Stantec Consulting Ltd.
500–311 Portage Avenue, Winnipeg MB R3B 2B9

February 28, 2017
Stantec File: 111440070
Manitoba Conservation and Water Stewardship File: 5577.00

Attention: Peter Crocker, District Supervisor
Manitoba Conservation and Water Stewardship
Environmental Compliance and Enforcement Branch
Box 13, 1129 Queens Avenue
Brandon, MB R7A 1L9

Dear Mr. Crocker,

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Stantec Consulting Ltd. (Stantec) submits the following 2016 Final Monitoring Report for the Daly Irrigation Project (the Project), on behalf of the Daly Irrigation Development Group (DIDG; the Licencee). This letter provides a summary and status of monitoring data collected in 2016, as required by *Environment Act* Licence No. 3010 (the Licence), issued on July 5, 2012.

The following information is presented:

- Upstream and downstream flows, volumes and rates of water pumped, and durations of pumping as prescribed by Clause 21 of the Licence.
- Results of the Dissolved Oxygen Monitoring Program as prescribed by Clause 22 of the Licence.
- Photographs of the Little Saskatchewan River riffle bed exposure immediately downstream of the diversion point of the Project as prescribed by Clause 23 of the Licence.

Due to high water levels that precluded safe retrieval of monitoring equipment at the end of the irrigation period, we were unable to collect end of season data.

MEASUREMENT OF UPSTREAM AND DOWNSTREAM FLOW RATES

In accordance with Clause 21 of the Licence, flow rates are to be recorded daily on a continual basis. For monitoring purposes, daily flow rates are monitored at two sites – upstream and downstream of the Project diversion point.

The upstream monitoring point is located at the Water Survey of Canada (WSC) Little Saskatchewan River near Rivers (05MF018) hydrometric station, close to the crossing of Highway 25 over Little Saskatchewan River. WSC flow and level data recorded at this station is used to monitor the river condition upstream of the diversion point. In addition to the WSC data, a Stantec operated data logger (ID: DIVER U3359) was installed here on June 3, 2016 to measure water level.

A stream flow monitoring station was installed downstream of the Project diversion point on June 17, 2015, to monitor the downstream conditions. This monitoring station consists of two data loggers: one (ID: DIVER S8844) was installed at the bottom of the river to measure total water pressure and water temperature, and the other (ID: DIVER U3297) was installed at the surface, adjacent to the pumping station to measure atmospheric pressure and air temperature. A flow survey was completed at this site on June 3, 2016.

For purposes of this report, flow rates upstream and downstream of the diversion point were compared during the irrigation period (June 4, 2016, to September 24, 2016). Real-time WSC flow data at Little Saskatchewan River near Rivers station were used to illustrate flow upstream of the diversion point. Flows downstream of the diversion point were estimated by subtracting the maximum daily pumping discharge from the upstream river flow. Figure 1 shows the average daily upstream flow rates recorded at the WSC Little Saskatchewan River near Rivers station and the estimated downstream flow rates during the 2016 irrigation period relative to the minimum in-stream flow of 0.524 m^3/sec prescribed in the Licence. Throughout the 2016 irrigation period the estimated flow downstream of the diversion point was above the minimum instream flow requirement of 0.524 m^3/sec.

A manual flow survey was conducted by Stantec on June 3, 2016, downstream of the diversion point. A flow of 8.47 m^3/s was recorded. The average daily flow recorded by WSC at the upstream station on June 3, 2016, was 11.21 m^3/s. The reduction in flow downstream of the diversion point is not a result of the irrigation pumps as the irrigation pumping did not start until the following day. This may be a result of the hydrological conditions at the location of the manual flow survey or technical problems with the flow survey equipment.

VOLUMES AND RATES OF WATER PUMPED

A summary of daily pump volumes and rates recorded at the diversion point are provided in Table 1. As flow meters on the pumps measure instantaneous flow rate, total daily volume and accumulated volumes over the season, duration of pumping is not required to determine volume and rates but can be calculated if necessary. The daily maximum pumping rate did not exceed the maximum pumping rate of 0.555 m^3/s specified by the Licence. A total volume of 445,512,000 US gallons or 1,367 ac-ft were pumped for irrigation in 2016.

DISSOLVED OXYGEN CONCENTRATION

In accordance with Clause 22 of the Licence, a Dissolved Oxygen (DO) Monitoring Program was implemented in spring of 2016 with deployment of the HOBO® U26-001 DO Logger.

The purpose of the DO Monitoring Program was to determine if the Project had an impact on DO concentration and fish habitat within the Little Saskatchewan River downstream from the diversion point. Impacts to fish habitat are conceivable when DO concentration drops to 2-4 mg/L. Fish kills

may occur at DO concentrations of <2 mg/L. Optimal habitat conditions within the river are achieved at a DO concentration of 5-8 mg/L.

The DO logger was deployed on June 3, 2016, and recorded DO and temperature values at 15-minute intervals until the logger was retrieved on August 11, 2016. Daily average, minimum, and maximum DO concentration and daily average temperature were calculated from the logger data and are summarized in Figure 2.

DO concentration did not fall below 5 mg/L during the period the DO logger was deployed. The average DO concentration recorded was 8.2 mg/L. The lowest DO concentration recorded was 5.4 mg/L on August 8, 2016.

RIFFLE MONITORING

Under Clause 23 of the Licence, the Licencee is required to provide photographs of the riffle bed exposure in the Little Saskatchewan River downstream from the Project's diversion point during the irrigation season. A trail camera was used to record daily photographs of the riffle from June 1, 2016, to September 15, 2016.

During the period of record, the highest water levels at the upstream and downstream stations were recorded on June 8, 2016. The lowest water level at the upstream station was recorded on July 1, 2016, and the lowest water level at the downstream station was recorded on June 29, 2016. During the irrigation period, the largest daily volume of water pumped from the Little Saskatchewan River occurred on June 28, 2016. Figure 3 shows the water level at the upstream and downstream monitoring stations from June 4, 2016, to August 11, 2016.

Figure 4 shows the riffle downstream of the Project's diversion point on June 8, 2016, during high water level. Figure 5 shows the riffle downstream of the Project's diversion point on June 29, 2016, during low water level. A complete set of photographs taken by the trail camera can be provided on CD-ROM if requested.

CLOSURE

Data from the end of the 2016 season will be downloaded in the spring or summer of 2017 when flows on the Little Saskatchewan River permit safe retrieval of data. Data will be reviewed and if any issues of concern are noted they will be reported to Manitoba Conservation and Water Stewardship in a timely fashion. If there are no issues noted, outstanding 2016 data will be reported as supplemental information in the 2017 report.

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

We trust the information presented satisfies the annual monitoring report requirements under the Licence. Should you have any questions on the information presented, please contact me.

Regards,

STANTEC CONSULTING LTD.

David Whetter, M.Sc., P.Ag.
Senior Project Manager
Phone: 204-488-5706
Fax: 204-453-9012
david.whetter@stantec.com

Andrea Kneale, B.Sc., EIT
Environmental Engineer-in-Training
Phone: 204-928-7615
Fax: 204-453-9012
Andrea.kneale@stantec.com

c. Bruce Webb (Manitoba Conservation and Water Stewardship)
Ed Waldner (Daly Irrigation Development Group)

lf v:\1114\active\111440070_little_sask_ea\report\1101_drafts\monitoring_report_2016\let_didg_annual_monitoring_final_20170228.docx

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

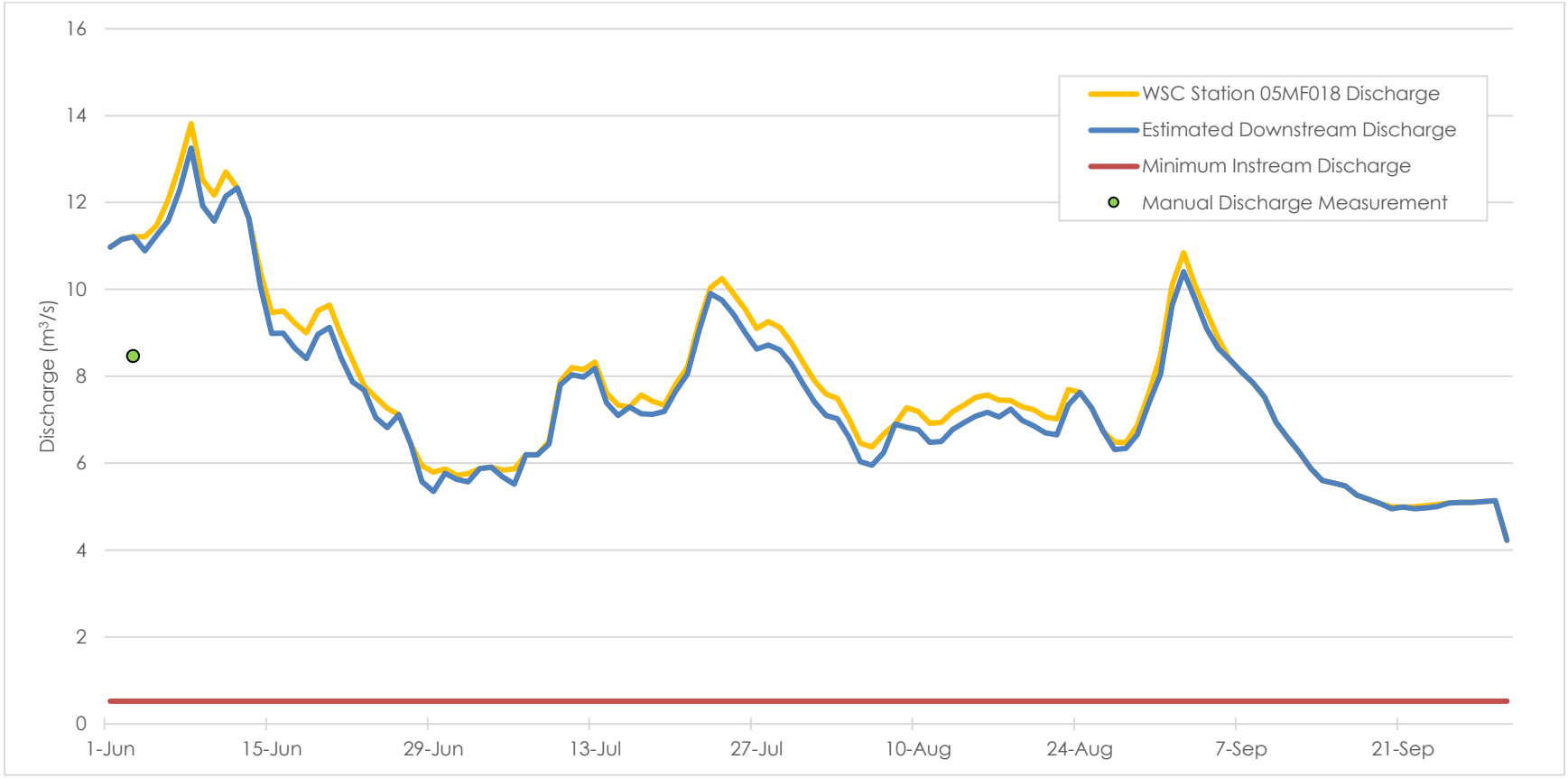

Figure 1: Average daily discharge upstream and downstream of diversion during irrigation period

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

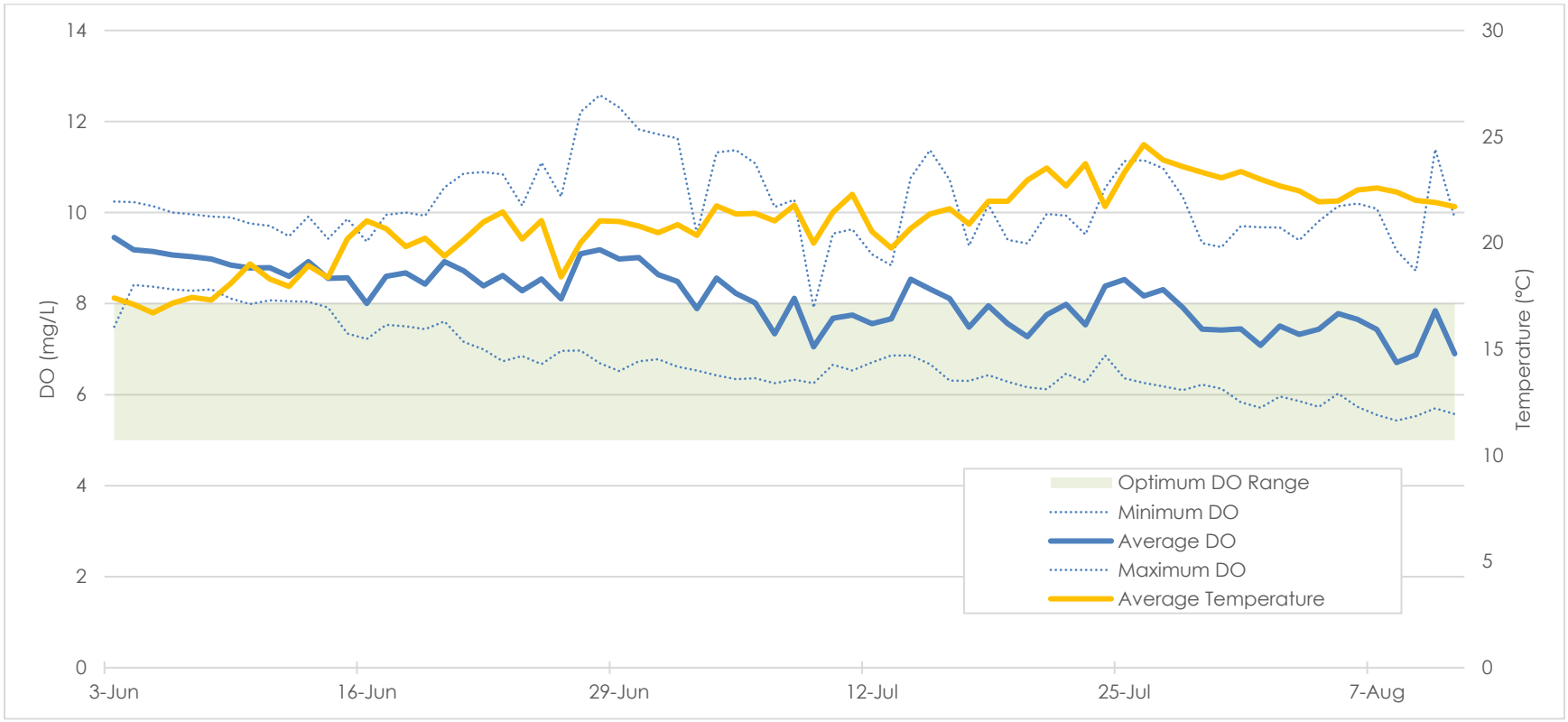

Figure 2: Daily dissolved oxygen concentration and temperature downstream of diversion

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

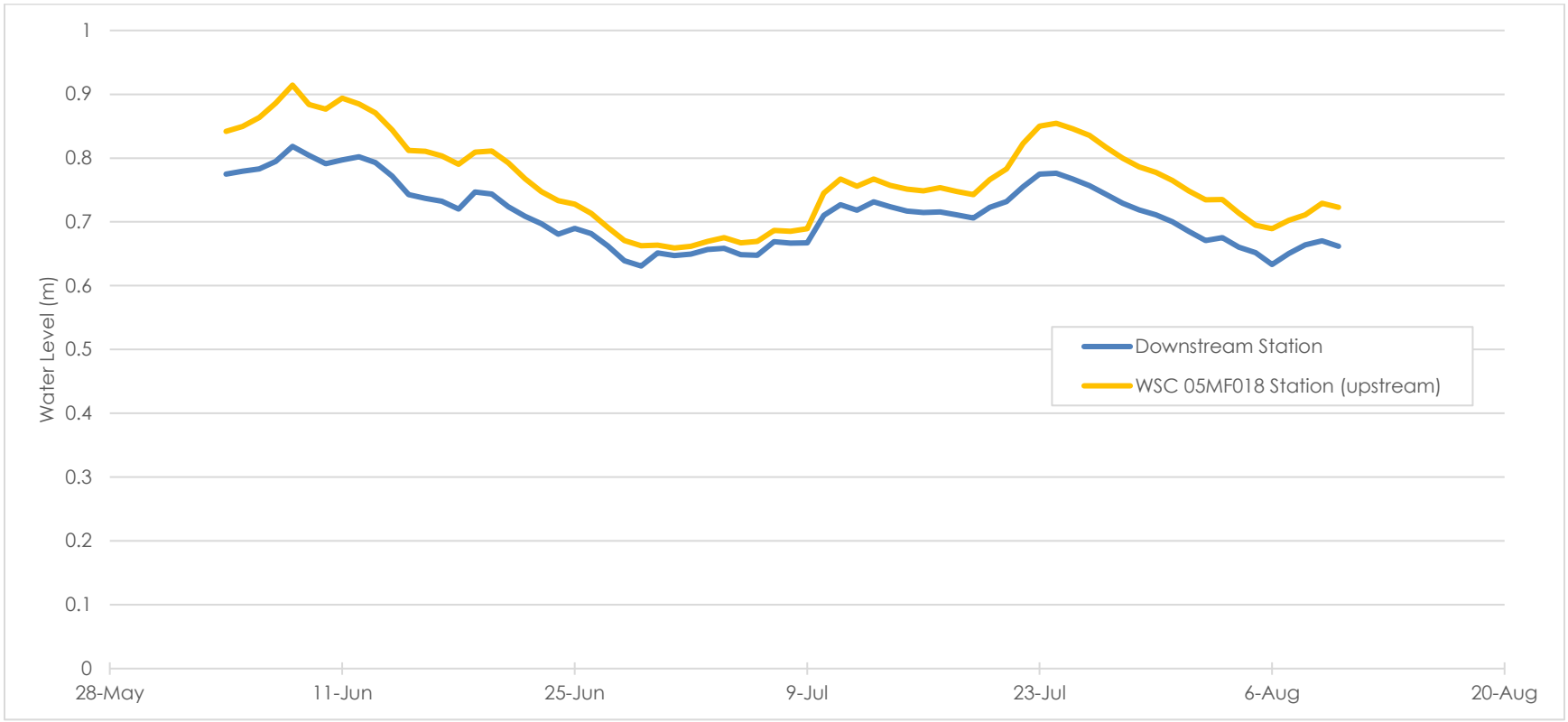

Figure 3: Average daily water level upstream and downstream of diversion

Figure 4: Photograph of riffle bed downstream of diversion during high flow conditions (June 8, 2016)

Figure 5: Photograph of riffle bed downstream of diversion during low flow conditions (June 29, 2016)

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary

Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
6/4/2016	652,030	1,763	0	0	786,240	1,749	652,030	1,763	2,090,300	5,274	0.333
6/5/2016	778,671	1,809	0	0	958,132	1,770	778,671	1,809	2,515,473	5,388	0.340
6/6/2016	1,398,082	1,796	1,620,345	1,643	1,794,676	2,512	1,398,082	1,796	6,211,184	7,746	0.489
6/7/2016	2,390,549	1,809	2,719,994	2,307	3,133,877	2,286	2,390,549	1,809	10,634,968	8,211	0.518
6/8/2016	890,040	1,675	1,177,171	2,263	1,119,823	2,551	890,040	1,675	4,077,076	8,164	0.515
6/9/2016	590,384	1,798	1,180,992	2,669	1,017,214	2,409	590,384	1,798	3,378,975	8,673	0.547
6/10/2016	1,379,607	1,763	2,043,604	2,723	2,143,989	2,452	1,379,607	1,763	6,946,806	8,701	0.549
6/11/2016	2,091,653	1,664	2,812,905	2,266	2,995,569	2,441	2,091,653	1,664	9,991,779	8,035	0.507
6/12/2016	0	0	0	0	0	0	0	0	0	0	0.000
6/13/2016	0	0	0	0	0	0	0	0	0	0	0.000
6/14/2016	1,287,175	1,795	683,356	1,719	0	0	1,287,175	1,795	3,257,705	5,309	0.335
6/15/2016	2,397,265	1,676	1,192,358	1,672	232,102	1,631	2,397,265	1,676	6,218,991	6,654	0.420
6/16/2016	2,387,851	1,670	2,835,263	2,443	2,098,690	1,493	2,387,851	1,670	9,709,655	7,276	0.459
6/17/2016	2,381,961	1,665	3,264,707	2,433	2,399,128	2,486	2,381,961	1,665	10,427,757	8,249	0.520
6/18/2016	2,374,607	1,654	3,253,853	2,334	3,303,405	2,640	2,374,607	1,654	11,306,472	8,284	0.523
6/19/2016	56,902	1,649	90,076	2,329	87,506	2,086	56,902	1,649	291,387	7,713	0.487
6/20/2016	816,888	1,788	688,961	1,739	638,709	2,105	816,888	1,788	2,961,447	7,420	0.468

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary											
Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
6/21/2016	2,368,220	1,662	2,815,980	2,477	2,192,646	1,691	2,368,220	1,662	9,745,066	7,493	0.473
6/22/2016	956,457	1,650	1,874,344	2,315	852,206	1,472	956,457	1,650	4,639,464	7,088	0.447
6/23/2016	0	0	2,070,480	1,565	0	0	0	0	2,070,480	1,565	0.099
6/24/2016	1,387,020	1,765	1,983,915	1,558	1,340,563	1,588	1,387,020	1,765	6,098,518	6,676	0.421
6/25/2016	387,312	1,640	344,453	1,428	364,872	1,470	387,312	1,640	1,483,950	6,178	0.390
6/26/2016	0	0	0	0	0	0	0	0	0	0	0.000
6/27/2016	0	0	0	0	0	0	0	0	0	0	0.000
6/28/2016	0	0	876,235	1,602	1,241,731	1,686	0	0	2,117,966	3,288	0.207
6/29/2016	1,203,141	1,694	1,192,815	1,444	1,192,973	1,457	1,203,141	1,694	4,792,069	6,288	0.397
6/30/2016	1,141,024	1,588	0	0	0	0	1,141,024	1,588	2,282,049	3,175	0.200
7/1/2016	0	0	0	0	861,765	1,527	0	0	861,765	1,527	0.096
7/2/2016	0	0	960,632	1,667	1,358,325	1,407	0	0	2,318,957	3,074	0.194
7/3/2016	0	0	0	0	0	0	0	0	0	0	0.000
7/4/2016	0	0	0	0	0	0	0	0	0	0	0.000
7/5/2016	0	0	0	0	0	0	0	0	0	0	0.000
7/6/2016	952,279	1,611	0	0	1,115,351	1,567	952,279	1,611	3,019,909	4,789	0.302
7/7/2016	0	0	0	0	0	0	0	0	0	0	0.000

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary

Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
7/8/2016	0	0	0	0	0	0	0	0	0	0	0.000
7/9/2016	0	0	35,970,560	1,008	0	0	0	0	35,970,560	1,008	0.064
7/10/2016	0	0	143,784	1,167	0	0	0	0	143,784	1,167	0.074
7/11/2016	0	0	150,420	2,691	0	0	0	0	150,420	2,691	0.170
7/12/2016	0	0	390,834	2,699	0	0	0	0	390,834	2,699	0.170
7/13/2016	0	0	381,733	2,320	0	0	0	0	381,733	2,320	0.146
7/14/2016	0	0	237,845	1,853	65,382	1,687	0	0	303,228	3,539	0.223
7/15/2016	0	0	714,961	2,207	1,077,840	1,642	0	0	1,792,801	3,849	0.243
7/16/2016	0	0	0	0	0	0	0	0	0	0	0.000
7/17/2016	0	0	1,007,182	1,840	2,213,972	2,452	0	0	3,221,154	4,292	0.271
7/18/2016	0	0	0	0	2,482,190	2,179	0	0	2,482,190	2,179	0.137
7/19/2016	0	0	0	0	390,424	875	0	0	390,424	875	0.055
7/20/2016	0	0	0	0	418,317	1,746	0	0	418,317	1,746	0.110
7/21/2016	0	0	0	0	0	0	0	0	0	0	0.000
7/22/2016	921,682	1,547	0	0	0	0	921,682	1,547	1,843,363	3,094	0.195
7/23/2016	1,830,588	1,288	0	0	0	0	1,830,588	1,288	3,661,176	2,576	0.163
7/24/2016	987,012	1,546	993,077	2,296	882,788	1,594	987,012	1,546	3,849,889	6,982	0.440

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary

Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
7/25/2016	1,349,096	1,391	1,748,636	1,413	2,446,075	2,338	1,349,096	1,391	6,892,903	6,533	0.412
7/26/2016	1,837,424	1,629	2,660,671	2,230	2,906,868	2,308	1,837,424	1,629	9,242,386	7,797	0.492
7/27/2016	1,776,939	1,510	3,033,909	2,339	2,889,508	2,144	1,776,939	1,510	9,477,294	7,503	0.473
7/28/2016	1,758,026	1,476	3,010,885	2,281	3,133,705	2,394	1,758,026	1,476	9,660,642	7,627	0.481
7/29/2016	1,717,377	1,210	2,912,979	2,108	2,943,962	2,499	1,717,377	1,210	9,291,694	7,029	0.443
7/30/2016	1,699,640	1,193	2,905,342	2,194	2,813,607	2,009	1,699,640	1,193	9,118,228	6,588	0.416
7/31/2016	1,699,978	1,288	2,888,720	2,178	2,819,748	2,191	1,699,978	1,288	9,108,424	6,945	0.438
8/1/2016	1,710,419	1,290	2,831,355	2,044	2,832,161	2,095	1,710,419	1,290	9,084,354	6,719	0.424
8/2/2016	1,691,058	1,297	2,708,899	1,946	2,894,791	2,233	1,691,058	1,297	8,985,806	6,775	0.427
8/3/2016	1,638,511	1,204	2,263,228	2,009	2,720,574	2,087	1,638,511	1,204	8,260,823	6,505	0.410
8/4/2016	1,561,532	1,217	1,879,933	1,333	2,570,645	2,044	1,561,532	1,217	7,573,641	5,811	0.367
8/5/2016	475,732	1,104	566,315	1,415	1,058,633	2,162	475,732	1,104	2,576,411	5,785	0.365
8/6/2016	1,551,622	1,136	1,812,983	1,291	2,677,597	2,114	1,551,622	1,136	7,593,823	5,677	0.358
8/7/2016	231,346	1,083	1,055,898	1,259	1,893,570	2,247	231,346	1,083	3,412,159	5,671	0.358
8/8/2016	0	0	0	0	0	0	0	0	0	0	0.000
8/9/2016	1,173,756	1,581	1,079,954	1,471	1,749,027	2,062	1,173,756	1,581	5,176,494	6,695	0.422
8/10/2016	1,739,859	1,223	1,757,010	1,259	2,812,594	1,991	1,739,859	1,223	8,049,322	5,697	0.359

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary											
Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
8/11/2016	1,695,062	1,231	2,048,169	1,723	2,798,553	2,092	1,695,062	1,231	8,236,846	6,277	0.396
8/12/2016	1,528,623	1,149	2,456,586	1,962	2,574,707	1,959	1,528,623	1,149	8,088,539	6,220	0.392
8/13/2016	1,523,772	1,075	2,405,988	1,732	2,638,777	1,872	1,523,772	1,075	8,092,309	5,754	0.363
8/14/2016	1,454,521	1,047	2,376,853	1,696	2,590,673	1,875	1,454,521	1,047	7,876,569	5,665	0.357
8/15/2016	1,233,082	1,139	1,215,041	1,682	2,346,268	2,094	1,233,082	1,139	6,027,474	6,055	0.382
8/16/2016	1,610,026	1,219	1,631,802	1,284	2,695,264	2,084	1,610,026	1,219	7,547,117	5,806	0.366
8/17/2016	1,605,423	1,156	1,486,938	1,068	2,698,241	1,956	1,605,423	1,156	7,396,025	5,335	0.337
8/18/2016	0	0	0	0	1,142,160	2,048	0	0	1,142,160	2,048	0.129
8/19/2016	775,519	1,120	0	0	2,718,613	2,063	775,519	1,120	4,269,651	4,303	0.271
8/20/2016	1,496,334	1,113	727,113	1,257	2,531,172	1,802	1,496,334	1,113	6,250,952	5,284	0.333
8/21/2016	1,568,747	1,104	1,612,068	1,157	2,474,542	1,778	1,568,747	1,104	7,224,104	5,143	0.324
8/22/2016	1,540,675	1,145	1,980,783	1,693	2,522,430	1,905	1,540,675	1,145	7,584,563	5,888	0.371
8/23/2016	611,123	1,063	964,236	1,673	1,036,258	1,816	611,123	1,063	3,222,739	5,615	0.354
8/24/2016	0	0	0	0	0	0	0	0	0	0	0.000
8/25/2016	0	0	0	0	0	0	0	0	0	0	0.000
8/26/2016	0	0	0	0	0	0	0	0	0	0	0.000
8/27/2016	0	0	1,352,087	1,258	0	0	0	0	1,352,087	1,258	0.079

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary

Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
8/28/2016	805,987	801	1,561,200	1,301	0	0	805,987	801	3,173,174	2,903	0.183
8/29/2016	928,751	758	1,664,640	1,156	0	0	928,751	758	3,522,142	2,672	0.169
8/30/2016	887,958	701	2,237,670	1,587	0	0	887,958	701	4,013,586	2,989	0.189
8/31/2016	1,508,795	1,200	2,212,140	1,603	2,013,499	1,762	1,508,795	1,200	7,243,229	5,765	0.364
9/1/2016	1,485,487	1,358	1,366,080	1,423	2,709,858	2,348	1,485,487	1,358	7,046,912	6,487	0.409
9/2/2016	1,642,571	1,287	1,300,320	1,204	2,608,759	2,058	1,642,571	1,287	7,194,221	5,836	0.368
9/3/2016	1,758,143	1,102	0	0	2,653,256	2,451	1,758,143	1,102	6,169,542	4,655	0.294
9/4/2016	1,205,483	1,099	0	0	2,718,975	2,568	1,205,483	1,099	5,129,941	4,766	0.301
9/5/2016	1,562,546	1,425	0	0	2,554,879	2,153	1,562,546	1,425	5,679,971	5,003	0.316
9/6/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/7/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/8/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/9/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/10/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/11/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/12/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/13/2016	0	0	0	0	0	0	0	0	0	0	0.000

Reference: Daly Irrigation Project – 2016 Monitoring Report – Licence No. 3010

Table 1: Water Use Summary											
Date	Keyriver		Redfern		Sundance (Pump 1)		Sundance (pump 2)		Total Volume Pumped (gallons)	Total Max Pumping Rate (GPM)	Total Max Pumping Rate (m3/s)
	Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W		Intake Location: NW10-12-21W				
	Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 2400 US GPM (0.1514 m^3/s)		Pump Capacity: 1600 US GPM (0.1001 m^3/s)				
	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)	Volume Pumped (gallons)	Max Pumping Rate (GPM)			
9/14/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/15/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/16/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/17/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/18/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/19/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/20/2016	0	0	1,068,780	758	0	0	0	0	1,068,780	758	0.048
9/21/2016	0	0	0	0	0	0	0	0	0	0	0.000
9/22/2016	0	0	1,156,320	803	0	0	0	0	1,156,320	803	0.051
9/23/2016	0	0	1,180,800	820	0	0	0	0	1,180,800	820	0.052
9/24/2016	0	0	667,800	742	0	0	0	0	667,800	742	0.047
Total	86,049,339	-	145,462,965	-	127,950,350	-	86,049,339	-	445,511,992	-	-