

(1) Number of pages 11

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.**Government of Madras.***Public Works* **DEPARTMENT.**

G.O. No. <u>702</u>	Press Mis.
Dated <u>13</u>	<u>1872</u>

Not to be folded or roughly handled*17/11/1944*

*Proceedings of the Madras Government, Public Works Department,
13th January 1872.*

No. 193. Read the following letter from R. SMITH, Esq., Executive Engineer on special duty, Madura District, to the Chief Engineer for Irrigation, dated Perryaur Camp, 13th December 1871, No. 7-A. :—

I HAVE the honour to submit the subjoined report of the progress made with the Perryaur investigations during the past month.

2. The contour survey of the portion of the Perryaur basin now under examination was carried on throughout the month; but I regret to have to state the work done is below the average, as Lieutenant Greer was compelled, by indisposition, to give up out-door work for sixteen days.

3. Tolerable progress has been made with the trial pits on the escape saddle and on the hill between it and the northern extremity of the proposed reservoir embankment, but no very reliable results have been obtained regarding the level of the compact rock, as the funds at our command would not admit of these excavations being vigorously prosecuted.

4. At 12 o'clock P.M. on the 25th ultimo the Perryaur rose to 24.41 feet above datum, and measures were taken early the following morning to ascertain the surface fall and the surface velocity of the stream at different stages of the flood. The information collected will be tabulated and submitted with the Perryaur Report for the current month.

5. The diagram and register showing the rainfall at the Perryaur Camps, and the discharge of the Perryaur during the month under review, are enclosed.

PERRYAUR PROJECT.

Table of Rainfall and Discharge of Perryaur during November 1871.

Date.	RAINFALL AT		Hours.	Water level in feet.	DISCHARGE.	
	Perryaur Camp.	Kythury Camp.			Cubic feet per second.	1,000 Cubic yards per day.
	INCHES.	INCHES.				
1st ...	0.33	0.17	{ 6 A. M.	0.07	344}	545
			{ 6 P. M.	0.04	337}	
			{ 6 A. M.	3.04	1,761}	2,011
			{ 12 noon.	1.75	181}	
2nd ...	0.67	0.47	{ 6 P. M.	1.52	855}	
			{ 12 mid.	2.46	1,430}	...
			{ 6 A. M.	5.87	4,395}	2,530
			{ 12 noon.	4.83	3,308}	3,281
3rd ...	0.25	0.27	{ 6 P. M.	3.80	2,280}	2,235
			{ 6 A. M.	2.15	1,242}	1,616
			{ 6 P. M.	1.52	855}	1,678
4th ...	0.05	0.07	{ 6 A. M.	2.46	1,430}	1,886
			{ 6 P. M.	1.66	927}	
5th ...	0.00	0.10	{ 6 A. M.	1.20	710}	1,070
			{ 6 P. M.	1.00	628}	
6th ...	0.10	0.00	{ 6 A. M.	0.85	572}	901
			{ 6 P. M.	0.80	554}	
7th ...	0.45	0.00	{ 6 A. M.	1.66	927}	1,360
			{ 6 P. M.	1.37	784}	
8th ...	0.00	0.00				

Proceedings of the Madras Government, Public Works Department,
13th January 1872.

Table of Rainfall and Discharge of Perryaur during November 1871.—(Continued.)

Date.	RAINFALL AT		Hours.	Water level in feet.	DISCHARGE.	
	Perryaur Camp.	Kythury Camp.			Cubic feet per second.	1,000 Cubic yards per day.
	INCHES.	INCHES.				
9th ...	0-00	0-00	6 A. M.	0-92	598	907
10th ...	0-05	0-00	6 P. M.	0-75	536	
11th ...	0-05	0-00	6 A. M.	0-62	490	774
12th ...	0-05	0-00	6 P. M.	0-58	477	
13th ...	0-93	0-03	6 A. M.	0-59	451	753
14th ...	0-93	0-70	6 P. M.	0-62	490	
	0-09	0-00	6 A. M.	1-52	855	1,595
			6 P. M.	2-00	1,139	
15th ...	0-46	1-61	6 A. M.	1-12	677	1,123
			6 P. M.	1-25	731	
			12 noon.	3-25	1,585	2,703
			6 P. M.	2-70	1,599	
			12 mid.	3-10	1,794	
16th ...	0-73	0-12	6 A. M.	2-59	1,509	
			12 noon.	2-30	1,337	1,139
			6 P. M.	2-46	1,439	1,07
			9 P. M.	2-50	1,461	1,176
			12 mid.	6-50	4,721	1,263
17th ...	0-00	0-00	6 A. M.	4-64	3,104	1,597
			12 noon.	3-04	1,761	
			6 P. M.	2-50	1,461	2,331
			6 A. M.	2-16	1,242	
18th ...	0-00	0-00	9 A. M.	4-50	2,972	
19th ...	0-00	0-00	12 noon.	5-78	4,274	4,735
20th ...	0-00	0-00	6 P. M.	4-36	2,839	
21st ...	0-00	0-00	6 A. M.	3-04	1,761	1,803
22nd ...	0-00	0-00	6 P. M.	2-16	1,242	
23rd ...	0-03	0-00	6 A. M.	1-80	1,012	1,212
24th ...	0-02	0-10	6 P. M.	1-37	784	
25th ...	0-25	0-20	6 A. M.	1-25	731	1,006
			6 P. M.	1-05	619	
			6 A. M.	0-95	609	856
			6 P. M.	0-80	554	
			6 A. M.	0-80	554	795
			6 P. M.	0-66	504	
			6 A. M.	0-62	470	832
			6 P. M.	0-66	504	
			6 A. M.	0-75	546	
			6 P. M.	0-75	546	1,450
			6 A. M.	1-85	1,013	
			6 P. M.	1-34	770	518
			6 A. M.	1-20	740	1,110
			6 P. M.	1-12	677	1,172
			10 P. M.	8-88	8,115	4,309
26th ...	0-13	0-15	12 mid.	16-64	24,206	9,910
			2 A. M.	24-41	50,120	12,278
			4 A. M.	22-20	41,965	8,954
			6 A. M.	16-58	25,192	5,245
			9 A. M.	12-49	14,143	5,085
			12 noon.	10-92	11,254	3,747
			3 P. M.	8-49	7,450	2,776
			6 P. M.	7-62	6,431	2,260
			9 P. M.	6-54	4,871	1,818
			12 mid.	5-74	4,220	1,550
				5-06	3,539	

* Estimated.

Proceedings of the Madras Government, Public Works Department,
13th January 1872.

Table of Rainfall and Discharge of Perryaur during November 1871.—(Concluded.)

Date.	RAINFALL AT		Hours.	Water level in feet.	DISCHARGE.	
	Perryaur Camp.	Kythury Camp.			Cubic feet per second.	1,000 Cubic yards per day.
	INCHES.	INCHES.				
27th ...	0-00	0-00	6 A. M.	4-46	2,935	7,861
			6 P. M.	3-40	1,978	
28th ...	0-00	0-00	6 A. M.	2-84	1,647	2,406
			6 P. M.	2-34	1,361	
29th ...	0-00	0-00	6 A. M.	2-05	1,173	1,748
			6 P. M.	1-89	1,012	
30th ...	0-09	0-00	6 A. M.	1-64	916	1,394
			6 P. M.	1-46	826	
Total...	8-29	6-54			...	122,528

Depth run off from Catchment Basin of 250 square miles = 5-69 inches.

Mean discharge ... { 4,084,263 Cubic yards per day.
170,177 " " per hour.
1,276 " " feet per second.

Discharge of Perryaur in November 1869 ... 496,396,000 Cubic yards.
" of " in " 1871 ... 122,528,000
Difference—Excess in November 1869... 373,868,000

PERRYAUR CAMP,
13th December 1871.

(Signed) R. SMITH,
Executive Engineer on special duty,
Madura District.

No. 194. ORDER THEREON, 13th January 1872, No. 102.

IRRIGATION, No. 19.

ORDERED to be recorded.

(True Extract.)
(Signed) J. CARPENDALE, Colonel, R.E.,
Secretary to Government.

Ed. E. C. Shanker.

Mean Discharge

4,082,256 Cubic yards per day
 190,177 Cubic yards per hour
 1,276 Cubic feet per second.

Cubic yards.

Discharge of Surge at low water 1869 — 496,396,000

Do. of Do. at low water 1871 — 122,528,000.

Difference — Excess in 1869 ^{3rd} 373,868,000.

John E. Ingersoll Office
 Surgeon General 13th Decemr 1871

Comdant. U.S. Army

opposite

Corporal Ingersoll

Washington

Perquimans Paper Table of Rainfall and discharge of Perquimans during November, 1891

Rainfall at			Discharge			Water level			Discharge		
Date	Perquimans Camp	Stations	Date	Perquimans Camp	Stations	Date	Perquimans Camp	Stations	Date	Perquimans Camp	Stations
	inches	fractions		inches	fractions		inches	fractions		inches	fractions
1	0.33	0.17	6 a.m.	0.07	344	16	0.73	0.12	6 a.m.	3.04	1761
			6 p.m.	0.64	337				12 noon	2.50	1461
2	0.67	0.47	6 a.m.	3.04	1761				6 p.m.	2.16	1242
			12 noon	1.75	1981				6 a.m.	4.50	2972
			6 p.m.	1.52	855	17	0.00	0.00	9 a.m.	5.78	4241
			12 mid.	2.46	1430				12 noon	4.36	2830
3	0.25	0.27	6 a.m.	5.87	4395				6 p.m.	3.04	1761
			12 noon	4.83	3308	18	0.00	0.00	6 a.m.	2.16	1242
			6 p.m.	3.80	2280				6 p.m.	1.80	1012
			12 mid.	2.15	1242	19	0.00	0.00	6 a.m.	1.37	7811
4	0.05	0.07	6 a.m.	1.82	855				6 p.m.	1.25	731
			12 noon	2.46	1430	20	0.00	0.00	6 a.m.	1.05	609
			6 p.m.	1.66	927				6 p.m.	0.95	609
5	0.00	0.10	6 a.m.	1.20	710	21	0.00	0.00	6 a.m.	0.80	534
			6 p.m.	1.00	628				6 p.m.	0.80	534
6	0.10	0.00	6 a.m.	0.85	572	22	0.03	0.00	6 a.m.	0.66	504
			6 p.m.	0.80	554				6 p.m.	0.62	490
7	0.45	0.00	6 a.m.	1.66	927	23	0.02	0.10	6 p.m.	0.75	536
			6 p.m.	1.37	781				6 a.m.	1.85	1043
8	0.00	0.00	6 a.m.	0.92	598	24	0.25	0.20	6 a.m.	1.34	710
			6 p.m.	0.75	536				6 p.m.	1.20	710
9	0.00	0.00	6 a.m.	0.62	490				6 a.m.	1.12	677
			6 p.m.	0.58	477	25	2.80	2.55	6 p.m.	8.88	8115
10	0.05	0.00	6 a.m.	0.50	437				8 p.m.	16.64	24206
			6 p.m.	0.62	490				10 p.m.		9910
11	0.05	0.00	6 a.m.	1.32	855				12 mid.	24.41	50120
			6 p.m.	2.00	1139				2 a.m.	22.20	41965
12	0.90	0.00	6 a.m.	1.12	677				4 a.m.	16.98	25192
			6 p.m.	1.25	731				6 a.m.	12.49	14143
13	0.93	0.70	6 a.m.	3.25	1885	26	0.13	0.15	9 a.m.	10.92	11284
			12 noon	2.70	1569				12 noon	8.40	71450
14	0.09	0.00	6 p.m.	3.10	1794				3 p.m.	4.62	61431
			12 mid.	2.59	1569				6 p.m.	16.84	41871
			6 a.m.	2.30	1337	27	0.00	0.00	9 p.m.	5.74	41220
			12 noon	2.46	1430				12 mid.	5.06	3530
			6 p.m.	2.50	1461				6 a.m.	4.46	2935
15	0.46	1.61	9 p.m.	6.50	4729	28	0.00	0.00	6 p.m.	3.40	1978
			12 mid.	4.64	3104				6 a.m.	2.87	1647
						29	0.00	0.00	6 p.m.	2.34	1361
									6 a.m.	2.05	1173
						30	0.00	0.00	6 p.m.	1.80	1012
									6 a.m.	1.64	916
									6 p.m.	1.46	826
Total					8.29	Total					122.528
					6.54						Estimated.

Depth run off from Catchment basin of 250 Square miles = 5.69 inches.

Means.

87 A

96

Exc: Engineer's Office
Perryman Camp
13th December 1871

From The Executive Engineer
for Special duty
Madras District

To The Chief Engineer
for Irrigation
Fort St George

Sir

I have the honor to submit
the subjoined Report of the
progress made, with the Perryman
investigations, during the past
month.

2 The contour survey of the
portion of the Perryman basin,
now under examination, was
carried on, throughout the month,
but I regret to have to state
the work done is below
the average as Lieut Greer

was

11/28/71

13th December 1871.
The Hon. Secy to the Executive
Engineer, Madras District
Madras District

11/28/71
for a long time
Madras.

1871.
Perryman during a long
time.

1871.

was compelled, by indisposition,
to give up outdoor work
for 16 days.

3. Tolerable progress has
been made with the trial
pits on the Escape saddle,
and on the hill, between
it and the Northern extremity
of the proposed Reservoir
embankments, but no very
reliable results have been
obtained, regarding the level
of the compact rock, as the
funds, at our command,
would not admit of these
excavations being vigorously
prosecuted.

4. At 12 o'c P.M. on the
25th ultimo the Perryman
rose to 24.41 feet, above datum,
and measures were taken,

end

early the following morning,
to ascertain the surface fall,
and the surface velocity of the
stream, at different stages
of the flood. The information
collected will be tabulated
and submitted with the Perryman
Report for the current month.

5. The Diagram and Register
showing the rainfall, at the
Perryman Camps, and the
discharge of the Perryman,
during the month under
review, are enclosed.

I have the honor to be

Sir
Yours most respectfully

G. M. W.

Exc. Engineer
on special duty

J. D. W. 1871
No. 102-13
Trans. No. 10081.

The Sec. Engineers
in Special Dist.
Madison District

To The Chief Engineer
for Irrigation
First of 1st Division.

Ordered 13th December
December 14th 1871

Recd 20th
* 1st Division
The 1st Division
No. 102-13
1871

Report showing
the progress made
with the Division
investigations during
November 1871.
made on 1st

Ordered to be recorded
No. 102-13
J. D. W.

Ch. 601.

Govt. of 1872 Madras.

PUBLIC WORKS.

To

Dated

Recd.

Encl. /

G. O. 18th Aug 1872, N^o 102.

Nos. 193 & 194.

Perryam Project. Copies
report on the Perryam
project during the
1871, record.