of the auriferous character of California were observed in the mountains on the western limits of this county, and near the line of Santa Barbara County. Shortly after, gold was discovered near the Santa Clara River, and not far from where the indications had been observed, at a point about fifteen miles west of San Fernando. During the spring and early part of the summer of eighteen hundred and forty-two and eighteen hundred and forty-three, from fifty to one hundred persons were engaged in washing for gold in this locality with remunerating results. Gold was also discovered in a number of other localities in this county at that time.

For the past five years the bed of the San Gabriel River, as also the mountain hill sides along its course, and the foot hills, where it debouches from the mountain, have furnished gold in sufficient quantity to induce miners to labor in the gold fields of that river. The number of persons employed has fluctuated, at times reaching four hundred men, at others falling as low as one hundred.

Silver ore has been discovered, and lodes opened in the north west part of the county, which warrant further prosecution. A silver lead has also been recently opened in the gold fields of the San Gabriel River.

This country is well adapted to grazing. The plains furnish, in great abundance, bur clover and pin grass, produced yearly from the seed, and the hills and elevated table lands produce perennial grasses of unsurpassed excellence.

With the exception of a small part of the county in the immediate vicinity of permanent streams which afford with but little cost the means of irrigation, the earth is but little cultivated. The productive power of the soil and atmosphere have not been developed in this county, since the acquisition of California by the United States, with that rapidity, success, and extent for which the genius and enterprise of the Americans are so celebrated. This must be attributed to the limited supply of water furnished by the streams at the season of the year when required for irrigation, and an acquiescence in the popular belief that irrigation is essential to the growth of the summer crops.

The practical husbandman, whose mind has been expanded and cultivated by science, when observing the fields in a state of nature producing annually bountiful crops of grasses, maturing seeds from which to grown another crop the following year without aid from the hand or mind of the laborer, could arrive at no other conclusion, than that an untilled soil and climate which year after year does this, would, under judicious and skillful cultivation, bring to perfection any and all the cereal and leguminous crops of the farmer.

That all our fertile plains, which in a state of nature produce and perfect abundant crops of grasses, can, under the management and tillage of scientific and experience farmers, be made to produce, without irrigation, abundant crops to reward the husbandman, must appear both reasonable and certain.

If, however, water should be required to mature and perfect crops, under the most judicious cultivation, or for the growing of crops before the inauguration of a system of successful cultivation without the aid of irrigation, the mountains, which shelter us from the blighting winds of the desert regions of the interior, are also capable of furnishing supplies to meet all the demands which may be made upon them by the plains and valleys. Not only the rivers of San Gabriel and Los Angeles, but numerous smaller streams which, during the winter and spring, issue from the mountains, draining off an immense body of water, would furnish the means of filling reservoirs (artificial lakes) which might be easily formed along the base of the mountains, thus converting the now useless valleys and basins of the foothills and permanent lakes and ponds, which would perpetually pour forth their innumerable rivulets of vegetable vitality, resulting in an amount of productiveness and wealth absolutely incalculable.

Labor and capital of an inconsiderable amount, when compared with that which has been expended in the ditch and reservoir system for the development of the mineral wealth of California, would create a ditch and reservoir system for agricultural purposes, the effect of which would be to convert the unproductive plains and valleys which spread out from mountains to the ocean's shore, with perpetual verdure and a continual harvest. The waters of the San Gabriel River alone, are sufficient to feed lakes from which thousands of acres of land, unsurpassed by any in the world, might be abundantly irrigated. Such a system of ditches and lakes and rivers would also afford an amount of water power which, when required by the wants of that increased population to which this system would give remunerative employment, would be invaluable for manufacturing and other purposes.

Fruitless attempts have been made in various localities of this county to obtain water by sinking artesian wells. The high mountains of this county and vicinity, the waters of which mostly flow off over the plains to the south and west, do not furnish artesian water on those plains unless at a depth which has not yet been attained. The earth has been penetrated more than eight hundred feet in the city of Los Angeles without procuring water. A bed of inundated bituminous clay, containing marine fossil, underlies the plain, and which has not been passed through in the efforts which have been made.

Asphultum finds its way through this thick deposit, and rises to the surface of the earth in various places. A manufactory of Kerosene or coal oil was not long since established upon one of the asphaltum fountains, but the manufacture has been suspended, from an unfortunate dispute respecting the title to the land.

Although the soil and climate of this county are well adapted to the growth of all the fruits and grains of the temperate zone, as well as many of those belonging to the tropical regions, yet, the cultivation of wheat has not resulted in causing it to become a staple product. The frequent occurrence of fogs and a still atmosphere in the early part of the day, in the season when the grain is forming, combine to produce a blight (mildew) which too often blasts the sanguine hopes of the husbandman. Corn, barley, potatoes, beans, peas, and summer crops, in general, are successfully cultivated in most parts of the county when water can be procured for irrigation. The introduction of a system of cultivation applicable to vineyards, orchards, and summer crops, which should render irrigation unnecessary, or the creation of lakes which could furnish a competent supply of water, would cause the productive capabilities of Los Angeles County to surpass the most sanguine calculations.

The cultivation of the grape has been attended to with a success for which no parallel can be found in the most prolific countries of Europe. Owing to causes not difficult to ascertain, the manufacture of wine has not resulted as favorable as was anticipated. That knowledge, obtained by experience and a careful study of cause and effect, as they shall be developed in the making of wine, will enable the manufacturer to avoid those errors into which he may have been led, and teach him to produce wines which will not only meet with a ready demand, but, instead of being inferior, will far surpass those of Europe, must admit of no doubt.

The exorbitant value of money in California, and consequently the great expense attending the making and storing of wine until it acquires a degree of perfection essential to its obtaining that reputation which will overcome the existing taste or partiality of wine-drinkers, has caused new, unsound, imitative, and improperly made, wines, to be forced upon the consumer, to the great detriment of the wine-making business in California.

The accumulation of capital in the hands of the proprietors of vineyards, or the acquisition of vineyards by enterprising capitalists, or, perhaps, the separation of the business of cultivating the vine from the making of wine, and bringing the latter branch under control of individuals of sufficient intelligence and pecuniarily able to prosecute the business carefully and scientifically, will remedy the evil under which this important branch of industry now suffers.

The cultivation of the orange, which bids fair to become an important industrial pursuit, has unfortunately been paralyzed by the introduction of the scale insect, (*cocus hesperidum Linnaeus*,) the multiplication and ravages of which, having materially diminished the produce of the orchards and seriously injured the trees, has destroyed the flattering prospects which were entertained but recently of this branch of industry. Of the many remedies made use of by our horticulturists, none have proved efficacious to destroy this insect. In some orange-growing countries where the *cocus hesperidum* has proved destructive, another insect, which preys upon it, has been introduced with success, and rescued the orangeries from their ravages.

The mountains on the northern and western limits of this county present difficulties of no ordinary character in the construction of carriage roads. A road has been opened at a heavy cost to this county, through the mountain on the north Buenavista County, which is yet but an indifferent carriage-way. On the west the obstacles in the way of a wagon road to Santa Barbara and other counties on the coast, are still more formidable, and the financial condition of this county is such that is has not been considered expedient to incur the expense required to build a wagon road in that direction. All the coast travel of the three southern counties with those of the north is compelled to make use of this impracticable road, and if a wagon road was constructed in an economical manner, even at the expense of the State, it would be soon reimbursed in the augmented valuation of property, not only along the line of the road, but generally in these two counties.

#### SCHOOL LAND LOCATIONS.

Warrants Nos. 310, and 311, located by George Hanson, July nineteenth, eighteen hundred and sixty, on the following described land: Northeast quarter of the southeast quarter, and southeast quarter of the northeast quarter of Section 5; the north half of the southwest quarter, and south half of northwest quarter, and south half of northeast quarter, and south half of northeast quarter of Section 4, Township 4 south, Range 9 west, San Bernardino meridian.

I have omitted in this report such statistical information as falls deservedly under the cognizance and comes within the province of the County Assessor, believing that from his office you will have received satisfactory reports.

> EBENEZER HADLEY, County Surveyor of Los Angeles County.

#### MARIN COUNTY.

A.D. EASKOOT.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, December 1<sup>st</sup>, 1860.

Hon. H. A. HIGLEY,

Surveyor General:

SIR: - In obedience to the law, and in compliance with your instructions, I have the honor to submit the following report:

According to the surveys made by the United States of *Spanish* and *Mexican* grants, this county contains three hundred and ten thousand acres of land.

Out of this amount there is about twelve thousand acres of swamp and overflowed land, which has been segregated by the U. S. Surveyors, and I suppose belongs to this State.

The number of surveys made on this land and approved by the Surveyor-General, and handed over to the purchasers – seventy-nine. Number of acres – eleven thousand and thirteen, and seventy-nine-hundredths. Number of re-surveys made on the same land – nine. Number of acres – one thousand two hundred and seven and fifty-seven-hundredths, leaving nine thousand eight hundred and six and fortyhundredths acres that have been actually surveyed.

The number of surveys made of State tide-land – three. Number of acres one hundred and two and fifty-two-hundredths.

The number of surveys made of State school land – two. Number of acres – one thousand one hundred and fifty-three and twenty-one-hundredths.

The law of eighteen hundred and fifty-eight, concerning swamp and overflowed land, required the whole of the purchase money within thirty days after the record of approval in my office. A number of persons had surveys made under this law, but before the thirty days had expired, the law of eighteen hundred and fifty-nine, requiring only twenty per cent. purchase money and interest on the balance, was passed. Those persons thinking the latter law applied to their surveys, paid the per centage and interest only, and so forfeited their lands and money.

A number of persons also had surveys made under the law of eighteen hundred and fifty-nine, but not having paid exactly within the thirty days, )though they paid a short time after,) they, by the law of eighteen hundred and fifty-nine, lose their land.

Now, I think the Legislature ought to pass a law for the relief of such persons as have paid the per centage and interest, and been to the expense of a survey before any other person has filed an affidavit for the same land – provided such persons continue to pay the interest on their respective surveys.

#### COUNTY BOUNDARY.

I have some suggestions to make with regard to some portions of the county boundary between Marin and Sonoma counties. That portion from where the San Antonio Creek strikes the Salt Marsh, to Petaluma Creek, from that point the San Antonio Creek is very crooked, and many large creeks running into it, and in a short time it will be impossible to tell which is the San Antonio Creek. Now, if the boundary line should run due east from the point where the San Antonio Creek strikes the Marsh to the Petaluma Creek, it would be a much better boundary line than to follow the meanderings of the San Antonio Creek, and I think it would be satisfactory to both counties.

#### TAX VALUATION OF PROPERTY.

Number of acres in Marin County, as before stated, is three hundred and ten thousand.

Cash value of above Cash value of improvements on real estate Cash value of personal property Cash value of town lots and improvements thereon	839,777
Total	\$2,084,575

TAXES OF MARIN COUNTY.

State tax	\$12,502 33
County tax	10,418 64
Road tax	1,039 86
Delinquent tax of last year	3,081 28
Redemption Fund.	7,257 73
Total	\$34,299 84

All of which is most respectfully submitted.

Your most obedient servant,

A. D. EASKOOT, County Surveyor of Marin County.

### NAPA COUNTY.

T. J. DeWOODY.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, December 12<sup>th</sup>, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

DEAR SIR: - In accordance with the provisions of the act of the Legislature, concerning County Surveyors, I respectfully submit the following report:

COUNTY ROADS.

Most all the roads in this county were laid out under the old law without a survey, so that I am unable to give the location of them. Under the law passed by the last Legislature, the county has expended about one thousand two hundred dollars improving the roads, and if the law is not repealed too soon, in a year or two more the roads in this county will be as good as any portion of the State.

#### BRIDGES AND FERRIES.

There is but one ferry in the county. There are no toll-bridges. The bridges having been built by the county are free. Two of them may be classed among the permanent improvements of the State, being of stone, built in a substantial and workmanlike manner, are an ornament to the county and a credit to the builder. The one that crosses Napa Creek on Main Street, is an elliptical arch, forty feet span. The one across Napa River consists of three arches, twenty-nine feet each; the two were built at a cost of one thousand eight hundred dollars.

#### COUNTY BOUNDARIES.

The boundaries of Napa County exist only on the Statute Book. The Board of Supervisors, through a mistaken idea of economy, have neglected to make provisions for paying for the survey, and therefore, there has never been any portion of it established. If the Legislature is disposed to alter the lines of this county I would, for the sake of improving the shape of the county, suggest the following changes: from the point where the present west boundary crosses the line of the "Huichica Rancho," follow the western boundary of said rancho to Sonoma Creek, thence down Sonoma Creek to San Pablo Bay, and along the bay and the Straits of Carquinas to the middle of range three west; thence north, through the middle of range three west, to the first standard line north; thence east as at present. And if the Clear Lake country is made into a separate county, I would recommend that the dividing line be the second United States standard, north, or the next township line north of the standard.

#### SWAMP AND OVERFLOWED LANDS.

I have made sixty-one surveys of swamp or overflowed lands, containing an area of ten thousand seven hundred and ninety-eight acres; of these four have been forfeited, and five of them are resurveys. A large portion of it is salt marsh, between Sonoma and Huichica creeks, which is entered by parties who have combined for the purpose of reclaiming it in connection, so as to reduce the expenses. They have twenty Chinamen at work, and have completed over six miles of levee, at a cost of about a dollar a rod. What it will be when it is reclaimed is as yet a matter of opinion. My own opinion is that it will be the most productive land in the State, it being an alluvial deposit of unknown depth. The cost of reclaiming cannot be a great deal, as it only overflows to the depth of a few inches, and the levee, with the ditch, and tide gate in the sloughs, can be made for one dollar a rod, that is, three hundred and twenty dollars per mile, which is about half the cost of a good board fence, and though a ditch fence on dry land is no fence at all, on the marsh it would be a secure one, as it would catch the leakage water, and being always wet at the bottom no animal could cross it without sticking in the mud. The growth at present on the marsh consists of a variety of salt grass, weeds, and a few bushes, and on the banks of some of the sloughs clover and pea vines, and in some places tules. When the water is kept off long enough for the ground to dry it can be burned over, and, with the exception of the places where there is a growth of tule, can be plowed without much difficulty; and after it is ploughed, and exposed to the rains of two or three winters, the salt will be leached out.

The plan that I would recommend is to make the ditches on the inside of the levee, and of sufficient size to furnish all the earth necessary to form the levee, and connecting with all the sloughs, so as to carry the water out of the small sloughs into the large ones, where a sufficient number of tide gates should be placed, so as to carry off all the water from the inside. These gates should be of redwood plank, at least two inches thick, made in shape of a long box, open at one end, and with a door at the other, hung at an angle of about forty-five degrees, so as to shut like a valve when the tide rises and presses on the outside; but to open when the tide falls, from the pressure of the water inside, thereby removing the water from the inside of the levee without the expense of machinery.

In this connection, allow me to call your attention to a large tract of salt marsh on the east side of Napa River, which, as it overflows by every tide, is probably the property of the Sate, but is claimed by the present holder of the Suscol Grant, from his construction of the wording of the grant, which calls for the "Estero de Napa," as the western boundary, and he claims to the low water mark on the channel of the Napa River; but if the high water mark is the line, all the marsh belongs to the State, and at the time of making the grant, salt marsh was not worth having, and where the grants were limited in quantity has almost invariably been left out; and in this case, if the proper measures were taken, the State could secure a large body of what will some day be valuable land. There are parties ready to enter the land, but do not like to undergo the expenses of a law suit, and if they lose the land lose also the money that they pay the State. If there was a provision for exactly such cases, by way of an amendment of the law providing for exactly such cases, by way of an amendment of the law providing for the money in case they should lose the land, then the land would all be entered, and the interest of the State attended to.

#### MINERALS.

Borax is found in abundance in two small lakes near Clear Lake, and in the same vicinity there is a bank of native sulpher, covering an area of about four acres. Rich specimens of cinnabar have been brought down from the neighborhood of Mount Saint Helena, and also native quicksilver, and several companies are engaged developing the mines.

Hot springs are found in different parts of the county, and also white sulpher; and the Mountain Springs, seven miles from Napa, can supply soda water enough for all the State.

Napa Valley has always stood high as a grain growing district, and never fails to produce a fair crop; but a great many persons are beginning to turn their attention to the cultivation of the grape for wine, and lands on the hill sides, that a year ago were considered hardly worth having, are now sought after for vineyards, and in a few years we hope to see Napa Valley, without losing its position as a grain growing district, rank high for its excellent wine. It has the same kind of volcanic soil as Sonoma Valley, and a warmer climate.

In agricultural statistics the County Assessor is better prepared to report than the County Surveyor.

The above is respectfully submitted by,

T. J. DeWOODY, County Surveyor of Napa County.

#### SAN JOAQUIN COUNTY.

DUNCAN BEAUMONT.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, Stockton, Dec. 10, 1860.

Hon. HORACE A. HIGLEY, Surveyor-General:

DEAR SIR: - I have the honor to transmit to you, in accordance with the act defining the duties of my office, the following report:

During the past year, applications for swamp land have been filed in this office amounting to ninety-five thousand acres. Almost all of the applications have been made for six hundred and forty acres. Surveys were made of all of this land last winter and spring, according to the applications.

The Swamp Land Act of eighteen hundred and fifty-eight authorized the purchaser to locate three hundred and twenty acres, restricting him to one-half mile front on any lake or navigable stream. The act of eighteen hundred and fifty-nine authorizes the location of six hundred and forty acres, but makes no provision for greater frontage. In all of this ninety-five thousand acres there are but ten claims which could be located ins strict accordance with the law. However, sixty-six locations have been made, embracing twelve thousand acres. These locations have been made by returning one section in two or more surveys. There is one instance, in which nine hundred and sixty acres was desired to be located, in which the land had to be divided in seven surveys, in order to comply with the law.

All of this land would have been returned and paid for before this time, had the law in reference to frontage been amended, as was contemplated at the time the surveys were made.

Under the statute, there are only two streams declared navigable in this county. Under a decision of the Supreme Court of this State, appended to the law in Wood's Digest, there are eighteen navigable streams, dividing these lands in such a manner that it is impossible to return surveys for six hundred and forty aces with only half-mile frontage. The interest of the State demands that the Legislature should amend this law at an early period of its next session.

Extensive and permanent improvements have been made during the past year in the tule lands of this county, demonstrating the perfect practicability of their reclamation.

Very respectfully, your obedient servant,

DUNCAN BEAUMONT, County Surveyor, San Joaquin County.

#### SONOMA COUNTY.

J. B. WOOD.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, Sonoma, Nov. 29, 1860.

Hon. H. A. HIGLEY,

Surveyor-General of California:

SIR: - In accordance with the law, and agreeable to your instructions, I beg leave to submit to you the following, my annual report:

As the County Assessor has, I presume, made his report, and with the additional information acquired by the taking of the census, I do not deem it necessary for me to say anything in regard to the statistics of the county.

#### INTERNAL IMPROVEMENTS.

There are two licensed ferries in Sonoma County; one is situated at the mouth of the Russian River, and the other is across the Russian River, at, or near, Healdsburg. The income arising from these ferries is very small, as they are seldom used, excepting at a high stage of water in the river. There have been some attempts at artesian well-boring, but with very little success. There has been but one of them that has discharged water above the surface, and that one in small quantities. We have no turnpike, or rail roads; no magnetic telegraph lines. There have been no improvements made on our highways for several years, consequently they are in a wretched condition; and the work that has been done to the roads, has been of no use, owing to the many changes that have since been made. You can frequently see mile-posts and bridges situated in the middle of some man's farm, that has been built or extended across the highway.

#### COUNTY BOUNDARIES.

The act of the Legislature defining the different boundaries of this county is so indefinite, than an officer of Sonoma or either of the adjoining counties can scarcely tell whether he is in his own county or an adjoining one, and more especially regarding that portion of the county line dividing Sonoma from Marin, which was changed by our last Legislature. The specification is so indefinite that I do not think a person with all the information that could be obtained, would be able to point out this particular line. I

would suggest its immediate location, which would prevent the many difficulties frequently arising.

Sonoma is an agricultural and pastoral county; there is but a small portion of land that is not suitable for grain or grazing purposes, perhaps one-fourth, which has a thick growth of timber and brushwood on it. There is only a small portion of swamp and overflowed land, situated on San Pablo Bay, Sonoma, Petaluma, and San Antonio, creeks, perhaps, fifteen thousand acres, nearly all of which have been surveyed.

#### PLAN FOR THE RECLAMATION OF OVERFLOWED AND SWAMP LANDS.

I can say but very little on this subject; as my experience in such matters has been very limited; it would, therefore, seem almost absurd on my part to hazard an opinion. However, in the first place, I would recommend a good system of ditching and embankments along the bay streams and principal sloughs, to prevent the outflows of the tide and the influx of the body of water which will accumulate by drainage, or from the main land. The work of ditching and embankments will obviate the necessity of fencing, and, consequently, reduce the expense of reclamation, which will probably not exceed four or five dollars per acre. I have no doubt that the plan I have recommended would, in the course of a very short time, cause the land to produce grass, and, as soon as that was accomplished, the reclamation would be complete. As to the mode of tilling, or the description of plough for such an operation, I can give no opinion, as no experiment of this kind has been made in this part of the county. The whole amount of swamp and overflowed land surveyed and approved by the Surveyor-General, is ten thousand five hundred and forty-four and twenty-six hundredths acres, on which some of the locators have commenced operations, but as little progress has been made in the work, I am unable to give you reliable information.

#### SCHOOL LAND WARRANTS.

School Land Warrant No. 275, located by William Mock for J. W. Ormsby, April fifteenth, eighteen hundred and fifty-six; School Land Warrant No. 65, located by William Mock for George Campbell, June fifteenth, eighteen hundred and fifty-seven, and relocated by J. B. Wood; School Land Warrant No. 160, for three hundred and twenty acres; No. 674 for one hundred and sixty acres; No. 676 for one hundred and sixty acres – are located upon the following described lands: The southeast quarter of the southeast quarter of the southwest quarter of the southeast quarter, the southeast quarter of the southwest quarter, the southeast quarter of the southeast quarter of the southeast quarter of the southeast quarter, the southeast quarter of the northeast quarter, and the northwest quarter of the southeast quarter, and the northwest quarter of the southeast quarter, and the

School Land Warrants Nos. 138 – 141 are located upon the following lands: Warrant No. 138, upon the southwest quarter of Section 32; Warrant No. 139 upon the southeast quarter of Section 31; Warrant No. 140 upon the northeast quarter of Section 6; Warrant No. 141 upon the northwest quarter of Section 5. Townships, Nos. 7 and 8, North Range, No. 7, west base and meridian of Mount Diablo – by J. B. Wood for Emsley Elliott, December third, eighteen hundred and fifty-seven.

School Land Warrants Nos. 266, 273, and 278, are each for one hundred and sixty acres. No. 266 upon the west half of the southwest quarter, the northeast quarter of the southwest quarter, and the northwest quarter of the southeast quarter, of Section 32; No. 273 on the east half of the southeast quarter; No. 278 on the west half of the northeast quarter, the northeast quarter of the northwest quarter, of Section 31, and the southeast quarter of the southwest quarter of Section 31, and the southeast quarter of the southwest quarter of Section 30. Township, No. 9, North Range, No. 7, west base, meridian of Mount Diablo.

Location made by H. H. Harman, Deputy County Surveyor for C. B. Grant – Warrants Nos. 86 and 87, located on the fractional north half of Section 5, Township No. 8, North Range No. 9 west, and fractional southeast quarter of same section, containing three hundred and eighteen acres.

Location of School Land Warrant No. 99, on the first September, eighteen hundred and fifty-nine, by C. C. Tracy, Deputy County Surveyor, upon the east half of Section 15, Township No. 6, North Range No. 8, west base and meridian of Mount Diablo.

Location of School Land Warrants Nos. 179 and 466, for one hundred and sixty acres each, September first, eighteen hundred and fifty-nine, by C. C. Tracy, Deputy County Surveyor, for Owen P. Sutton, upon the south fractional half of Section 26, the fractional southeast quarter of the southeast quarter of Section 27, the west half of the southwest quarter of Section 25; all of Township No. 7, of Range No. 8, west base and meridian of Mount Diablo.

Location of School Land Warrant No. 260, for three hundred and twenty acres, for C. H. Holmes, October ninth, eighteen hundred and fifty-nine, upon southeast quarter and west half of the northeast quarter of Section No. 3, and the west half of the southwest quarter of Section No. 2, Township No. 7, Range No. 8, west base and meridian of Mount Diablo.

Very respectfully, your obedient servant,

J. B. WOOD, County Surveyor Sonoma County.

#### SUTTER COUNTY.

PHIL E. DRESCHER.....County Surveyor.

COUNTY SURVEYOR'S OFFICE, November 27<sup>th</sup>, 1860.

Hon. H. A. HIGLEY,

#### Surveyor-General:

SIR: - In compliance with the statutes, I respectfully submit the following brief report:

For a small county, like Sutter, of about five hundred square miles, where more than one-third of the lands are annually more or less submerged, the title of the other two-thirds has been kept in suspense for the last ten years by supposed Mexican grants, it will appear natural that the interest must be great which an exclusive agricultural people have in the definite construction of the act of Congress of September, eighteen hundred and fifty, by which the swamp and overflowed lands were donated to the several States. In view of this important interest, allow me, therefore, to direct your attention to the speedy action necessary by the State in regard to the segregation of the swamp and overflowed lands from those of the General Government. A large quantity of these lands have been entered under the several acts of the Legislature, and consequently considerable sums have been paid into the State Treasury, without an adequate security of future title. The money this paid into the State Treasury is not so much of a loss to the persons who enter these lands as the delay put upon their operations in reclaiming said lands, as long as they are not finally considered swamp lands; on the other hand, it is to the interest of the State. It might turn out that by their labor they make their title more uncertain, the same as if they had left the land sin their natural condition, and consequently the settlers make their subsistence by cutting grass and making inferior hay on the small knolls and ridges that extend along the margins into the tule. Their actions are so retarded – as with most of the settlers of Sutter County in years past, when Mexican grants were adversely hanging over their farms – that they hardly have the courage to make brush fences around their grain-fields.

Fractional Townships Nos. 13 and 14 north, Range 1 east, and 12 north, Range 2 east, and Townships Nos. 13 and 14 north, Range 2 east, were sectioned by the U. S. Surveyors, in the fall of eighteen hundred and fifty-five. But very little swamp land has been marked off, and if the survey was to be made at the present time, now that the tules are burnt off to the ground, I doubt very much whether any swamp lands would be marked off at all. Where is the Surveyor that would not admit that the tules are easier sectioned after they have been burnt down, than any other lands in California? And then, twelve dollars per mile is pretty good pay.

Captain Vioget, who is said to have made the map of the New Helvetia Grant, for General Sutter, in the winter of eighteen hundred and forty, ought to be considered pretty good authority, (he may have been the first Surveyor that ever made a sketch of this section of California,) and he has marked a large portion of land between the Sacramento and Feather rivers, as "Tulares." Perhaps there is something in the season that these lands should be segregated by Surveyors comparative strangers to the country. I think the months of April and May would give more visible indications of the true character of these lands, than October or November.

It has been said, that in California the plow has been ahead of the compass. It might with equal truthfulness be said, that the actions of our Legislature are as far behind the interests of the people – as regards the segregation of the swamp and overflowed lands – as the compass is behind the plow.

No attempts have been made for the reclamation of swamp lands on a large scale, until this fall, when the Marysville and Vallejo Railroad Company commenced putting in their dam across the Sacramento River Slough. This slough is about two hundred feet wide and thirty feet deep, and heretofore discharged its full volume of water, for six months of the year, in an extensive tule bed; and if the dam that has been made across it by the railroad company should stand – of which there is little doubt, judging from its solid construction – it will lay a large body of from one hundred and eighty to two hundred sections, comparatively dry; and if, in the future, the waters of Butte Creek are confined in a canal dug through to Feather River, it will bring under cultivation the richest lands in Sutter County.

With these few necessary remarks, I close my Annual Report for eighteen hundred and sixty.

I am very respectfully, Your obedient servant,

> PHIL. E. DRESCHER, County Surveyor of Sutter County.

# MISCELLANEOUS REPORTS.

OF P. S. BEASLEY, ON THE RECLAMATION OF SWAMP LANDS.

PEACHDALE, November 22, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

SIR: - Agreeable to promise, I proceed to give you my plan for reclaiming tule lands. Commence on the front, and cut a ditch seven feet wide and four feet deep. Place the sod in two rows on the inside of the ditch, one row in eight inches of it, and the other far enough back to give sufficient space for the bottom dirt between them. Throw in the bottom dirt and levee is complete. Proceed in building the levee around the entire tract of land in the same way, and it is reclaimed. Always build the levee on the inside of the ditch. In extending the levee back from the river, commence at the edge of the water at low tide, run it back as deep as you can, and when in line with the front levee, put in a sluicebox. Fill in the ditch on top of the box, and that will prevent the tides from interfering much with the ditching on the inside of it. Continue the ditch back two feet wide and as deep as the bottom of the box, which will give drainage enough, and build the levees. When it has been extended back as far as required, commence at the other end of the front levee and extend the ditch back in the same manner. Then connect the back ends by a ditch five feet wide and four feet deep. The land is then reclaimed from water. In the summer, set the sod on fire and burn it off, which reclaims the land from tule and grass roots. Take particular care that the fire does not get to the levee, for if it does, it will burn it up. After the sod has burnt off, it leaves dust and ashes for four to ten inches deep. Sow wheat on this, harrow or brush it in, and it will make a fine crop. Potatoes produce very well planted in these ashes, and require no work after planting the first year, and the next year it can be plowed with one yoke of oxen. I have cultivated on land of this character, beets, turnips, onions, parsnips, carrots, cabbage, celery, lettuce, Indian corn, wheat, barley, oats, sweet potatoes and Irish, peas, beans, etc. They all grow finely.

This land is never too dry to plow. You can sow grain from September until the next May, and it will mature.

For the pasturing horses and cattle, I don't think the land can be equaled in the State.

It will cost about one dollar and seventy-five cents per rod to build the levee. The implements to work with in cutting the ditch and building the levee, are a "tule-cutter" to cut the sod with, and a hook to pull it out and plow it with; also, a long-handled round-pointed shovel.

Any persons desiring further information in regard to this subject, or to see for themselves my plan for reclaiming tule lands, can do so by coming to my place, ten

miles below Rio Vista, on the east side of the Sacramento River, where I shall be happy to give them all the information I possess on the subject.

I am, sir, yours respectfully,

P. S. BEASLEY.

OF J. M. SIDWELL, ON THE RECLAMATION OF SWAMP LANDS.

HORSESHOE BEND, TOLAND & LEE'S RANCHO, November 14<sup>th</sup>, 1860.

Hon. H. A. HIGLEY,

Surveyor-General:

SIR: - I have the honor to report the following circumstances which have presented themselves to my mind since my first experience in reclaiming the swamp and overflowed lands in this section of the country:

I made my first trial in eighteen hundred and fifty-four, upon a small piece of land which was overflowed every tide. I had to levee two and a-half feet high, which made it about one foot above the spring-tide mark. The first season it did not succeed well. The second, it became very tight, not leaking a drop. In June, eighteen hundred and fifty-five, I had the ground all spaded up. In July, I put the plow to work, turning the furrow toward the levee, filling up the ditch and making a solid bank. In a few more years it will appear like a natural bank. This I think is the best mode of making a levee on the bank of any stream. The only difficulty I have found in reclaiming these lands is in keeping the water from flowing over them. It is not necessary for back ditches; a good front levee is what is required. The ditch should not be over two feet deep. If the levee should be higher, make the ditch wider. The dirt from a five-by-two-feet ditch will make a levee of sufficient hight in most cases, until it can be raised by back plowing, which will prove far better than any machine that can be started.

On Captain J. H. Smith's claim, bordering on Cache Creek Slough, back of Rio Vista, I did not pretend to make a general levee, but merely stopped the small inlets or sloughs, putting sluices to each, according to their size; say, for instance, a slough ten feet wide, six feet deep, and one mile in length, a sluice one foot in depth by three feet in width, will be sufficient. I would not use any sluice smaller than two feet wide and one in depth. The sluice must increase more in proportion as the slough is wider and longer; for instance, in a dam which I put in for Smith, the slough being sixty-four feet in width and fourteen in depth, I placed a sluice eight feet in width and seventeen inches in depth, which should have been five feet in depth, so as to pass off the rain-water that collected in the slough from the hills. The slough is about two and a-half miles in length to the head, where there is a long, wide flat, covering an area of about two thousand or

more acres, which collects the water in the rainy season. As it is, there is somewhere near one thousand acres pretty thoroughly reclaimed for the sum of one thousand dollars, and by spending one thousand more, he can have three thousand acres pretty well reclaimed at a cost of sixty-six and two-third cents per acre. The larger the tract the less is the cost per acre for reclamation.

In constructing the levee on Dr. Toland & Lee's Rancho, I have cut a ditch five feet wide and two in depth, making the levee of the dirt therefrom, first taking the sod and making a good front next to the ditch, about two and a-half feet high, then putting the remnant of the dirt on the outside, packing it down well. After the expiration of one season, it will not let water in enough to be of any injury. The levee must have time to settle before it can be of service. It is nearly impossible to make it tight the first season. A levee is something like a fence – it needs repairing every year. It is for that reason that I advance the idea of shoal ditching and back plowing. By this means you can in a few years, have your levees on a grade apparently level, and annually increase them in hight.

It will not do to calculate on the immediate use of these lands for other than grazing purposes; the risk of overflow at first would be too great to put in crops of grain.

The dams I have built on the ranch, are made of brush and dirt, which if properly made, will never give out. I prefer brush to lumber dams. The lumber dam cannot be made to last more than ten years at most, while a brush dam, if built at the proper season, will increase in strength as it acquires age. To construct a brush dam in a slough, say fifty feet in width, and on an average of ten feet in depth, it will cost about five hundred dollars. A lumber dam would cost about one-third more. The sluices should not be placed in the slough; a channel should be cut around the end of the dam through solid ground, so that they will have a firm bed, and the dirt should be well rammed down at the sides. The length of sluices vary from sixteen to forty feet. It is not well to have the dam close to the bank especially when there are steamers running on the river – they cause a vibration of the gates, which is apt to damage the structure.

The land which I have reclaimed here in the early part of this season, is now dry enough for burning or plowing. Burning I do not approve of; though a quicker way of getting the land ready for cultivation, it is not so good. By plowing the land, in June or July, it will rot in time to raise a crop the following year. I think the first season, that sod corn might be raised to advantage, similar to the mode of raising the first crop in the Western States. It is argued that the ground is too cold; I think after the water is once shut off, the ground appears to undergo a change, and by turning it up at the time I speak of, there would be a heavy crop of grass, which, turned under, would act as a hot-bed another year.

I might, perhaps, go into detail still further, in this matter, but feeling that I am not competent to do the subject justice without further experience, I therefore submit the foregoing to your consideration.

I have the honor to be Your obedient servant,

> J. M. SIDWELL, Sup't of Reclamation at Horse-Shoe Bend.

# **REPORTS OF COUNTY ASSESSORS.**

AMADOR COUNTY.

FREDERICK P. SMITH.....County Assessor.

OFFICE COUNTY ASSESSOR, JACKSON, December 24<sup>th</sup>, 1860.

Hon. H. A. HIGLEY,

Surveyor-General:

SIR: - In compliance with your circular, and in conformity with the law, I submit the following, my annually report:

The total valuation of the property of this county, for the year eighteen hundred and sixty, is two million three hundred and ninety-nine thousand one hundred and thirtyeight dollars – falling below that of last year, sixteen thousand six hundred and eightyone dollars. The falling off is accounted for by the great depreciation in the value of live stock.

# REAL ESTATE.

The value of real estate is steadily advancing; especially is this true as regards that portion lying in and below the foot-hills, embracing what are known as lone, Dry Creek, Buckeye, and Jackson valleys. And the advance may be expected to be still more rapid from this time forward; for, indeed, this is a beautiful locality – a body of land unsurpassed in richness and productiveness, producing, without irrigation, crops equaling, if not surpassing, those of any of the lower valleys of our State. Where irrigation is needed, however, water is readily obtained, as each of these valleys is watered by distinct running streams.

One drawback to improvement in this section of our county, heretofore, has been the uncertainty of the validity of the so-called "Pico," or "Rio Seco Grant." The decision of the U. S. District Court made during the past year, removing this claim from our best valley lands, has induced settlers to improve and beautify their homes, and I have no doubt another year will show a large increase in the value of this part of the county over other portions, and over the assessment for this year.

CROPS, ETC.

The fruitfulness of the soil of our State is proverbial. The valley, the hill-side, and even the tops of hills and mountains, all produce largely when properly cultivated; hence, the study, by the tiller of the soil, of the sources of fertility and the causes of

barrenness, is not as necessary here as it is in many of the Easter States of our Union. Yet that such study and knowledge, and then application and admixture with the soil, of proper substances, would be beneficial, and repay largely, even here, I cannot for a moment doubt; and in my estimation, the man who would give his time and talent to promote, or bring about, a proper spirit of inquiry on this subject, would as much deserve the name of a philanthropist, as the inventor, the teacher of the arts and sciences, or of divine law. Whether the people of Amador County are as wide awake on this subject as they are progressive on others, I am unable to say; yet that the crops of the past year have been prolific without precedent, is unquestionable, as will be seen by the following: Wheat yielded an average of thirty bushels per acre; oats, thirty; barley, forty; corn, fifty. A field of barley harvested by Messrs. Bishop & Martin, of Jackson Valley, yielded at the rate of sixty-one bushels to the acre. This is not a solitary instance – many fields in other valleys yielded equally well.

# FRUIT TREES AND VINES.

The increase in apple trees has been large, the number returned this year being thirty-two thousand two hundred and sixty-three. As an article of food, fruit, but more especially apples, have been proved of great value. The cost of living in families can be very materially reduced by the use of fruit, in various ways, not merely by the amount of aliment afforded, but by adding to the variety and to the list of luxuries, enabling them to reduce the amount of other and more costly luxuries. Hence, I am happy to notice the great increase in the number of trees planted this last season.

The increase in pear, plum, and cherry trees, is also large, but the increase in the number of grape vines is astonishing; one hundred and sixty thousand vines is the number given in. Ranches exist in our county containing as many as fifteen thousand vines, and producing many tuns of grapes, although one-half of the vines are not yet in bearing condition. A considerable quantity of wine will be manufactured in different portions of our county this fall. The ruling price of grapes is one hundred and twenty dollars per tun.

# LIVE STOCK.

The increase in the number of horses, over the last year, is two hundred and forty-eight; cattle, one thousand three hundred and seventy-two; sheep, seven thousand three hundred and twelve.

#### MILLS AND MANUFACTORIES.

The number of grist mills and saw mills is the same as last year. The quantity of flour and lumber manufactured, abut the same. The iron foundry, situated at Sutter Creek, and owned by Frank Tibbetts, Esq., is doing an excellent business, and is indeed a useful institution. The heaviest kind of machinery used for quartz-crushing, is here manufactured with dispatch, and at only a very slight advance on city prices.

The increase in quartz mills is three, being a total of thirty-six mills; but owing to repairs needed in some, litigation in regard to others, and the failure of quartz, only nineteen are in operation. Many of this number are paying handsomely. Especially in

this the case with the Badger and Eureka mills, situate at Sutter Creek; the Keystone Mill, situate at Amador; the Oneida, situate near Jackson; and the Butte Mills, situate near Butte City.

The mines owned by Alvinza Hayward, Esq. And known as the "Badger" and "Eureka," are said, by those who pretend to know, to be the best paying concerns in the State. The depth attained on the veins is four hundred and seventy-five feet and upwards, an the average pay of rock fifteen dollars per tun. At this great depth, the veins are from fifteen to thirty feet in width, and the whole paying rock. Ninety-five men are constantly employed by Mr. Hayward, and the net proceeds are about twelve thousand dollars per month. The Badger Mills are run eight months in the year; and the Eureka the whole year.

A new steam mill is being erected at Scottsville, by Albert Moore, Esq. and will be under way in a month from this date. The rock to be crushed at this mill is rich, and the quantity large. Many other mills are paying good profits, but I have not the space to particularize.

In my past report I spoke of a coal-mine having been discovered in Buckeye Valley, in this county; but to what extent it has been opened or prospected I am unable to say. Of another mine, discovered since near lone City, and owned by Messrs. Hall & Harron, I have more knowledge. This vein is very extensive, and the quality pronounced excellent. Coal from this mine is already in use in every portion of the county, for use of mills, burning in stoves, and making gas. In the Golden Star Grist Mill, situate at lone City, this coal is now used instead of wood. Instead of three cords of wood, formerly used every twelve hours, one and a half tun of coal now suffices, which is a saving to the owners of six dollars for that length of time.

One other subject I will touch upon, then close. The farmers of Amador County have heretofore been blessed with a good market; but the increased interest manifested in farming, and the great increase in the quantity of grain raised from year to year, compel them to look about for a more extensive market.

The great discoveries made east of the mountains, the acknowledged richness of the silver mines of Carson, the known unproductiveness and unfitness of lands in that region for farming purposes, must naturally make it a good and regular market for any and all the commodities produced and for sale by our farmers.

Our close proximity, and the acknowledged probability, of the construction of a good road between some eastern point in our county and the summit of the Sierra Nevada, induces our farmers to believe that such a road should be opened to them. Whether by the State, the County, or by individual enterprise, is immaterial to them; they demand a road. Such a road would be of incalculable value, not only to farmers of our county, but would equally benefit the farmers of San Joaquin and Sacramento counties, as well as many other classes of our community. I trust the mention to you of this subject will induce you to give it a notice in your report, and, by that means, bring it more prominently before the public, and ultimately result in the opening of the desirable thoroughfare.

All of which is respectfully submitted,

FREDERICK P. SMITH,

County Assessor of Amador County.

JACKSON, October 24<sup>th</sup>, 1860.

Having sent you a copy of the statistics for this year, I did not deem it necessary to copy it again, or to add it to this.

Truly yours,

FREDERICK P. SMITH, Assessor for Amador County.

To Hon. H. A. HIGLEY, Surveyor-General.

# BUTTE COUNTY.

WM. D. VANTINE .....County Assessor.

COUNTY ASSESSOR'S OFFICE, Oroville, Oct. 2, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

SIR: - I have herewith enclosed a statement of the agricultural and other statistics of Butte County, compiled from the assessment books of eighteen hundred and sixty; and also, an abstract of the assessed value of real and personal property, with the amount of taxes for the State and county purposes levied theron.

Farmers, generally speaking, have reaped an average crop; though prices are low for grain, stock, etc.

The several branches of industry in this county, to wit: agricultural, mercantile, and mining, appear to be in a prosperous condition. One difficulty we experience is that such a number of disputes, followed by suits at law, arise from lands claimed by possession, and covered by Spanish grants; that there has not been the improvements made that would have been had these matters been settled.

The breed of stock of all kinds in this county, is improving slowly, but steadily. I wish to notice a late importation of fine South Down sheep by J. M. Montgomery, of Pine Creek, Chico Township.

Fruit-growing has increased during the present year, and the greater part of the finer fruits are of excellent flavor. I will here refer to the orchards of Messrs. Bidwell, Briggs, Washington Henshaw, and J. R. Woolen.

The facilities for the cultivation of the grape-vine in this county, in many locations are good, and some of the different classes of grapes are as fine as any raised in the State; among others I may mention those raised by T. Shaub, near Oroville.

Three hundred gallons of wine have been made by Major John Bidwell, the present year, from grapes raised on his rancho at Chico, and of good quality.

The mercantile business in this county is in, I think, a prosperous condition, though, for some time past, not so extensive as we could have wished, however. The trade of Oroville is slowly progressing, and as we have all confidence in a railroad being built to connect Oroville with tide water railroad, we have no doubt of future prosperity, and within a short period of time. The Contractors have been delayed in the commencement of the work for the purpose of testing the law passed by the Legislature, approved March fourteen, eighteen hundred and sixty, and amended March twenty-nine, eighteen hundred and sixty, authorizing the Board of Supervisors of the county to issue her bonds for the two hundred thousand dollars to aid in the prosecution of the work.

The present year we have had considerable improvements made at our county sear, in good substantial buildings, and will, undoubtedly, within the coming year, much more.

The principal seats of mining enterprise in the county are at Oroville, Inskip, Dogtown, Cherokee Flat, Yankee Hill, Oregon City, and Sparks & Smith's Mill, near the same, Mooreville, and Forbestown.

River mining I do not think is carried on to such an extent as it was last year, although there are many claims being working on the Main, Middle, North, and South, forks of Feather River. The Golden Channel claims of J. & T. Lytle, and H. B. Minott & Co. employ a large number of men, and I little doubt that they will be successful in their operations on Main Feather River, above Oroville. At quartz mining there is considerable work, and but few claims paying well. The heaviest mining operations in the county, successfully prosecuted, are located about, or near, Dogtown, on the hills of little Butte Creek, and on the west branch of Feather River, it being generally tunnel mining, and, as a general thing, requiring the outlay of much capital.

The number of miles of boundary necessary to be run in this county, at least, prior to March first, eighteen hundred and sixty-one, I should say would be about sixty miles. The said lines to be run between Butte and Sutter counties, Butte and Colusa counties, and Butte and Plumas; there being much difficulty experienced by the Assessors of the several counties in making their assessments.

Electro-magnetic telegraphs in this county, we have but one, and its value at ten thousand seven hundred dollars, and extending about fifty-four miles in length.

The timber of the county, of the greater part, is cedar and pine; redwood, none. Oak to be found generally in the valley, but the lands not heavily timbered. The assessment of the present year, you will perceive, is not so large as eighteen hundred and fifty-nine, but I have no doubt the supplementary assessment, will, in all probability, increase it to four million of dollars. This may be accounted for by the decrease in the value of stock since last year. In conclusion I would recommend that printed blanks be forwarded to the several County Assessors, in sufficient quantity and before the time of their commencing to assess, so that all could be accomplished at one time, in accordance with the recommendation of John Rule, Esq. Assessor of Yuba County. I am, sir, yours very respectfully,

WM. D. VANTINE, County Assessor of Butte County.

# CALAVERAS COUNTY.

ROBT. W. DOWLING.....County Assessor.

COUNTY ASSESSOR'S OFFICE, Mokelumne Hill, Nov. 13, 1860.

Hon. H. A. HIGLEY,

Surveyor General:

SIR: - In accordance with the requirement of "An Act concerning the Office of Surveyor-General," passed April seventeenth, eighteen hundred and sixty, I herewith transmit my annual report, as Assessor of Calaveras County.

The principal source of wealth at present, at least, of this county consists in her mines; for although the western portion is mainly occupied, as it is best adapted to agricultural purposes, it is the auferious yield of the lesser branches and spurs of the Sierra Nevada, which imparts activity to the other pursuits of her citizens, furnishing as it does the wherewithal to remunerate the husbandman for his labor.

But, lest an erroneous impression should be produced by the foregoing, justice requires to state that, if from its superficial nature, this portion of the county will not admit of the laying our of extensive farms, the experiment to plant the vine and tree upon these apparently arid and sterile hill-sides, has produced such extraordinary favorable results as to leave not a shadow of doubt of the adaptability of every foot of land not otherwise unfit for cultivation, to the purpose of horticulture. By reference to the accompanying table of statistics you will perceive that our citizens are alive to the importance of this branch of industry and source of future wealth; and it must be truly gratifying to every well-wisher of this State to learn the fact that the progress, extension, and yield, of horticulture is far ahead of the inverse ratio of the supposed or actual decline of the mines, so that what the county is losing by the gradual exhaustion of her mines and consequent depreciation of mining property, such as ditches, flumes, reservoirs, etc. she is more than gaining by the rapid conversion of her virgin soil into blooming and productive gardens and homesteads.

The striking contrast between the number of trees and vines of this year and that of eighteen hundred and fifty-eight, (according to the last published report of my predecessor,) will furnish a more convincing proof of the start taken by horticulture, than anything I might say upon the subject, the number of trees having more than doubled, and, in some instances, tripled since then, and the number of grape-vines increased from twenty-four thousand one hundred and eighty-seven, in eighteen hundred and fifty-eight, to one hundred and sixty-nine thousand seven hundred and eighty-four, in eighteen hundred and sixty.

All sorts of garden vegetables are produced in the greatest abundance for home consumption.

The cultivation of hops has been tried this season, and promises ere long to become a staple production.

It is a well-known fact that there can be no reliable information obtained in regard to the yield of the gold mines of this or any other county in the State, and while, therefore, I refrain from more than a mere allusion to the existence of such, I must, on the contrary, enlarge upon another branch of mining that bids fair to rival our gold-fields at no very distant day – I refer to her

#### COPPER MINES.

In the spring of the present year a copper field, having the appearance of proving very extensive and remunerative, was discovered by Mr. Hiram Hughes, in the southwestern portion of this county. Operations to develop the riches of the miner were immediately commenced, and the favorable result of the first prospectors, led to the discovery of the same and other ores at different points in the vicinity. All of these "claims" promise to equal in value the one first discovered, which latter closely resembles the far-famed Burre-Burre mines of south Australia.

The quality of the ore is blue and green carbonate, oxide of copper, yellow, gray, and black ores, some of which will yield, as I have been informed, from sixty-five to seventy per cent. There are at present accumulated at Hughes & Co.'s claim, some tow hundred tuns of the ore, and about a like quantity on McCarty's & Co.'s claim, but which, from adverse circumstances, has not been disposed of as yet.

I am confident that more discoveries of like character might be made – as there eventually will be – by a judicious outlay of capital, a practical knowledge of this branch of mining, and a scientific manipulation of the ores; and it is owing to the absence of all these that so little has been done there to develop the undoubted mineral wealth of this section of our county.

It would amply repay the State for all the outlay that a State Mineralologist might make in giving this section a thorough scientific investigation, not only in connection with the discoveries already made, but to inaugurate a system of researches, which will, as I am satisfied, lead to the discovery of other minerals, such as sulphur, antimony, and tin – traces of which have already been found by "prospectors" unaided as they were by those indispensable guides – arts and sciences.

There having been no report made in eighteen hundred and fifty-nine by my predecessor, it is impossible for me, without going over the whole process of extracting from his books, as I have just done from my own, for this year, to institute a comparison between the different statistics of last year and those of the present; but from a partial investigation, I find that while the number of assessments of last year were sixteen hundred and twenty-three, those of the present ran up to eighteen hundred and fiftyeight, thus showing a gain of nearly fourteen and a half per cent. The value assessed on the different kinds of property, amount in the aggregate to two million, four hundred and twenty-seven thousand, seven hundred and ninety-five dollars, namely, assessed value of improvements on –

Description.	Value.
Ranches	\$415,625
Town lots	397,409
Personal property	1,615,761
Total	\$2,427,795

The number of inhabitants of this county being about sixteen thousand, gives an average amount of property subject to assessment, to every man, woman, and child, of one hundred and fifty-one dollars and seventy-two cents.

All of which is respectfully submitted,

ROBT W. DOWLING, Assessor of Calaveras County.

# EL DORADO COUNTY.

LEWIS FOSTER ......County Assessor.

COUNTY ASSESSOR'S OFFICE, Placerville, Oct. 27, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

SIR: - I have the honor herewith to transmit you the following official report of statistics of the county of El Dorado for the current year. The report is not as elaborate as I could have wished, but it is sufficiently so for all necessary purposes. It differs but slightly from that I made you one year ago.

It is almost needless to inform you that I find it impossible to fully and accurately comply with the requirements of the law; but when practicable, I have strictly done so. Our population, to a great extent, is migratory, and the value of property is constantly changing. It is no unusual thing to find a mining camp prosperous one year, the next, deserted; for this reason it is more difficult to arrive at the real value of property in this than in the older States, where settlements are permanent and property acquires a fixed value. In comparing the statistics of last year with those of the present, it will be perceived that there has been a marked and gratifying increase in the amount of taxable properly over last year; also, fruit trees, vines, etc. Nearly every valley that is susceptible of irrigation, is covered with fruit trees, but there are thousands of acres, well adapted for vineyards, still uncultivated. At no distant day, El Dorado County, I am confident, with its fine orchards and productive vineyards, will compare favorably with older fruit-raising counties.

#### TIMBER.

In the entire eastern portion of this county the timber may be regarded as inexhaustible. Of the chief varieties that are valuable for lumber, I will mention the sugar, pitch, and spruce, pines, which can be found in abundance. There are also species of live oak and ash that are valuable, but scarce; these are mostly found along cañons.

#### LAND.

El Dorado is more noted for its mineral than its agricultural lands. The eastern portion is mountainous, and the principal pursuit of a large proportion of its inhabitants, is in the collection of precious metals. There are, however, interspersed throughout this mountain regions, innumerable valleys adapted to agricultural and grazing purposes, which, in fertility, are equal to any in the county. The number of acres of land claimed is one hundred and fifty-six thousand and forty-nine. There are no swamp lands in the county.

I have to report by two foundaries; two tanneries; three soda factories; twelve breweries; three brick kilns; and two telegraphs.

# MINING INTERESTS.

Quartz mining has about entirely ceased. There are river, tunnel, and surface, diggings, however, that are paying fair wages – a few paying well.

# VALUATION OF PROPERTY.

In comparing the assessment of last year with this, it will be perceived that there has been a marked and gratifying increase. The total amount of property assessed is three million five hundred and ninety thousand seven hundred and seventy-two dollars. The total value of real estate is three hundred and twenty-five thousand eight hundred and sixty-five dollars. The value of improvements is one million two hundred and thirty-two thousand one hundred and twenty dollars. The amount of personal property is two million thirty-two thousand seven hundred and eighty seven dollars. An increase over last year's assessment of one million forty thousand two hundred and twenty-two dollars.

All of which is respectfully submitted,

LEWIS FOSTER, Assessor of El Dorado County.

MONTEREY COUNTY.

MONTEREY, November 24, 1860.

Hon. H. A. HIGLEY, ESQ. Surveyor General:

DEAR SIR: - I herewith transmit to you the report of the County Assessor of this (Monterey) county for the present year, and also an abstract of said report. There being but one Assessor in this county, I thought it best to send you his full report. The delay is attributable to the Assessor, as I have just his day received it.

Very respectfully,

T. S. ROBERTS, County Auditor.

URIAH BURNS ......County Assessor.

ASSESSOR'S OFFICE, Monterey, Nov. 23, 1860.

To the Clerk of the Board of Equalization:

SIR: - In accordance with the provisions of section nine of an act entitled An Act to provide Revenue for the support of the Government of this State, approved April thirtieth, eighteen hundred and sixty, I herewith transmit to you my annual report for the current year, wherein are mentioned such statistical facts as required by the circular of the Surveyor-General to the County Assessors in this State, and all general information (as much as is within my personal knowledge, and as learned from reliable sources) tending to develop the resources of this county, and to indicate some of its wants.

VALUE OF PROPERTY ASSESSED.

Real Estate	\$49,914 50
Improvements on Real Estate	126,270 00

Personal Property	877,482 60
Total value of Property Assessed	1,497,667 10

#### METEOROLOGY.

The following table is an abstract of meteorological phenomena observed by Dr. C. A. Canfield, at the city of Monterey, from October, eighteen hundred and fifty-nine, to October, eighteen hundred and sixty:

			L	AT. 36	deg. 36	min. L(	ONG> 1	21 deg	. 54 min	. 30 seo	C.		
SUMMARY OF WEATHER.	Oct. 1859.	Nov. 1859.	Dec. 1859.	Jan. 1860.	Feb. 1860.	March 1860.	April, 1860.	May, 1860.	June, 1860	July, 1980	Aug. 1860.	Sept. 1860.	Oct. 1860.
Greatest heat Greatest cold Average heat at 2	95 50	69 41	72 36	62 32	66 37	70 40	79 40	65 45	66 51	78 53	78 53	93 56	72 51
P. M Number of nights of	65	61	58	55	58	59	62	59	62	64	65	66	63
frost Am't of rain in inches and	3	4	17	11	5	0	0	0	0	0	0	0	1
hundr'ths Number of clear	0	3.03	2.84	0.98	0.54	6.02	2.60	2.05	0.17	0	0	0	0.70
days No. of days completely	2	1	1	10	6	2	4	1	0	1	1	3	1
clouded No. of days of s. or	0	7	4	5	5	9	7	5	16	7	5	5	1
s.w. winds No. of days of n. or	7	15	6	6	4	16	4	11	8	3	3	6	9
n. w. winds Number of foggy	20	12	20	9	16	11	18	17	17	26	24	1	10
Number of foggy	11	4	1	4	5	6	8	9	18	17	29	9	13
evenings Fog all day,	7	1	0	4	0	5	4	1	15	10	21	9	4
number of days	4	1	0	2	0	1	1	1	12	6	10	3	1

#### FARMING.

This year the lands in the Pajaro Valley and Salinas Plains have yielded an abundant crop. A quantity of wheat has been lost, owing to copious showers of rain during the month of July. As to other produce, the harvest has been satisfactory.

An undertaking, likely to prove very beneficial to the farmers of the aforesaid lands, has lately been set on foot. Some enterprising persons considering the Monterey or Salinas River navigable, to ascertain the distance from its mouth, have purchased a small steamer for the purpose of towing vessels over the bar, in and out of said river. The enterprise has succeeded extremely well; a large number of small crafts have entered the slough, loaded produce, and have been safely towed out to sea.

The opening of the navigation of the Salinas River is a great advantage to all land-owners and farmers in that neighborhood, saving them expensive costs of freight, and doing away altogether with the dangers of the Pajaro landing through a high surf.

The only drawback is, that the mouth of the river should not be attempted whenever the sea is rough; and, therefore, vessels may be obliged to remain in the port of Monterey for several days until a calm may permit them to go in. Likewise, vessels loaded in the slough must wait for an opportunity to go out. However, from the first of July to the fifteenth of October, the sea on the bar is so smooth that the entrance and exit of the river may be undertaken almost every day.

At the mouth of the river a city has been laid out, under the name of Saint Paul's City. This is on a small swampy island, commonly called Paul's Island. It would not be advisable to erect any buildings hereon, neither to trust there any kind of depot, as the island is subject to overflow every severe winter.

Much grain has been cut early in the year as hay for cattle and horses; and no mention as to the quantity is made in this report, as I have has no means to make a correct estimate of the number of tuns of hay obtained.

# PASTURAGE AND CATTLE.

The winter of eighteen hundred and fifty-nine and eighteen hundred and sixty having been comparatively wet, there has been good pasturage this year, and to the present time no want thereof has been experienced, although the rain, fallen early for the season, must have, in a great measure, deprived the grass of its strength and nutritious qualities. Owing to the drought several years in succession, the seed of the wild oats in two good years before the hills will be covered with that pasture as they were in the spring of eighteen hundred and fifty-three.

The indigenous grasses are: the wild oat, clover of several kinds bunch grass, pin grass, and others. Attempts to raise "alfalfa" or Peruvian clover have failed.

The cattle have done well, but are now at low prices in the marker. Much pains has been taken to improve the breed of Spanish stock cattle; several stockraisers had a number of American bulls imported, and are now beginning to get on their ranches some very fine half-breed cattle.

Since the last year much American stock cattle has come to this county.

# CONTAGIOUS DISEASE AMONG HORSES.

Abut the beginning of August, eighteen hundred and fifty-nine a disease altogether unknown to the native stockraisers, broke out among the horses in some parts of this county, and most of the horses attacked died. Until now no efficacious remedy against the evil is known. The progress of the disease is slow, but certain. The fist symptoms are indicated by a continual shaking of the head; after some time, the diseased horse will droop his head until his nostrils touch the ground, and in that matter walk or trot for a considerable time and over many miles of ground without taking food or drink, and as if deprived of eyesight, until at last coming up before some obstacle, as a cluster of trees or a fence, he remains standing still until he dies.

This year the disease made its appearance at about the same time as the previous year, and is raging with greater intensity. Some stockraisers on the Salinas Plains – among others, Messrs. David Spence and Francisco Soberanes – have lost one-half of their horses.

Colts are subject thereto, the same as grown horses; and it has been ascertained that the disease is contagious.

The seat of the disease is undoubtedly in the brain, but although several experiments have been made on dead horses, no positive cause has as yet been discovered. When a horse is attacked with this disease, his recover is never complete; but remains stupefied and almost useless.

I think the case is deserving the attention of the veterinary profession.

SHEEP.

As may be seen by the table under the head of "Live Stock," there have been assessed ninety-nine thousand five hundred and fifty sheep – five thousand one hundred and fifty-six more than last year. As the assessment was made in the spring, most of the ewes had not yet lambed, or the lambs were so small as not to be worth the notice of the Assessor. If the lambs of this year were counted, the total amount of sheep would have been put down at one hundred and twenty-four thousand head.

It is a well-known fact that this county is the best locality in the State for raising sheep; the climate and pasturage are favorable to their in crease and improvement of the breed. No case of disease among the flocks has come to my knowledge.

During this year, several new localities, proper for sheep raising, have been discovered, particularly in the extensive range of hills dividing Peach Tree Valley and the Salinas, where formerly leagues of land with good pasture, were lying useless for the want of water. Enterprising settlers have, by artificial means, succeeded in procuring an abundant supply of that element, thereby rendering aluable a considerable tract of land.

Captain Sherwood had this year one thousand two hundred sheep imported from Australia, of a superior quality. An offer was made for the lot, at thirty dollars per head, which was declined.

M. M. Flint, Bixby & Co. and Col. W. W. Hollister, have made it their especial care to improve the breed of sheep in this county. Their flocks can vie with the best in this State, for the superior quality of wool and mutton.

#### FRUIT TREES AND VINES.

The raising of fruit trees is progressing, and the yield of the young trees is considerable every year, while the trees in the Mission Orchards, owing to old age, and want of proper care, begin to fail.

The vine is cultivated with success in several localities. On the farm of Mr. Theophile Vaché, on the eastern slope of the Gabilan Mountain, there are now over fifty thousand grape vines, which produced, last year, five hundred gallons of wine, of a very good quality. I am informed that this year, one thousand five hundred gallons of wine have been produced there.

# WHALE FISHERIES, ETC.

There are two whaling companies at Monterey – one consisting of Americans and Portuguese, and the other of Portuguese only. Each company has two boats, manned by six men each. Besides the boats' crews, each company has three or four spare hands to attend to the trying works. The following table will indicate the success of each company, and the amount of oil made within the last twelve months:

# AMERICAN AND PORTUGUESE COMPANY.

Whales caught, California Grays Whales caught, Humpbacks Oil extracted from California Grays, barrels <sup>*</sup> Oil extracted from Humpbacks, barrels Total number of whales caught Total number of barrels of oil extracted PORTUGUESE COMPANY.	9 13 250 400 22 650
Whales caught, California Grays	18
Whales caught, Humpbacks	16
Oil extracted from California Grays, barrels	700
Oil extracted from Humpbacks	500
Total number of whales caught	34
Total number of barrels of oil extracted	1,200
Total number of whales caught by both companies	56
Total number of barrels of oil extracted by both companies	1,850

Like the foregoing year, the mackerel fishery failed this year – both mackerel and herring having been scarce during the season. It has been noticed that, after two successive seasons when the aforesaid fish have been abundant, there succeed two seasons when the same will be scarce. During the fishing season of a good year, the waters of the Monterey Bay are literally swarming with a great variety of fish.

# APIARIES.

The raising of bees has been lately undertaken, and has met with success, except in some parts of the Salinas Plains, where, according to report, several swarms have been destroyed by the rapacious attacks of a certain species of bumble-bee, commonly called "yellow jacket."

<sup>&</sup>lt;sup>\*</sup> The barrel is of the capacity of thirty-two gallons.

An amateur in the city of Monterey has several hives, and they are doing well.

# SAW MILLS.

There is one saw mill, situated four miles from Monterey. It is propelled by a thirty-horse-power steam engine, and is capable of sawing seventeen thousand feet of lumber in twenty-four hours.

### WOOD, LUMBER, ETC.

The lumber produced, is the "Monterey pine." It is tough, durable, and well suited to planking roads, wharfs, bridges, etc. but being very knotty, it cannot be recommended for spars.

The export of cord-wood amounts to about twenty thousand cords per annum.

There are great quantities of redwood in the ravines at the foot of the mountains south of Carmelo River, but owing to the roughness of the country, and the difficulty in making roads in these localities, little use is made of this valuable article.

One vessel, of one hundred and twenty tuns burden, is in progress of construction. She is entirely out of "Monterey pine."

#### WHARFS.

There are two wharfs at Monterey, one belonging to the Monterey Wharf Company, and the other to the owner of the Monterey Saw-Mill. The last named is private property without privilege, situated on the lands of the owner, and only used by himself.

# ARTESIAN WELLS.

There is one artesian well in the county, situated in the vicinity of the town of San Juan; the bore is about seven inches in diameter, and the depth is only eighty feet. It throws up abundance of water, but it has been remarked that the quantity is decreasing. Other attempts have been made, but have failed – the greatest depth bored is three hundred feet. It is, however, generally believed that by boring a few feet deeper water could be obtained on the Salinas Plains.

# TELEGRAPH.

During the year the telegraph line has not much advanced. The line reaches to the town of San Juan, making, in all, twenty-four miles of telegraph line within this county.

# FERRIES AND BRIDGE.

There are two ferries, one at the mouth of the Salinas River, and one at Hilltown, where the stage crosses the river on the line of travel from Monterey to San Juan. A toll-bridge has been completed over the Pajaro River, on the line of travel from San Juan to San José, the cost of which was four thousand dollars.

#### ROADS.

The roads are far from being in good condition. The main road of this county, or line of travel from Monterey to San Juan, is at certain points, and particularly at the San Juan hill, quite bad. Suggestions have been made to change the road, so as to avoid the aforesaid hill of San Juan, and construct a new branch, passing over the Rancho de los Vergelos. The matter of roads is about to receive attention. By an act of the Legislature the Board of Supervisors has been empowered to levy an extra tax for road improvements, and that last named body has appropriated twenty cents on every dollar of assessed value for that purpose. The stage road from Monterey to San Luis Obispo is also in need of repairs.

The nearest road from Monterey to the Pajaro Valley, and that part thereof on the southwest side of the Salinas River, is what is commonly called the lower, or Estrada road, and is in no condition to allow the carriage of freight; there, no improvements can be made at present, the soil on the greatest part thereof being composed of quicksand. However, when the Pajaro Valley and Salinas Plains shall be more thickly settled, and the amount of produce augmented, there is no doubt but private enterprise will establish a plank road there, as the advantage to be obtained thereby can be easily calculated.

The distance from Monterey to the Salinas River by the aforesaid road, is about eleven miles, and the distance from that point to the Pajaro Valley about ten miles more. Of the first eleven miles eight require planking; the road over the Salinas Plains is level and good. If the road from Monterey to the Salinas River was planked, bridges thrown over some of the sloughs would complete this work. This work could be done comparatively cheap as the lumber wanted for such a purpose is close at hand.

A toll-road, laid out in the above described property, perhaps, at the present time, would not pay the shoreholders on their outlay, but, as I said before, it will eventually, when produce shall increase, for the farmers will, perhaps, prefer sending their grain to the safe port of Monterey, at a low cost of freight, there to be shipped, in all security, and to be in the market at a given time, than to expose it to the risks of the bar of the Salinas River, or to the loss of the market when vessels are delayed, lying weatherbound in the Salinas Slough.

#### COUNTY BOUNDARIES.

The southern boundaries of this county, dividing the counties of Monterey and San Luis Obispo, begin at a point on the summit of the coast range due east from the mouth of the Nacimiento River; thence running due west to the aforesaid mouth of the Nacimiento River; thence up said river ten miles; thence due west to the Pacific Ocean, etc.

This line is altogether an imaginary, or artificial one, except as to the distance of ten miles where it follows the meanderings of the Nacimiento River, and has never been surveyed or marked out; and as the country about the said line is getting thickly settled, some steps should be taken so as to ascertain the limits of the respective counties. The settlers do not know in which of the two counties they are residing, and many of them had their property assessed this year both by the Assessor of San Luis Obispo and of Monterey.

To the above stated fact I respectfully call the attention of the Surveyor-General, to whom the foregoing is submitted.

I have the honor to be respectfully your obedient servant,

URIAH BURNS, County Assessor.

By J. RUURDS, Deputy,

# PLACER COUNTY.

THOMAS B. HARPER .....County Assessor.

ASSESSOR'S OFFICE, November 13, 1860.

To Hon. H. A. HIGLEY, Surveyor-General:

SIR: - In compliance with the law, I herewith submit my annual report. As in my last report, I do not deem it necessary to indulge in any lengthy comments, professing to submit a compilation of statistics for the consideration of those who may be interested therein.

It will be seen, by comparison with my previous report, that some species of property have depreciated in value, and my observations as to the causes that have brought about the result, may not be inappropriate.

Live stock, although having largely increased in number, have depreciated in value. This is doubtless owing to the fact that the facilities for range and pasture, possessed heretofore in the lower portion of the county, having almost entirely failed, and greater attention and expense being requisite to the proper care of this kind of property; the market necessarily became crowded, and hence loss in value. This grazing region, too, being composed of rich agricultural land, having fallen into the ownership of our citizens, under the various State and United States land law, and the right of common usage being denied to the owners of stock, has also had its weight to lessen their value.

The fact, however, of these land becoming private property, has greatly added to the value of real estate, the land itself being taxed at its market price, when, heretofore, the improvements alone have been assessed.

The value of ditch property has decreased, as has also that of saw-mills. I am unable to account for the former, as our mining regions are rich and valuable; nor for the latter, unless it be that the facilities for market are such as not to allow a competition

with other more favored countries. When a system of railways shall have been projected and completed, the heavy and extensive forests in the upper portion of our county will prove one of the greatest sources of wealth to our people.

It is pleasing to see the attention and care that our citizens are giving to the cultivation of the various fruit trees and vines. The cultivation of the grape has been demonstrated to be peculiarly adapted to our climate, and many of our citizens have embarked extensively in the enterprise. One vineyard alone, near the center of our county, is covered with upwards of sixty thousand vines.

The figures given below, will compare favorably with any previous report from this office, and I feel confident that Placer county, combining, as she does, all the best elements of climate, soil, and productions, will continue to increase in wealth, and for all time furnish a home for a rich and prosperous people.

#### ASSESSED VALUATION OF PROPERTY.

Real Estate and Improvements	\$989,953
Personal Property	2,088,878
Total amount of Property Assessed	\$3,078,831

All of which is respectfully submitted,

THOMAS B. HARPER, Assessor of Placer County.

# SAN DIEGO COUNTY.

JAMES M. McCOY .....County Assessor.

COUNTY ASSESSOR'S OFFICE, San Diego, Nov. 1, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

SIR: - In answer to your "Circular to County Assessors," dated March twentysecond, eighteen hundred and sixty, I can furnish you with but little information to embody in your annual report. I will *refer* to your suggestions in the numerical order in which they stand in the "circular," for, as to *answering* them, it is wholly out of my power, for the want of information. "2<sup>nd</sup>. Plans and Suggestions," etc. This county, having no rivers, (with the exception of the Colorado,) and being hilly and mountainous, is not capable of being made susceptible of internal navigation. The Colorado can be navigated by light-draught steamers from its mouth to some distance into the territory of New Mexico. Out roads are generally good. A railroad from the bay of San Diego to the eastern boundary of the county, at or near Fort Yuma, to intersect a railroad from the Atlantic seaboard, is so necessarily apparent that the Surveyor-General will recommend the construction of the same without any suggestions from me. As to canals and aqueducts, we have no water to spare to fill them. Marshes, we have none in the county. Our "forests of timber and trees" are all right, and preserve themselves. Artesian wells have not been attempted in favorable localities. As to "prevention of overflows," the trouble with us is, we don't have "overflows" enough.

"3<sup>rd</sup>. An estimate of the aggregate quantity," etc. I know of no land belonging to the State, with the exception of the sea shore, within the ebb and flow of the tide, and the school section in each township. There are no "swamp and overflowed lands." I have no knowledge as to the "characteristics" of the lands composing school sections.

"4<sup>th</sup>. An estimate of the aggregate quantity of all lands used for or adapted to tillage," etc. In answer to this suggestion, I cannot do better than to refer you to the report of one of my predecessors, made for the year eighteen hundred and fifty-six, and now on file in your office.

"5<sup>th</sup>. An estimate of the aggregate number of horses, cattle," etc. I respectfully refer you to the table of "statistics," hereto attached.

"6<sup>th</sup>. An estimate of the aggregate quantity of wheat, rye," etc. You are also respectfully referred to said table. I am not aware of the existence "of any *diseases, or other mischief*, preventing a full and proportionate return and increase of the same."

"7<sup>th</sup>. An estimate of the mineral lands," etc. I have not knowledge sufficient to answer this question. Gold, silver, and copper, are found on nearly every league of land in the county, but as yet, with two or three exceptions, have not been found in sufficient quantity to prove remunerative. During the past year, about two thousand dollars of gold from quartz, has been extracted.

"8<sup>th</sup>. All facts," etc. "which may," etc. "be collected to promote the full development," etc. This county is nearly purely agricultural and grazing county, and its resources can only be developed by industry and back-ache labor.

In response to other questions in your circular, I refer you, most respectfully, to the table of statistics hereto attached.

Your inquiry relative to the boundaries of this county, had nearly escaped me. We have no lines necessary to be run, nor can they be improved by "substituting *natural* for *artificial* boundaries." The boundaries of this county are found in Wood's Digest, p. 137.

Yours, etc.,

JAMES McCOY, Assessor of San Diego County.

# SANTA CLARA COUNTY.

WM. R. DAVIS .....County Assessor.

COUNTY ASSESSOR'S OFFICE, San José, Nov. 14, 1860.

Hon. H. A. HIGLEY, Surveyor-General:

SIR: - Inclosed you will find my statistical report as Assessor of this county, whis is as nearly correct as circumstances will allow me to make it.

The difficulties which lie in the way to prevent an accurate estimate of the different matters embraced in the report, must be apparent to every one who has the slightest acquaintance with the duties of an Assessor, and while I do not claim this report to be strictly truthful, I am sure the fault is not that of exaggeration.

Santa Clara County contains an area of fourteen hundred square miles, nearly one-half of which is valley land, unsurpassed in the fertility of its soil. The mountains lying on the east and west side of the valley, are annually covered with a fine growth of wild oats; but notwithstanding this fact, they do not afford sufficient pasturage for the immense herds of cattle and sheep owned in this county, and many of our citizens have been compelled, within the past two years, to remove their stock to counties south of us, to secure a wider range.

MINES.

In mineral resources, Santa Clara can boast only of its quicksilver. The celebrated mine of New Alamedan has been closed since November, eighteen hundred and fifty-eight, by an injunction of the United States District County; but the Enriquita Mine, opened about fourteen months since by Henry Laurencel & Co. and the Guadalupe Mine, still continue in active operation – the former making an average of one thousand flasks of quicksilver per month, the latter about two hundred. The mineral lands comprise about two leagues.

#### LUMBER.

The mountains on the west side of the valley afford inexhaustible forests of redwood timber, and it is believed that there are about four hundred persons engaged in the lumber business in this county.

# SCHOOLS.

Besides the following named well-known institutions of learning, there are in this county many private and select schools, and all are enjoying prosperity and increasing in usefulness:

Santa Clara College, S. J. – Very Rev. Felix Cicaterri, President. For males. Incorporated eighteen hundred and fifty-five; number of scholars one hundred and forty; number of graduates, six.

*University of the Pacific,* (Under the Conference of the M. E. Church.) – Rev. E. Bannister, President. For Males. Incorporated eighteen hundred and fifty-three; number of scholars, ninety-eight; number of graduates, ten.

The above schools are located in the town of Santa Clara.

*Female Collegiate Institute of the University of the Pacific.* – Rev. G. S. Phillips, President. For females. Incorporated eighteen hundred and fifty-three; number of scholars, eighty; number of graduates, ten – located in Santa Clara.

Academy of the Sisters of Notre Dame. – Sister Mary Cornelia, Superior. For females. Incorporated, June, eighteen hundred and fifty-eight; number of scholars, one hundred and ninety – located in San José.

AGRICULTURE.

Upon the subject of agriculture – the chief resource of this valley – it is unnecessary to say more than is embraced in the statistics of the crops raised. The annual fairs, held by the Santa Clara Valley Agricultural Society, show a display of the products of the soil, fully equal, if not superior, to those of any other portion of our country. Much attention is now given to the business of stock-raising, also, and upon the fair grounds every year may be seen numbers of the best-blooded animals – horses, cattle, sheep, hogs, etc.

The fair ground contains eighty acres, owed by the society. It is well improved, and has every convenience needed for the purposes for which it is used.

Very respectfully submitted,

W. R. DAVIS, County Assessor.

# SOLANO COUNTY.

E. H. VON PFISTER .....County Assessor.

COUNTY ASSESSOR'S OFFICE, Fairfield, October 10, 1860.

To Hon. H. A. HIGLEY, Surveyor-General:

DEAR SIR: - In making a report to your office, and fulfilling the requirements of the law, you are aware of the insurmountable obstacles that intervene to prevent the

Assessor from making such an elaborate report as the nature of his instructions would seem to imply. With this short preface I herewith present such items of interest as I have been able during my labors to obtain.

#### SOLANO COUNTY.

Is located almost in the center of the great State of California, lying between thirty-eight degrees and thirty-eight degrees thirty minutes north latitude, and between one hundred and twenty-one degrees thirty minutes and one hundred and twenty-two degrees thirty minutes longitude west from Greenwich. It is bounded on the north by the Rio Los Putos, or Putah Creek – this stream being the dividing line between Yolo and Solano counties; on the east, for twenty miles, by the fresh water tules adjacent to the Sacramento River, and in Yolo County. The remainder of its eastern, and the whole of its southern, boundary, is a continued navigable water front, for the space of sixty-one miles – twenty-five miles on the Sacramento River eighteen miles on Suisun Bay, six miles on Carquines Straits, and twelve miles on Napa Bay and river. The dividing ridges of the Napa Mountains bound Solano on the west, and separate it from Napa County.

Compared with the other forty-seven counties of the State, it ranks about fortieth in point of size. It has an area of eight hundred and fifty-two square miles, or five hundred and forty-five thousand four hundred and forty acres, divided as follows:

Description.	No. Acres
Valley Land adapted to tillage	292,000
Mountain and Hill Land suitable for grazing purposes	118,440
Swamp and Overflowed Lands, lying principally on the Eastern and Southern side of the County, about The Bays and Estuaries within the boundaries of the County, cover	92,000
the surface of	43,000
Total	545,440

#### MEXICAN GRANTS.

A large portion of the grazing and arable land of the county is covered by six Mexican grants, as follows:

*First* – the "Suscol," lying on the southern portion of the county, including the towns of Benicia and Vallejo, containing eighty-four thousand acres.

Second – The "Suisun," lying north of the Suscol, covering the beautiful valley of Suisun, and the towns of Suisun and Fairfield, containing seventeen thousand seven hundred and fifty-two acres.

*Third* – The "Tolemas" or Armejo, not yet located, but supposed to lie north and east of the Suisun grant, containing thirteen thousand three hundred and fourteen acres.

*Fourth* – The "Los Putos," or Vaca Pena, covering the town of Vacaville, and its handsome valley, running northward and terminating upon the banks of the Rio los Putas, containing forty-four thousand three hundred and eighty acres.

*Fifth* – The "Rio los Putos," or Wolfskill, lying on both sides of the Rio los Putos, the south half, or eight thousand eight hundred and eighty acres, being within the county.

*Sixth* – The "Ulpinos," or Bidwell, is located on the eastern side of the county, at the junction of Sacramento River and Suisun Bay. It covers the town of Rio Vista, and what is known as the Montezuma Hills, containing seventeen thousand seven hundred and fifty-two acres.

The "Sobrante" or Suco grant, covering the stupendous quantity of two hundred and eighty-four thousand acres, after a number of years litigation, has finally been rejected by the Supreme Court, and this vast extent of land added to the public domain.

#### AGRICULTURAL LAND.

Of the two hundred and ninety-two thousand acres of tillable land, there is not probably, upon the face of the globe, so large an amount of farming land, lying in a compact form, that presents more alluring inducements to the husbandman than this. Experiments have proven it to be susceptible of the highest state of cultivation, yielding abundant harvests of the grains and fruits indigenous to every zone. Wheat, barley, oats, rye, corn, buckwheat, peas, beans, potatoes, yams, onions, etc. flourish luxuriantly, while the growing of flax, hemp, tobacco, cotton, rice, broomcorn, and Chinese sugar cane, has been pronounced a success. Here also grow, beautifully, the apple, peach, pear, plum, cherry, nectarine, quince, apricot, fig, orange, olive, pomegranate, pineapple, almond, and prune trees; and gooseberry, raspberry, strawberry, and grape vines, are yearly laden with fruit.

We have, according to statistics:

Description.	No. Acres
Land inclosed	115,774
Cultivated	44,454
In Wheat	14,256
Barley	15,687
Oats	580
Rye	320
Corn	970
Buckwheat	36
Peas	120
Potatoes	1,473
Onions	462
Нау	42,160
Alfalfa	23
Broom Corn	170

Of fruit trees and vines, we have:

Description.	Number.
Apple trees, acres	15,996
Peach	32,381
Plum	1,592
Pear	3,573
Cherry	1,486
Apricot	2,144
Fig	1,772
Grape-vines	520,630
Wine manufactured, gallons	10,580
Brandy manufactured, gallons	460

It will thus be seen that the inhabitants of Solano are not unmindful of the comforts that surround civilization, and make happy homes; and as the great drawback on California, the land titles, are becoming adjudicated, new evidence of thriftiness and industry are being added to those already inaugurated.

#### GRAZING LAND.

This portion of the county (one hundred and eighteen thousand four hundred and forty acres) consists of the mountain spurs of the Coast Range, that lie on the eastern side of the dividing range between this county and Napa, and the low hills that are adjacent to, and form a portion of, the shores of Suisun Bay. The surface is covered with a dense growth of "bunch grass" and wild oats, the former growing upon the summits and the north sides of the highest peaks, being green nearly the whole year, and a grass of hardy growth, flourishing best upon the most sterile hills. It is valuable to the farmer, being very nutricious for stock.

Of the wild oats it would seem almost superfluous to speak, being indigenous to the soil, and familiar to nearly every inhabitant of California. But, lest there are some who have not visited this portion of the State when its growth is most abundant, I will endeavor to describe it: - The seed bears a strong resemblance to the tame black oats, with this difference: it is smaller and has a hirsute appendage that grows upon the base of the grain and nearly envelopes it. This seemingly useless appendage has its uses. In the fall, the soil, after many months of uninterrupted sunshine, is hard and impenetrable, and would be impossible to seed were it not for the cracks that are produced by contraction. The oats ripen in the months of July and August, and are shattered by the action of the wind.

Falling upon the hard and impervious earth, they could not take root if they did not make their way to these cracks, which they do in two ways: *First* – The heavy fibers that surround it act as legs, and prevent the grain from lying close to the earth, at the same time being a sort of sail that catches the lightest breeze that blows, thus turning it over and over until it is safely lodged in the nearest crack, to await the coming rains of winter. Second – The action of the water upon these fibers has a singular and novel effect. The first rains falling upon the seed, produce a desire for locomotion, or a crawling propensity, and by a curious process, the grain will move itself several inches, thereby falling into the cracks that are yawning to receive and nourish it. Early in the winter, the oats, sprouting from these cracks, give the earth the appearance of being spread with a beautiful net-work.

This grass is the stand-by of the farmer. It nourishes his stock in the spring, fattens them in summer and fall, and sustains them in winter. From it he makes his hay, which is pronounced by good judges to be the best that is used.

#### SWAMP AND OVERFLOWED LAND.

As before remarked, our estimate of the quantity of this land laying in this county is about ninety-two thousand acres. A few years since, this portion of our State was deemed valueless, but more enlightened and recent experiments are awakening the public mind to the fact that it will be quite an important element in enhancing our future wealth. The manner of its disposal, as marked out by the Legislature fo eighteen hundred and fifty-eight, in a law enacted during that session, was a wise termination of this previously mooted question. Since the passage of that law, these lands are being rapidly taken up, and are yielding an increasing revenue to the State. Moreover, there is no one now who doubts the fact that these lands are in a more speedy way to reclamation by private energy an enterprise than they would have been had they been jobbed out in large quantities to corporate associations and irresponsible parties. The more elevated portions of these lands in our county are being tilled to good advantage, and the day is certainly not far distant when this now neglected soil will be made to furnish support and sustenance to thousands of immigrants arriving upon our shores.

#### MINERAL LAND.

This county has long since been denominated a "cow county;" therefore, little will be expected in my report under this head. Gold has been found, however, within our borders. There are about seven thousand acres of mountain and hill land laying on the north of Township No. 7 north, Range 2 west; and on the south side of Township 8 north, Range 2 west, in the vicinity of Putah Creek, from which gold dust has been taken to the amount of fifteen hundred dollars in the past year.

Stone has been found in several localities suitable for building purposes. Still, our quarries are inferior to those of Folsom. Our marble quarries have gained considerable celebrity, furnishing a peculiar kind of striped, variegated marble, that admits of the highest polish, and is elegantly adapted for ornamental uses. The coloring ingredient of this marble is said to be iron, giving it a light and dark brown color, intermingled with white. These quarries are located upon the summits of the hills that surround Suisun Valley. The quarrying has been abandoned for the present, having proved unprofitable during the high price of labor.

#### SCHOOL LANDS.

There are about eleven thousand five hundred and twenty acres of school lands, lying mostly in the valleys not covered by Mexican grants. Warrants are being laid upon this land, and it is being fast reclaimed from its wild state and made to subserve the useful purposes of man.

While upon the subject of school lands, it may not be inappropriate to digress somewhat, and speak of our schools. We have four institutions of learning conducted by private enterprise, that are an honor to our county. Three of these institutions – one male, and two female – are located in the town of Benicia. The other academy – for both sexes – is located in the village of Vacaville.

The course of instruction adopted by these institutions embrace all the studies that are required to give a solid, useful, and polite, education; and by the able manner in which they are conducted, they attract a large number of pupils from other counties.

Besides these four institutions, there are twelve district schools, provided with efficient teachers, that have an attendance of from twenty to fifty scholars. These latter schools are supported partly by a school fund and partly by an assessment made upon the patrons. If our educational facilities should continue to increase in the same ratio that has characterized the first ten years, our county may not inappropriately be termed the Connecticut of California.

#### TIMBER.

The timber of Solano comprises several species of oak, pitch pine, ash, cottonwood, etc. growing upon the mountains, in some of the valleys, and on the margin of streams. It is worthless for any mechanical use, and serviceable only for fuel. It is the opinion of many, that, as soon as the land is all fenced, and the annual fires prevented from ravaging the country, timber can be grown here as successfully as upon the prairies of Illinois, or elsewhere.

#### LIVE STOCK.

We come now to a branch of industrial pursuit that, next to our agricultural interest, surpasses all others in point of importance. The rearing of stock of every species has occupied the attention of our citizens for years, and upon no other avocation has the same amount of money been expended as upon this. Stallions, bulls, jacks, and rams, of the choicest breeds, have been imported from Europe and the older States. If the same interest that is now taken in regard to the improvement of our breeds of stock, remain unabated, with the healthful climate we posses, the time is not far distant when we will proudly take rank with the noted stock-raising localities of the East. According to our statistics, we have as follows:

Description.	Number.
Horses – American	1,343
Horses – Spanish	2,667
Mules	269

Cattle – American. Cattle – Spanish. Oxen (yoke). Sheep. Hogs. Chickens. Turkeys. Ducks. Geese. Wool – American, Ibs.	3,634 169 132,000 11,737 12,960 2,452 560 128 154,000
Wool – American, Ibs	154,000
Wool – Spanish, Ibs	220,000

#### IMPROVEMENTS.

Our buildings are beginning to assume an appearance of stability. Redwood shanties are being supplanted by comfortable frame and brick dwellings; substantial plank fences are taking the place of the miserable ditches so long used; and barns and stables are becoming indispensable to every farmer.

Of our public improvements, we have: *First* – The United States Navy Yard, at Mare Island. This Island lies near the southern shore of the county, opposite the town of Vallejo. It was formerly the property of General Vallejo, and was purchased by government, of Wm. H. Aspinwall, for the sum of eighty thousand dollars. The immense sum of four million five hundred thousand dollars has been expended in building docks capable of raising vessels of the largest class, and the following named buildings, which are constructed in the most durable manner, of brick and stone: Four naval storehouses, sixty-five by four hundred feet each; blacksmith shop, two hundred by two hundred and fifty feet; foundry, five hundred by nine hundred feet – said to be the largest building of the kind in the United States; thirteen elegant residences for officers; a magazine, sixty-five by one hundred feet; and a seawall, or bulkhead, four hundred feet long.

*The Pacific Mail Company.* – This company has, at Benicia, two buildings, of large dimensions, used as a foundry and machine shop. Here they repair and coal their steamers, besides doing an immense amount of work for other parties.

*Marysville and San Francisco Railroad.* – Of this road, forty-eight miles are located in Solano county. Twenty-two miles – from Putah Creek to Suisun – are graded, at a cost of about one thousand dollars per mile. Our county owns stock in this road to the amount of two hundred thousand dollars.

*Court-House and Jail.* – Our county has recently completed a new Court-House and Jail, at a cost of thirty-five thousand dollars. The amount was raised by special assessment.

*Grist Mills.* – We have two grist mills – one built of stone, and not yet finished; is to have four run of stone, and to cost fifteen thousand dollars. The other is built of brick, at a cost of twenty-five thousand dollars. It has three run of stone, and is propelled by a forty-horse-power engine; has ground two thousand five hundred and twelve tuns of grain, during the past year, and is capable of making seven hundred and eighty barrels of flour per week.

ASSESSMENTS.

Assessed value of Real Estate, 1860 Assessed value of Improvements Assessed value of Personal Property	704,516 00
Total	\$3,882,700 98

Hoping that this report will fulfill the requirements of the law, and meet with your approbation, I subscribe myself

Your obedient servant,

E. H. VON PFISTER, Assessor of Solano County.

By GEO. A. GILLESPIE, Deputy.

TUOLUMNE COUNTY.

DAVID HAYS .....County Assessor.

COUNTY ASSESSOR'S OFFICE, Sonora, Oct. 1860.

To Hon. H. A. HIGLEY, Surveyor-General:

SIR: - In compliance with the laws of this State I herewith submit the following statistical report of this county for the present year:

Tuolumne may be considered a mineral county, as the precious metals have been found in paying quantities in a large portion of it; and the resources for working her mines profitably are very extensive – most of the mining country being well supplied with water by large and costly ditches or canals, many of them furnishing water the year round to both quartz and placer miners.

Our quartz mines are as rich as any in the State, and are being developed more and more every day; the amount taken out by quartz mills alone being over half a million dollars annually. There is also a large amount taken out by working arastras, etc. The number of quartz mills is thirty-three; assessed value, eighty-six thousand dollars; tuns of rock crushed yearly, thirty-two thousand one hundred and forty-four; average yield, about twenty-seven dollars per tun.

Our placer, deep, and river, mines, are second to none in the State – in which thousands are engaged, receiving a fair remuneration.

Although this is a mining county, the amount of land claimed for agricultural, horticultural, and grazing, purposes, is large, amounting to sixty thousand three hundred and thirty acres; of which there are inclosed, twelve thousand seven hundred and eighty-four acres; and under cultivation, about nine thousand acres. The quantity of cereals grown is not large, the greater portion of which is made into hay. Many of the inhabitants are engaged in fruit growing, in which they succeed quite as well as some of the agricultural counties; the fruit being as large and of as fine a flavor as any produced in the State; and in quantity increasing yearly, and which pays remunerating prices.

Quite a number are turning their attention to the making of wine, in which they are successful.

Our lumber and timber forests are quite extensive, lying in the eastern portion of the county, consisting of white, sugar, and pitch, pines, and cedar, interspersed with oak of different kinds. There are twenty-one saw mills and about two hundred men engaged in this branch of business, producing nine million feet annually.

There is not much attention paid to the raising of stock – the number of horses of different kinds being one thousand three hundred and sixteen; of mules, four hundred and eighty-one; of cattle of all kinds four thousand seven hundred and twenty-one; of which there are four hundred and thirty-two work cattle, and one thousand seven hundred and eighteen milch cows. The number of cattle slaughtered yearly, nine thousand eight hundred and fifty-five – valued at one hundred and ninety-seven thousand one hundred dollars; of hogs, seven thousand six hundred and sixty-five – valued at seventy-six thousand three hundred and fifty dollars; of sheep seven thousand three hundred dollars. The larger portion are driven into the county as they are needed for market.

The value of real estate is not on the increase – the assessed value being two hundred and eight thousand eight hundred dollars. Improvements are springing up on every hand, and are of a more solid and substantial character than those made in former years. The assessed value of improvements is one million five hundred and ninety-seven thousand dollars; increased value, as compared with the year eighteen hundred and fifty-nine, one hundred and thirty-six thousand eight hundred and seventy dollars. The assessed value of personal property is one million five hundred and five thousand six hundred and seventy-five dollars; increased value, as compared with the year eighteen hundred and fifty-nine, four hundred and six thousand six hundred and fifteen dollars. Total assessed value of property of all kinds for the fiscal year eighteen hundred and sixty, is three million three hundred and twelve thousand four hundred dollars.

For more and full particulars, please refer to the schedule inclosed. All of which is most respectfully submitted.

DAVID HAYS,

Assessor of Tuolumne County.

# YOLO COUNTY.

JAMES McCAULEY ......County Assessor.

COUNTY ASSESSOR'S OFFICE, Cacheville, October 3, 1860.

To Hon. H. A. HIGLEY, Surveyor-General:

DEAR SIR: - In compliance with your circular, and the statutes of the State relative thereto, I have the honor to submit the following as my annual official report, as Assessor of Yolo County, for the present year; an din doing so, I shall refrain from commenting, to any extent, upon the subject matter, as I hope the simple facts and figures will be sufficient of themselves.

It is almost impossible to obtain all the information desired by the law, and, in fact, it is with much difficulty the Assessor can get what is actually necessary.

Yolo is an agricultural county, with a population of over four thousand inhabitants, the principal portion of whom are engaged in farming, and settled upon seven hundred and twenty-five farms, or ranches.

LANDS.

The lands of Yolo may be classed under three general lands:

*First* – The swamp and overflowed lands, claimed by the State, of which there is an area of about one hundred miles in length, and from two to four miles in width.

Second – The United States lands. Of this class there is but very little good lands, and, in fact, may be considered as the trimmings of the Spanish grants.

*Third* – The Spanish grants. This class comprises nearly all the available land in the county, and are denominated, to-wit: The Rio Jesus Maria, comprising six leagues; the Rio Canada de Capay, comprising seven leagues; the Laguna de Santos Valley, comprising ten leagues; the Rancho de Carmell, comprising eleven leagues; the Guessisose, comprising two leagues; and a portion of the Rio de los Putos. Of these, three have been patented, to wit: the Rio Jesus Maria, Guessisose, and the Rio de los Putos.

CROPS.

The hay lands have returned a yield of about one and one-half tuns per acre, or, in the aggregate, about eighteen thousand tuns, a large per centage of which is fed within the county.

The grain crops of Yolo, for eighteen hundred and sixty, exceed that of any other year since eighteen hundred and fifty-two; and, from a comparatively accurate estimate, I find the average yield to be as follows:

1859 – Wheat, bushels per acre	8
1859 – Barley, bushels per acre	10
1860 – Wheat, bushels per acre 1860 – Barley, bushels per acre	35 60

The total amounts are:

Grain.	Year.	Acres.	Bushels.
Wheat	1859	15,164	121,312
Barley	1859	24,526	245,260
Wheat	1860	13,236	469,360
Barley	1860	25,694	1,541,640

Barley is essentially the staple commodity of the county, and by its exemption from all diseases, is generally the most remunerative.

Wheat also does well, and with the exception of an occasional sprinkle of smut, is a safe and profitable crop.

Corn grows well upon the Sacramento River, and is also successfully grown, by way of an experiment, near the north of Cacheville, where a limited number of acres can be irrigated by water from the Cacheville Agricultural Ditch.

The vegetable crops are chiefly confined to the lands bordering on the Sacramento River, and as these lands never suffer form drought, the farmer is always sure of an abundant harvest. I have learned of no disease, as yet, from the present crop.

Of Rye there is a small crop of about one hundred and fourteen acres, yielding about twenty-five bushels per acre.

# FRUIT TREES AND VINES.

Much interest is manifested in the culture of all kinds of fruit, as yet, but a comparatively few trees have reached maturity; those few, however, have met the full expectation of the culturist, and have been reared both with and without irrigation. The experienced advantage in irrigation seems to be in transplanting, but the propriety of its continuation is much questioned. Though conductive to the rapidity of growth, the flavor of the fruit is said to be impaired by its too frequent use.

Whether this is caused by a too rapid flow of sap, its chilly influences excluding the genial and ripening warmth of the sun, or if at all, I am unable to say; but certainly there is connected with the successful growth of fruit a subject worth of the attention of the wise.

#### TIMBER.

The timber of Yolo County consists principally of the scrub oak, and is chiefly profitable for fire-wood. Its limited amount will, in a few years, make it valuable for steam boat fuel.

#### LIVE STOCK.

The progress in this department may be readily seen by its annual exhibitions at each successive State Fair. In fact, the raising of fine stock in Yolo is becoming a matter of pride in our farmers – each endeavoring to outrival his neighbor in the superiority of his horses, sheep, or cattle.

The advantages for raising stock upon the Spanish, or wholesale, system, is greatly reduced, as the plow and harrow have taken the place of the once extended pasture-fields.

#### SHEEP AND WOOL.

The improvement in this lime is steadily on the advance. The Merino and Southdown are now seen in almost every flock in the county. More attention is being paid to the quality than the quantity of the wool. The facilities for raising large flocks of sheep are decreasing, as the vacant lands are being more generally tilled, and, consequently, reducing the amount of pasturage. There are, in the county, thirty thousand nine hundred and seventy-one sheep. The wool from which is clipped in the months of April and September, and amounts, for the present year, to seventy-seven thousand four hundred and twenty seven pounds, and valued at an average rate of fifteen cents per pound. The assessed value of sheep – four dollars per head.

#### HORSES.

There are in the county three thousand nine hundred and forty head of horses, valued at, or assessed at, two hundred and fifty thousand eight hundred and thirty-one dollars.

#### MULES.

There are only three hundred and seventy-three mules in the county, valued at forty-two thousand one hundred and seventy dollars.

#### HOGS.

We have thirteen thousand eight hundred and fifty-two hogs in our county, valued at fifty-four thousand nine hundred and ninety-four dollars.

#### RECAPITULATION OF STOCK.

Description.	No. 1859.	Value.	No. 1860.	Value.
Horses	3,052	\$198,380	3,940	\$250,331
Cattle	17,006	510,180	23,480	419,526
Sheep	15,866	75,330	30,971	114,055
Mules	262	31,440	373	42,170
Hogs	10,064	40,256	13,852	54,994

#### POULTRY AND EGGS.

Property of this kind may eventually be considered as the pin-money of the husbandry, and is generally presided over by the landlady, and when well cared for, proves quite lucrative. I find about thirty-four thousand seven hundred and seventy-eight chickens, in the county, and three thousand three hundred and ninety-nine turkeys. Of ducks, geese, etc. we have but a small number. About seventy thousand dozens of eggs are produced, annually, in the county, at an average valuation of about twenty-five cents per dozen.

#### BEES.

We have, in the county, about five hundred and thirty-seven stands, or hives, of bees, which are in a thriving condition, and are found to do well near the tule and rivers.

#### RAILROADS.

The grading of the Marysville and Benicia Railroad is nearly completed across the county, and the laying of the track is soon to be expected. This road, while it has the best wishes of many of our citizens, received no appropriations from the county by the vote of eighteen hundred and fifty-nine.

#### IMPROVEMENTS.

We have, in the county, three steam-power flowering mills, three turnpike roads, two distilleries (of whiskey), and two agricultural ditches; all in a flourishing condition. In the above enumeration of statistical items, I have endeavored to be as correct as circumstances would allow. The items of live stock is strictly correct, as shown by my assessed roll. There is a small increase in the number of stock in this county, but a slight depreciation in the value of cattle.

#### TAXABLE PROPERTY.

Description.	Amount.
Assessed value of Land	571,898

Assessed value of Improvements	345,435
Assessed value of Personal Property	1,506,350
Total	2,423,563

One dollar and thirty-five cents tax on each one hundred dollars.

The assessed valuation of property in the county, you will find to be some thirty thousand dollars less than last year. This is owing to a depreciation in the value of cattle, and also in the valuation of certain lands, reduced by the Board of Equalization. In the above report, I have endeavored to give you such information as I could obtain from the people of the county. There are other items that I had wished to procure, but could not, because farmers generally keep no record of them.

I have endeavored to comply with the requirements of the law, as far as practicable, in my report, and though short, I hope it will be satisfactory.

Respectfully,

JAMES McCAULEY, County Assessor.

P. S. – Inclosed, please find my statistical table.

# YUBA COUNTY.

JOHN RULE .....County Assessor.

COUNTY ASSESSOR'S OFFICE, Marysville, Sept. 29, 1859.

Hon. H. A. HIGLEY,

Surveyor-General:

SIR: - Herewith I inclose a statement of the agricultural and other statistics of Yuba County, compiled from the assessment books of the year A. D. eighteen hundred and sixty; as also, an abstract of the assessed value of real and personal property, with the amount of taxes for the State and county purposes levied thereon.

The several branches of industry in this county, which may be properly classed under three heads, viz: agricultural, mercantile, and mining, appear, on the whole, to be in a sound and prosperous condition. Farmers, generally, have reaped bountiful crops as the reward of their exertions, though, from the prevailing low prices of grain and stock, are not being quite so well remunerated as could be wished.

The fair, lately held in this city, has, however, conclusively demonstrated the rapid strides that are being made in agriculture and its kindred pursuits, more especially in improving the breed of the various kinds of stock, some of which have already reached a high standard of excellence.

Fruit-growing has become quite a prominent feature in this county, and, ere long, will attain a position of vast importance. The orchards of Messrs. Briggs, Covillaud, Hutchinson, Teegarden, Wescoatt, and others, being a proof of what skill and well-directed enterprise may effect in a short time.

The facilities for the cultivation of grape-vines in the foothills of this county, are not to be excelled by any in the State, and are attracting the attention of many to that business, which promises to become successful and highly remunerative, as may be well instanced in the case of the "Empire Ranch," the spirited proprietors of which, Messrs. Moody & Mooney, spare no pains in the cultivation of superior grapes especially adapted for the table.

Much damage has accrued to the bottom lands on the Yuba and Bear rivers by the deposition of a thick stratum of red sandy mud, caused by the overflow of these rivers. This is productive of much injury and annoyance to the farmers of these lands, and unless means are devised to check the evil, much of the best fertile land in this county will be rendered completely valueless.

These bottom lands are also being much injured in another form, but arising from the same cause, for as the main channels of these rivers fill up with sand and mud, their waters, not finding a sufficiently large outlet, are diverted from their usual course and are backed into what were formerly dry sloughs, and there from large and deep watercourses, and ponds, greatly to the hindrance and loss of the farmer. In one case, on the Yuba bottom, a large portion of that river has forsaken its natural channel, and flows for a considerable distance through a series of sloughs, completely surrounding several valuable farms, much to the deterioration of their value and injury, to the health and inhabitants of that vicinity. Altogether, this is an evil of much magnitude, and I deem it my duty to call your attention to the matter, as anything that obstructs the development of the resources of a particular section, injures, to a certain extent, the whole community as well as those more immediately interested.

As a remedy, a levee would seem to offer the only effectual means of preventing this evil, but the great expense attending the construction of a work of that nature, would almost appear to forbid such an enterprise being undertaken by private means alone; but already, in spite of the great labor and consequent expense, the farmers on Bear River seriously contemplate the erection of a levee sufficient to restrain that river within its natural channel.

Those engaged in mercantile pursuits in this county have been doing a steady, paying business. The demand for goods and for the means of freighting them to the mountains, having been good during the spring, and though somewhat slack during the summer, appears to be steadily reviving.

Much progress has been made during the year, in improving this city, many handsome and substantial brick buildings being in course of erection, which will tend to

greatly adorn our already handsome place; and it needs but the completion of the tidewater railroad, to insure Marysville, as the éntrepót of the commerce of the north, a bright and prosperous future.

The principal seats of mining enterprise in this county, are at Timbuctoo, Galena, Young's, and Railroad Hills, Parks' and Long Bars, and their vicinity.

River mining, owing to the vast accumulation of tailings, is almost totally discontinued. In quartz mining, also, but little is doing.

At Timbuctoo, some of the heaviest mining operations in the State are being successfully prosecuted; the whole range of hills, from the Empire Ranch to the Yuba, a distance of fully three miles, being some of the busiest activity; and a constant source of employment to very many men.

The nature of the deposit, which is composed of cement and cemented gravel, requires much skill, labor, and a large outlay of capital, to bring about a successful result. At the first washing, but a small portion of the gold is secured; the tailings then lie exposed to the action of the atmosphere for several months, when they are again washed, giving a far larger yield than at first. As the cemented gravel becomes more decomposed, the process is repeated again and again, each time paying well for the operation.

In conclusion, I would urge upon you the necessity of a more complete and systematic method of compiling the statistics required by law. Under the present system, it is an exceedingly difficult and tedious task to collect them with that accuracy which alone renders them valuable. If the matter is worth doing at all, it is worth doing well, and, in my opinion, an important step in effecting this, would be, by issuing a printed form in sheets, each sheet divided into columns, with appropriate headings; these could be conveniently carried around by the Assessors, and the proper entries made; at the close of the season, the several columns should be added up, and the result transmitted to your office, as usual, while the originals should be deposited in the County Records, forming a correct annual register of the progress of the county, which, in a few years, would become a very valuable and interesting record that would well repay the cost of collecting the data.

# ABSTRACT

And Comparison of the Assessed Value of Property with amount of Taxes thereon for the years 1859 – 1860.

Description.	1859.	1860.
Real Estate	\$1,523,674 00	\$1,593,873 00
Improvements	1,657,750 00	1,772,983 00
Personal Property	2,616,580 00	3,032,435 00
Total Value	5,798,004 00	6,399,291 00
County Tax – 1859, \$1 65 per ct; 1860, \$1 50 per		
ct	95,658 70	95,751 03
Total Tax	131,436 82	134,051 94
Delinquent Tax	8,751 53	19,023 69

I am, sir, Yours, very respectfully,

> JOHN RULE, Assessor of Yuba County.