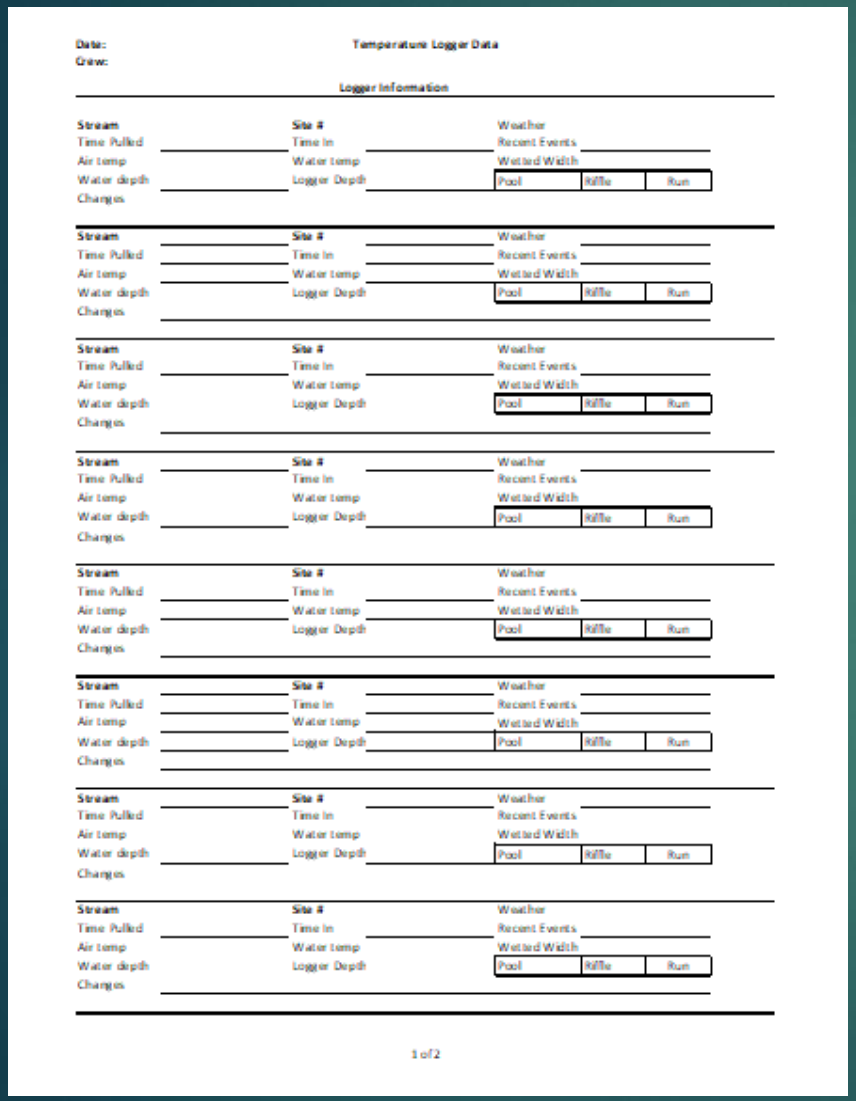
Bonaparte Watershed Temperature Monitoring

2020

SECWEPEMC
FISHERIES COMMISSION

Methodology

Methodology



Date:
Crew:

Temperature Logger Data

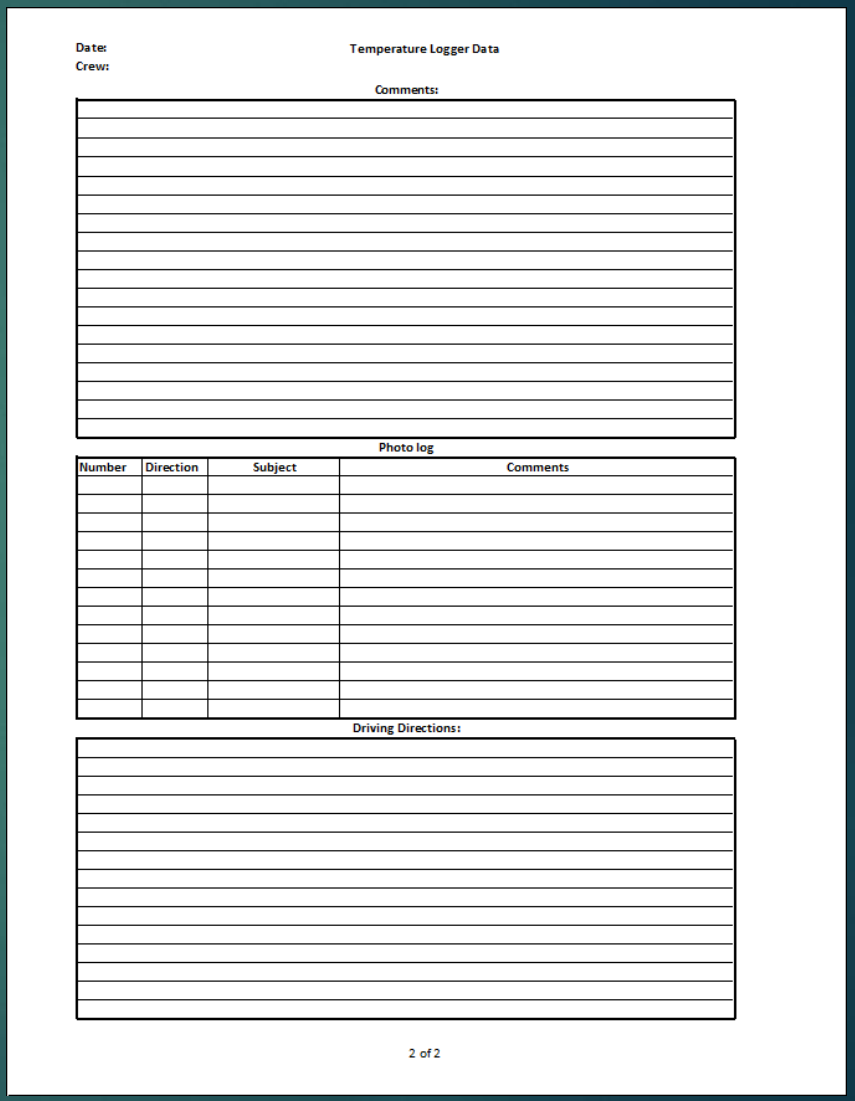
Logger Information

Stream
Time Pulled
Air temp
Water depth
Changes

Site #
Time In
Water temp
Logger Depth

Weather
Recent Events
Wetted Width
Pool | Riffle | Run

1 of 2



Date:
Crew:

Temperature Logger Data

Comments:

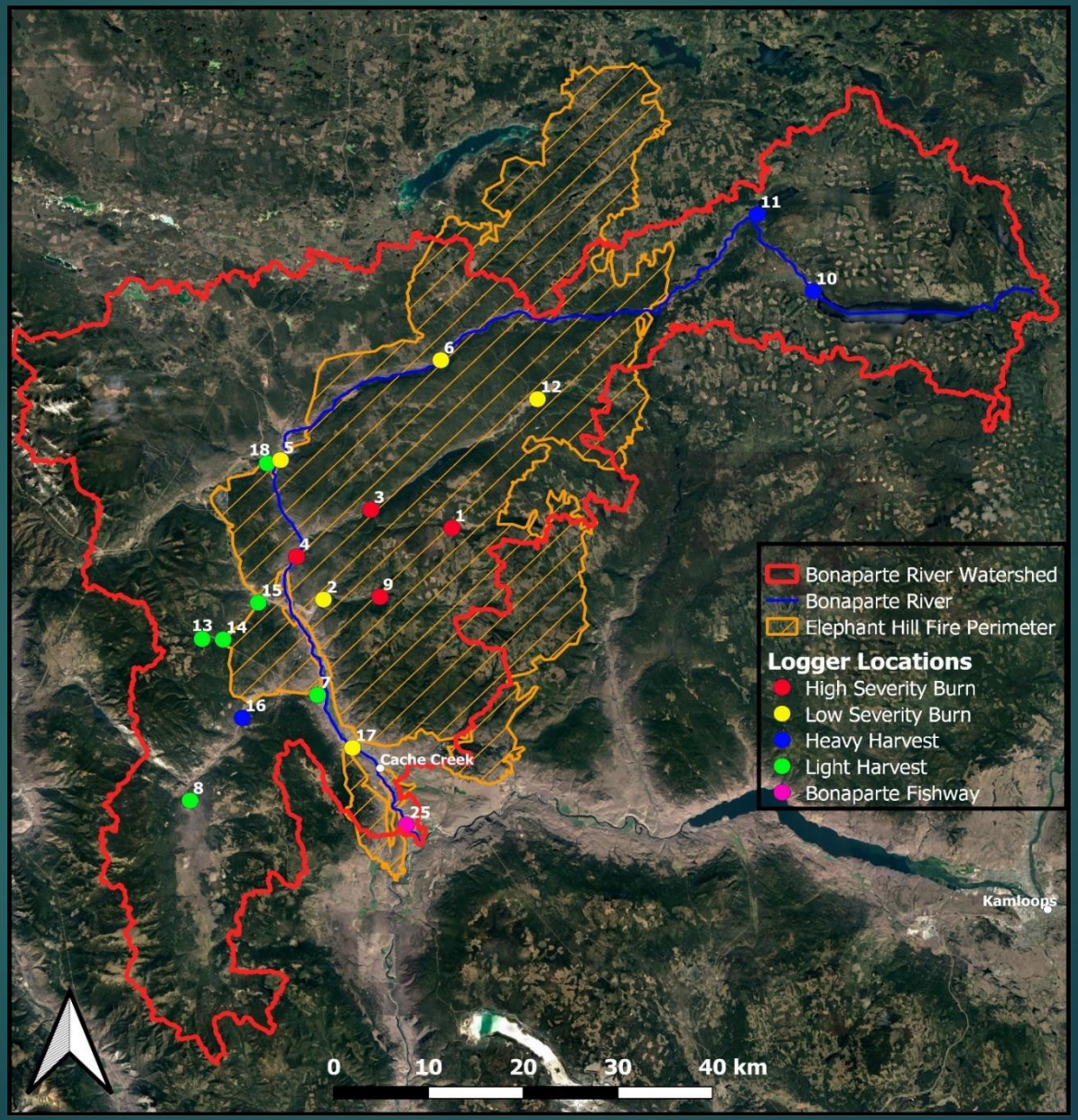
Photo log

Number	Direction	Subject	Comments

Driving Directions:

2 of 2

Methodology



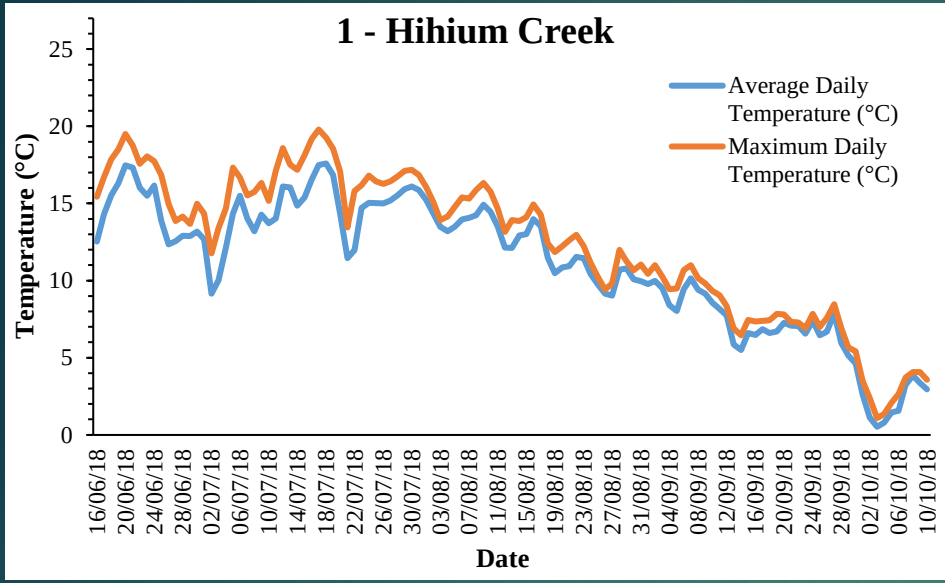
Methodology

Map	Location	Pin	Logger	Coordinates	Elevation (m)	Date Installed	Date Removed
High severity burn	Hihium Creek	1	20332202	51.04916, -121.21648	1311	24/08/20	14/10/20
	Loon Creek DS Loon Lake	3	10909998	51.06762, -121.33710	827	29/06/20	16/10/20
	Bonaparte River at Loon Creek (US)	4	20343686	51.02108, -121.44760	579	27/08/20	16/10/20
	Bonaparte River at Loon Creek (DS)	4	20044334	51.02108, -121.44760	579	29/06/20	16/10/20
	Upper Scottie Creek	9	10893030	50.98125, -121.32422	970	13/07/20	16/10/20
Low severity burn	Lower Scottie Creek	2	10956678	50.97881, -121.40799	717	13/07/20	16/10/20
	Bonaparte River at Mound Road (US)	5	10827074	51.11594, -121.47231	655	29/06/20	16/10/20
	Bonaparte River at Mound Road (DS)	5	10909995	51.11594, -121.47231	655	29/06/20	16/10/20
	Bonaparte River at Chasm Road (US)	6	10909992	51.21444, -121.23406	820	27/08/20	14/10/20
	Bonaparte River at Chasm Road (DS)	6	10956675	51.21444, -121.23406	820	24/08/20	14/10/20
	Upper Loon Lake and Loon Lake	12	20862509	51.17562, -121.08997	947	24/08/20	14/10/20
	Bonaparte River (BIB Antoine) (US)	17	10827065	50.83204, -121.36573	473	13/07/20	15/10/20
	Bonaparte River (BIB Antoine) (DS)	17	20343682	50.83200, -121.36303	473	13/07/20	15/10/20
Heavy harvest	DS Bonaparte Lake (US)	10	10893034	51.28176, -120.67934	1174	24/08/20	14/10/20
	DS Bonaparte Lake (DS)	10	10956681	51.28176, -120.67934	1174	24/08/20	14/10/20
	Bonaparte R. at Eagan and Young Lakes	11	20047877	51.35700, -120.76274	1045	24/08/20	14/10/20
	Middle Hat Creek	16	20343679	50.86725, -121.52515	682	13/07/20	-
No/light harvest	Lower Hat Creek (US)	7	20343677	50.88448, -121.42096	514	13/07/20	15/10/20
	Lower Hat Creek (DS)	7	10956677	50.88444, -121.41697	514	13/07/20	15/10/20
	Upper Hat Creek	8	20343675	50.77966, -121.60599	867	13/07/20	15/10/20
	Upper Maiden Creek	13	20343681	50.93978, -121.58850	1247	29/06/20	16/10/20
	Middle Maiden Creek	14	20047879	50.93930, -121.55760	1009	27/08/20	16/10/20
	Lower Maiden Creek	15	10893036	50.97652, -121.50562	685	29/06/20	16/10/20
	Clinton Creek at Mound Rd	18	20332204	51.11315, -121.49179	685	29/06/20	16/10/20
Mouth	Bonaparte R. DS Cache Creek	25	20343685	50.74046, -121.26353	364	13/07/20	15/10/20

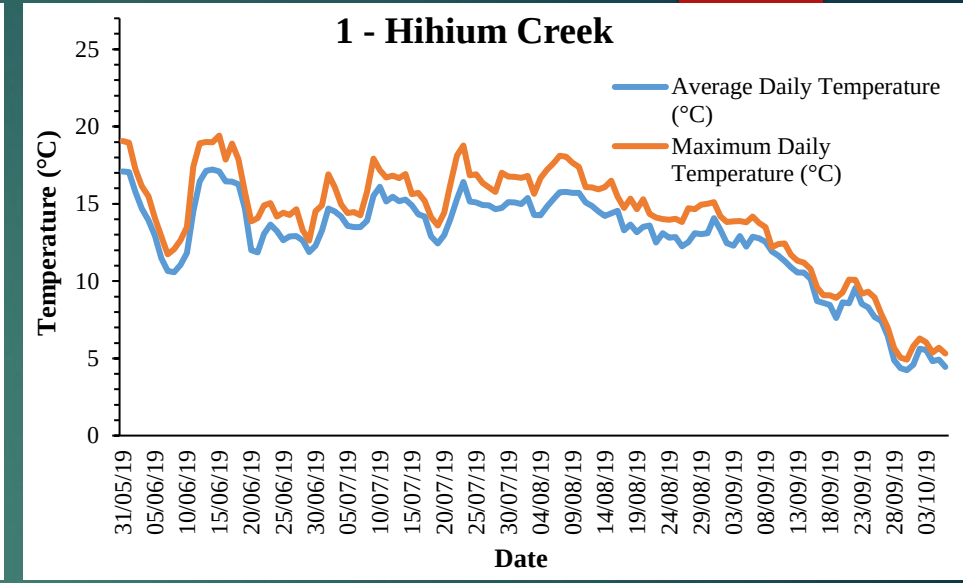
Results

High severity burn areas
Hihium Creek, 1311m elevation

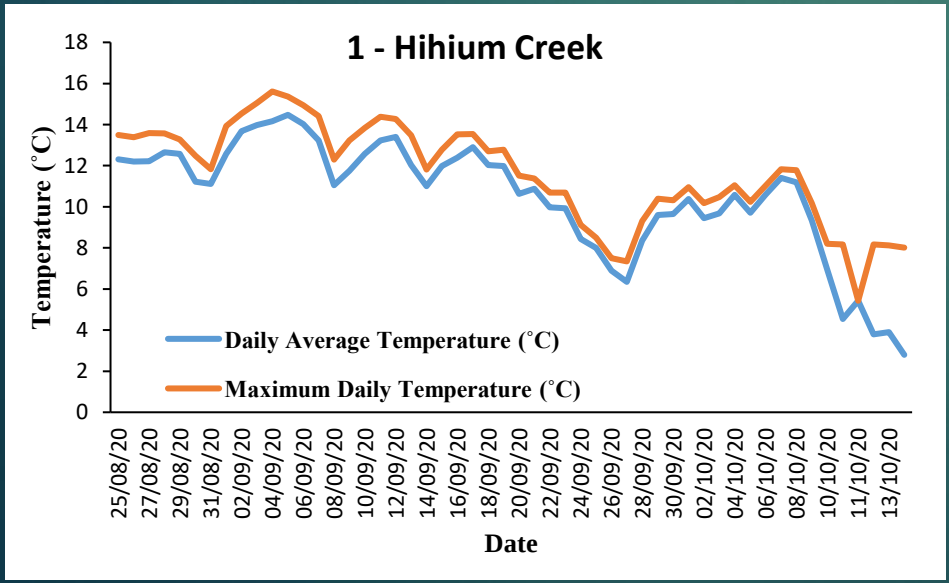
2018



2019

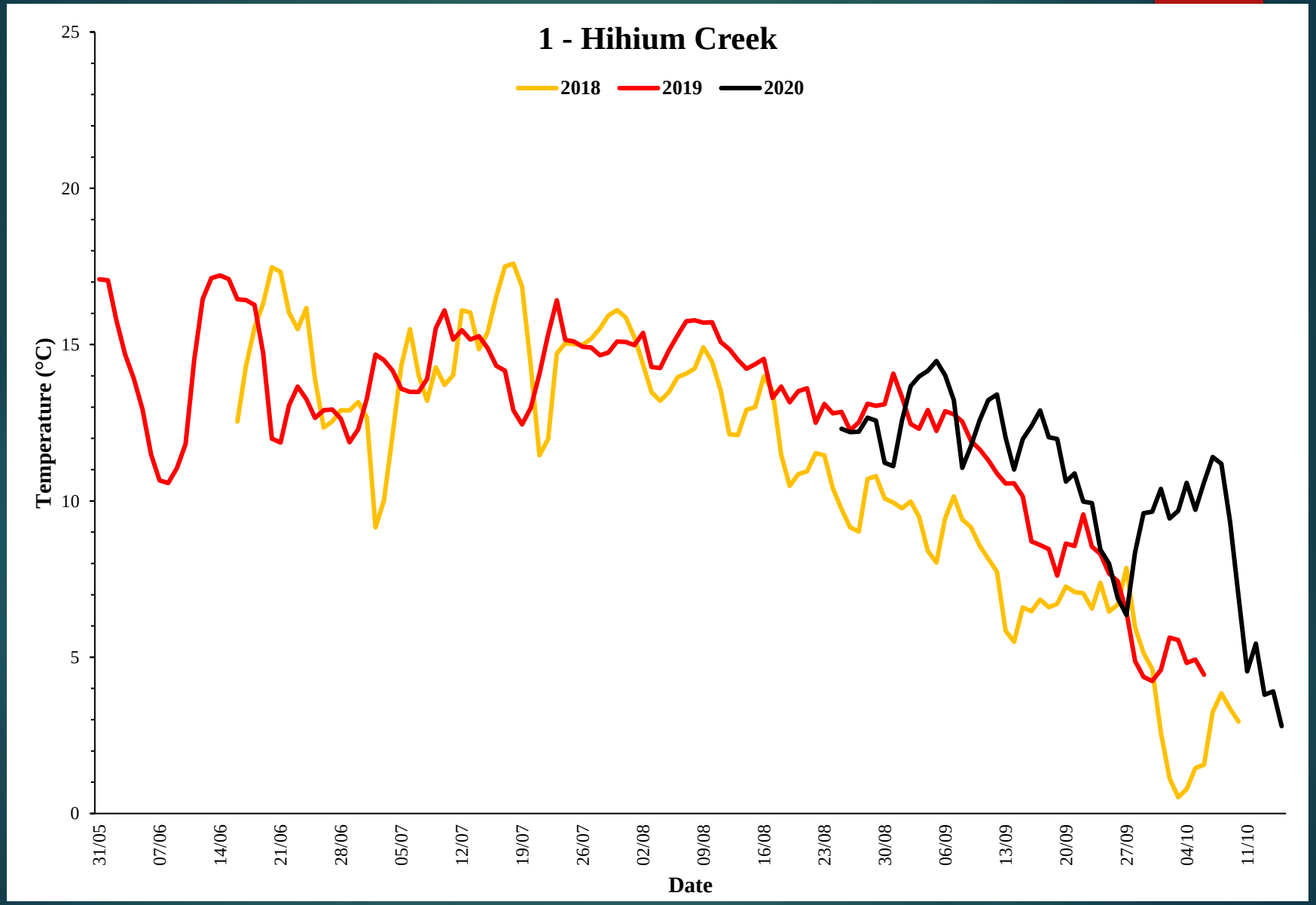


2020



Results

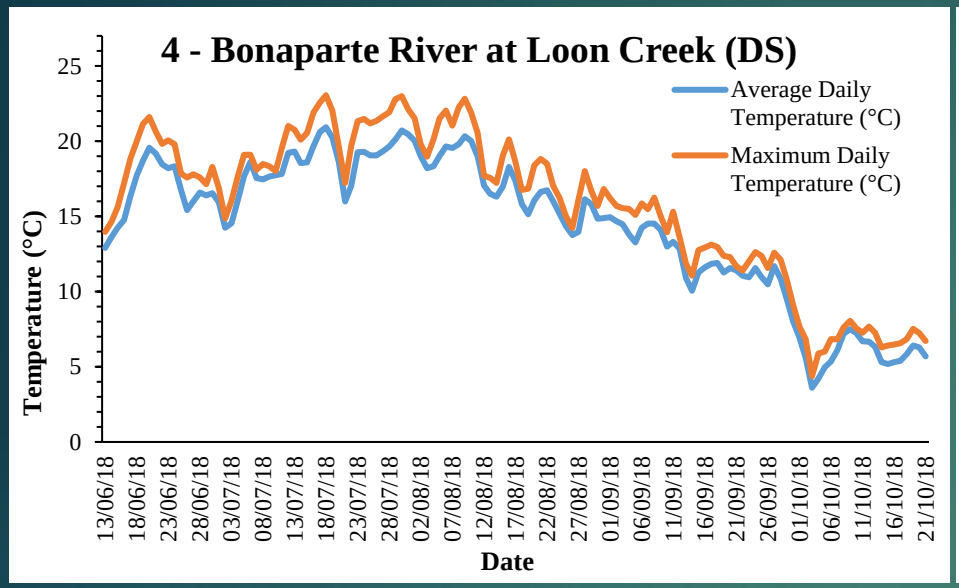
2018 -2020 Average Daily Temperature



Results

High severity burn areas
Bonaparte River, 579m elevation

2018



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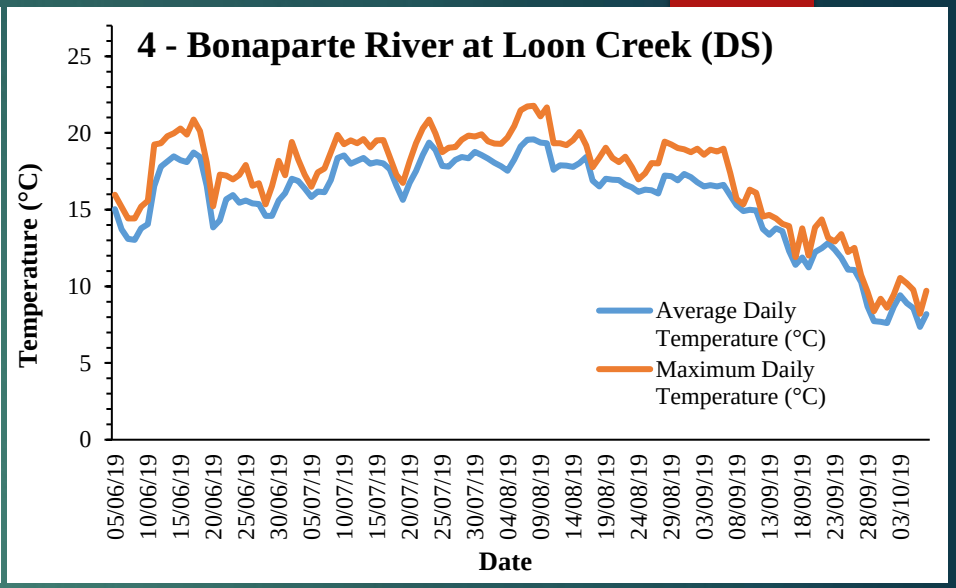
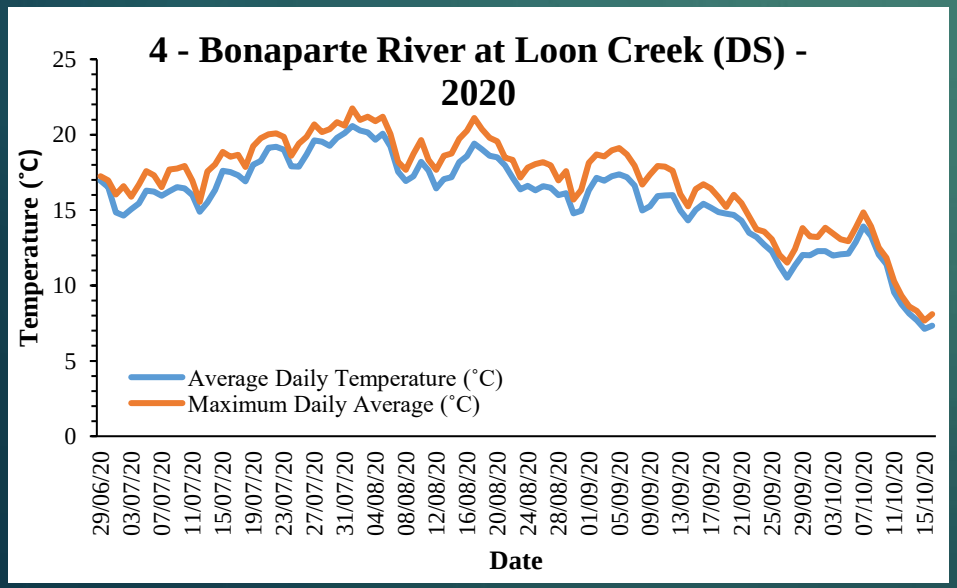
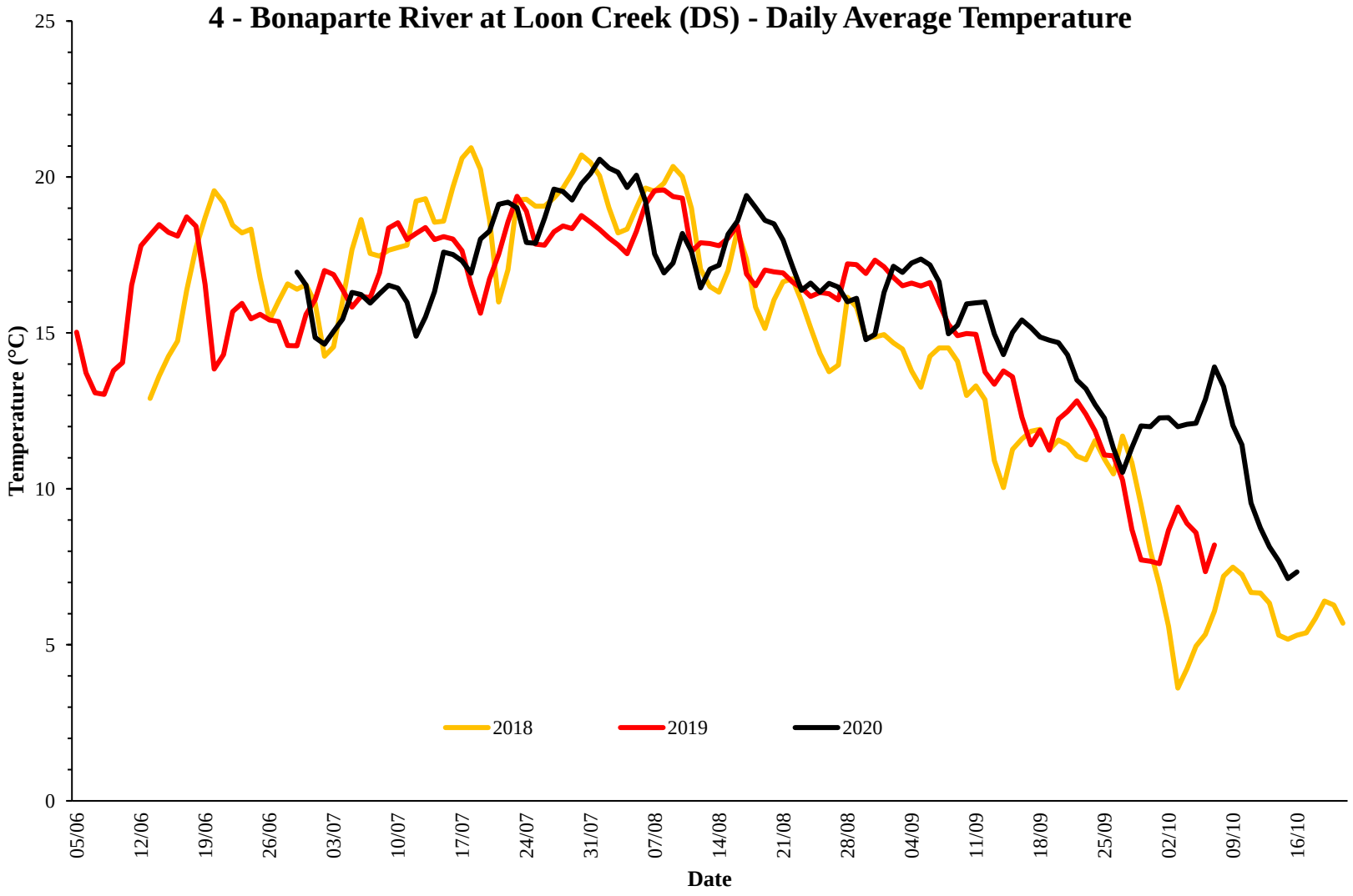


2020



Results

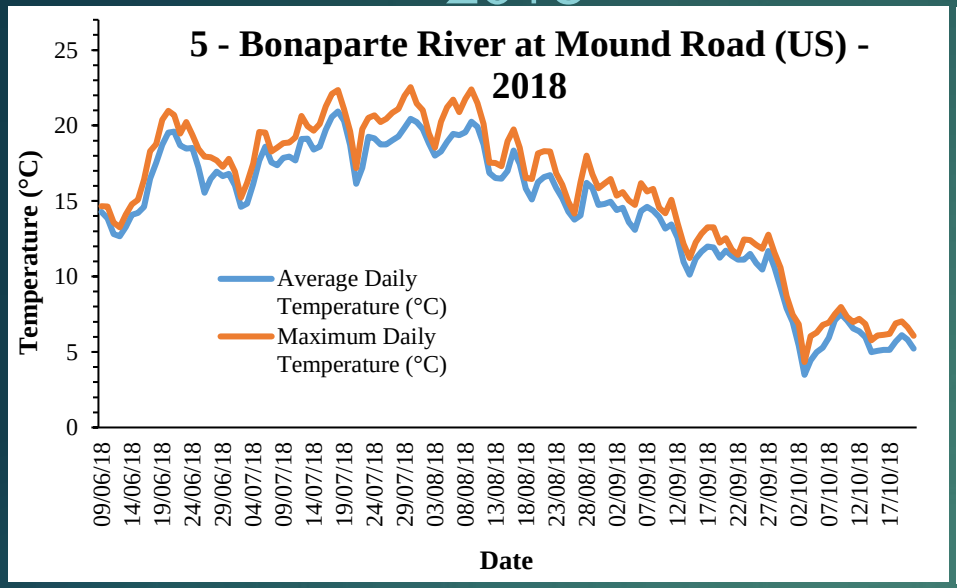
2018-2020 Average Daily Temperature



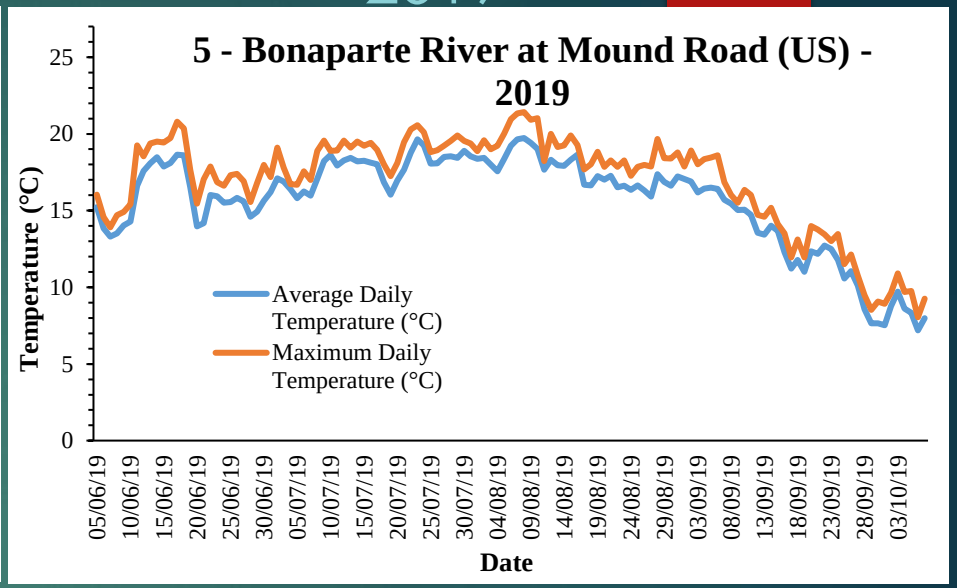
Results

Low severity burn areas
Bonaparte River, 655m elevation

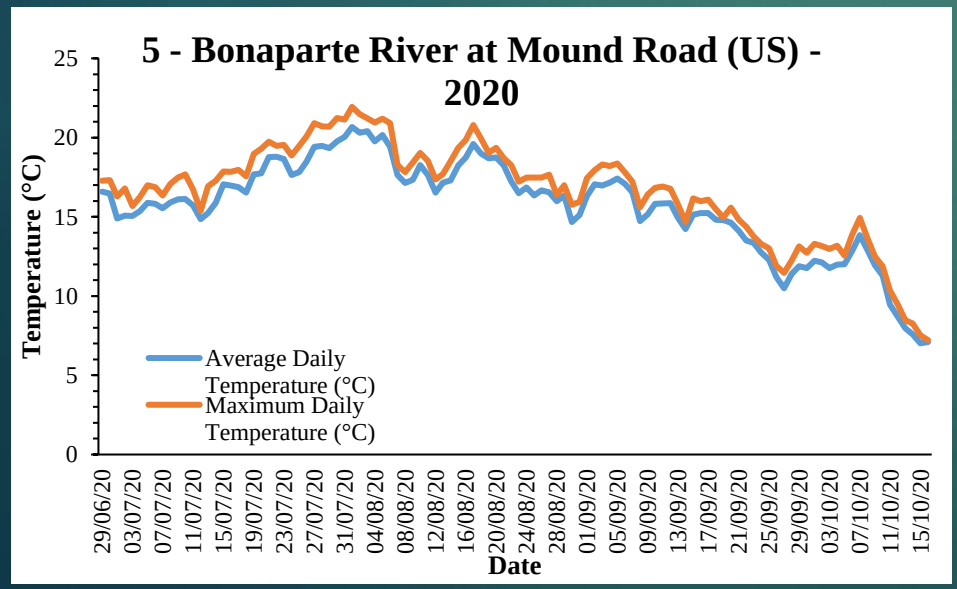
2018



2019

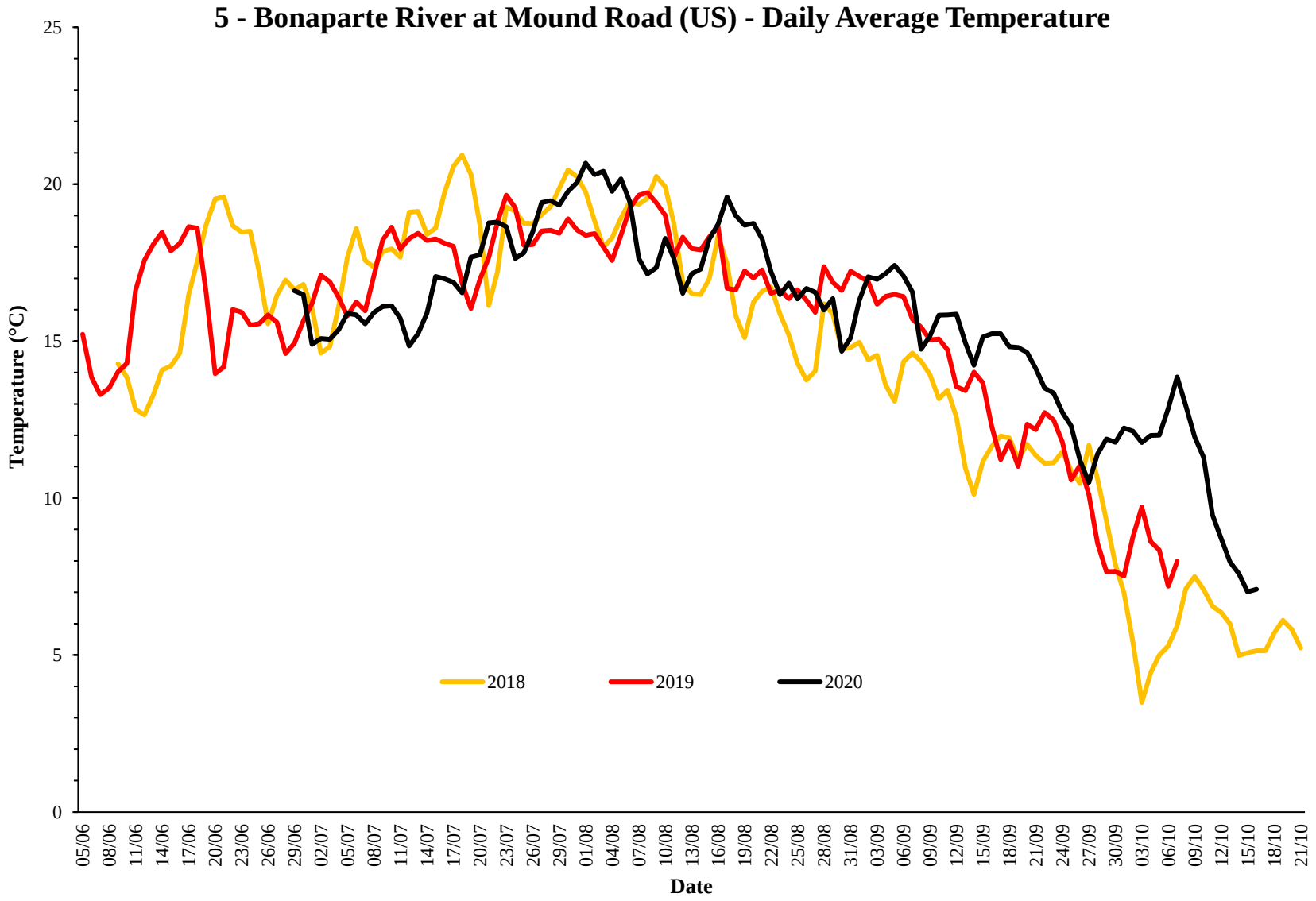


2020



Results

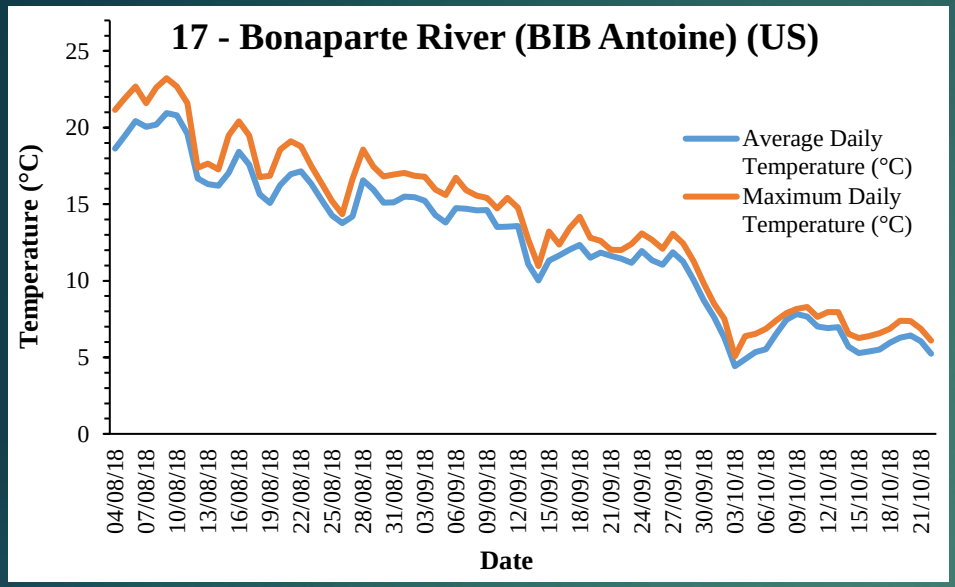
2018 -2020 Average Daily Temperature



Results

Low severity burn areas
Bonaparte River, 473m elevation

2018



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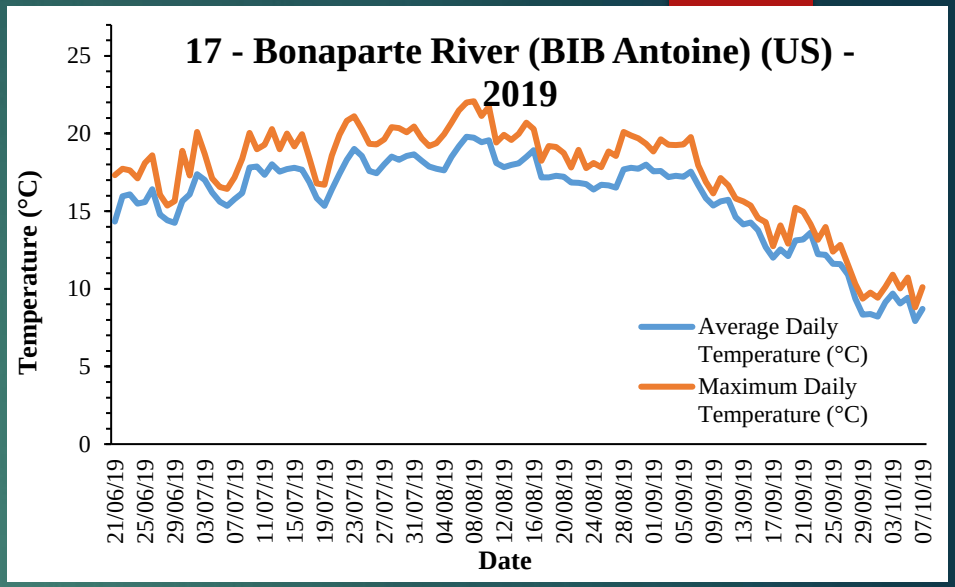
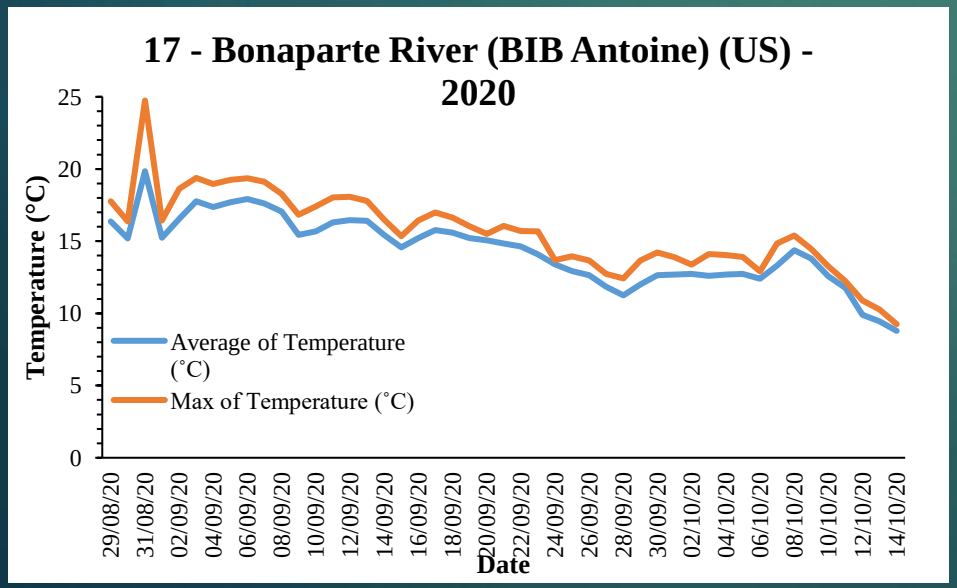
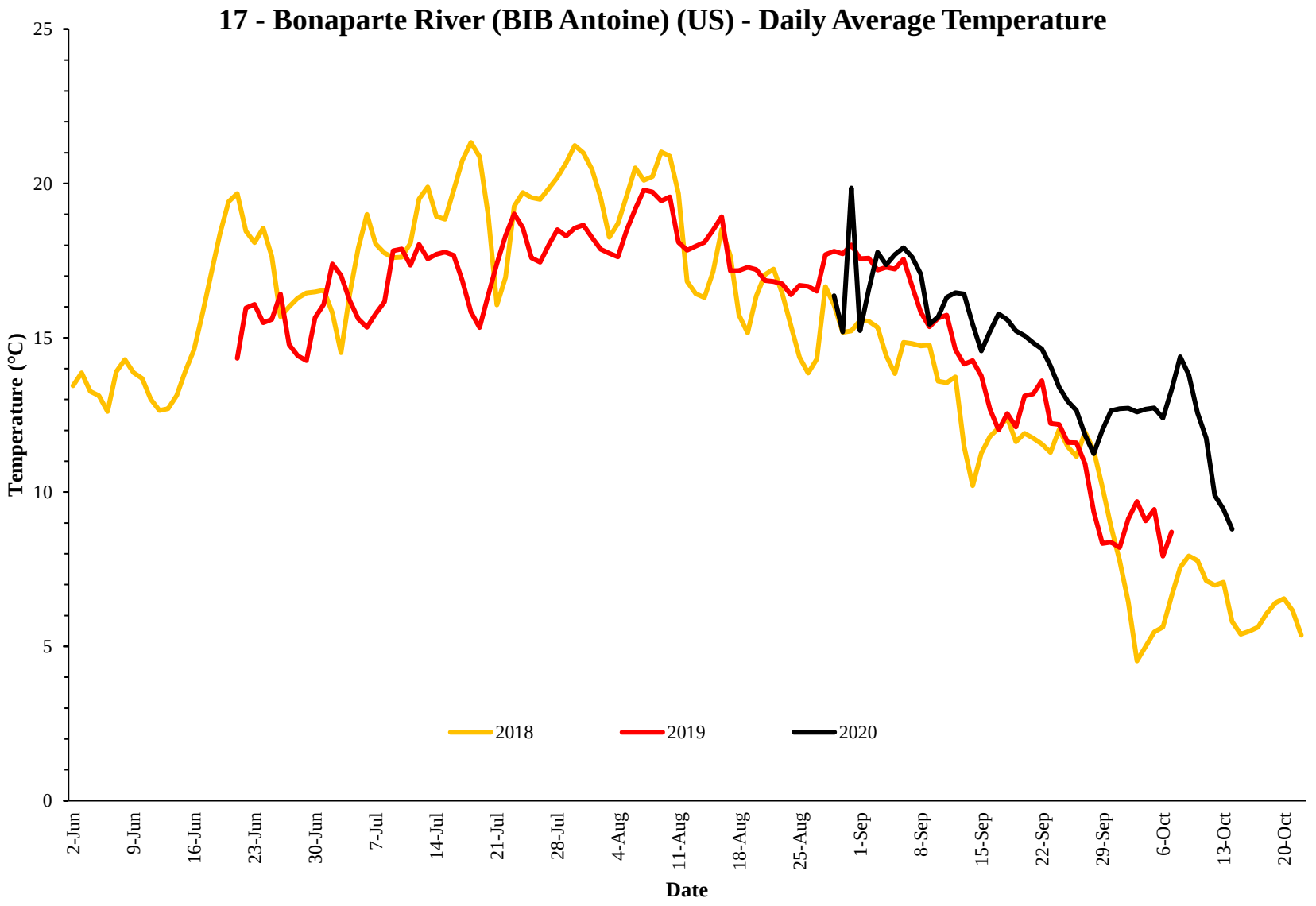


2020



Results

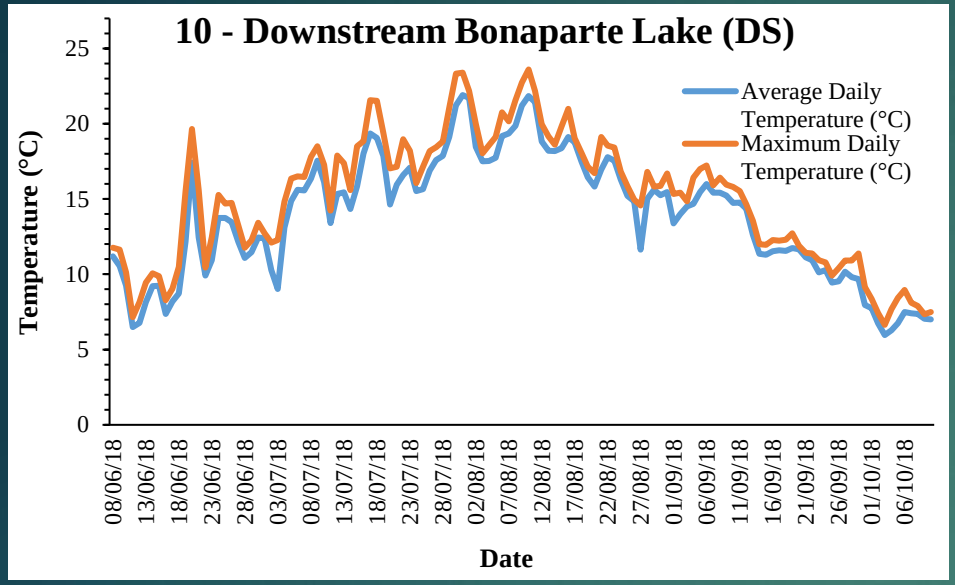
2018 -2020 Average Daily Temperature



Results

Heavy harvest areas
Downstream Bonaparte Lake, 1174m elevation

2018



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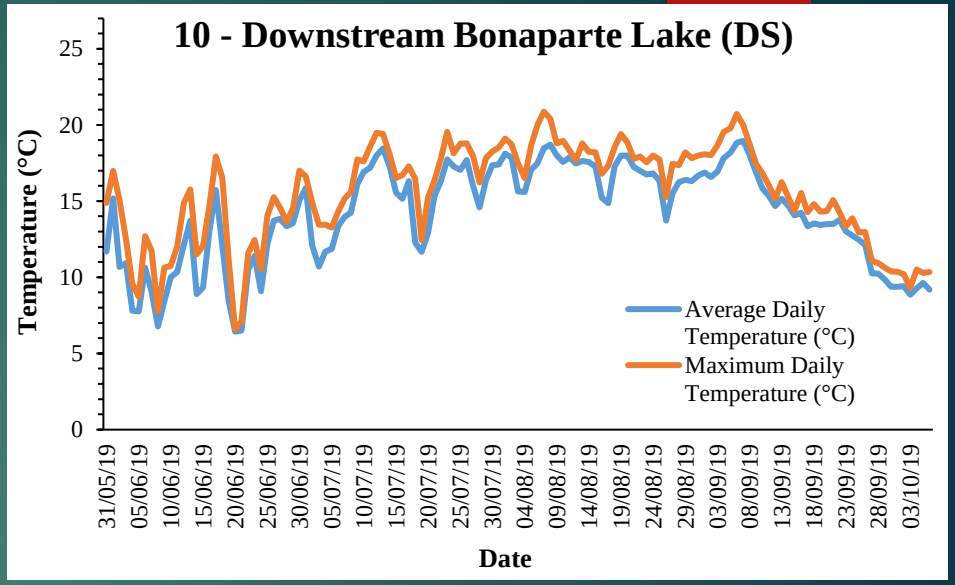

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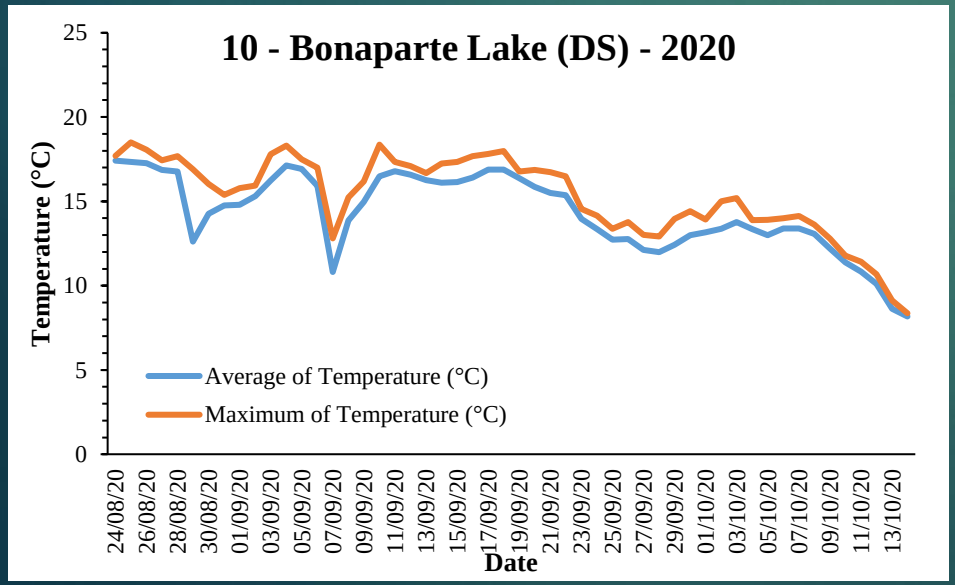
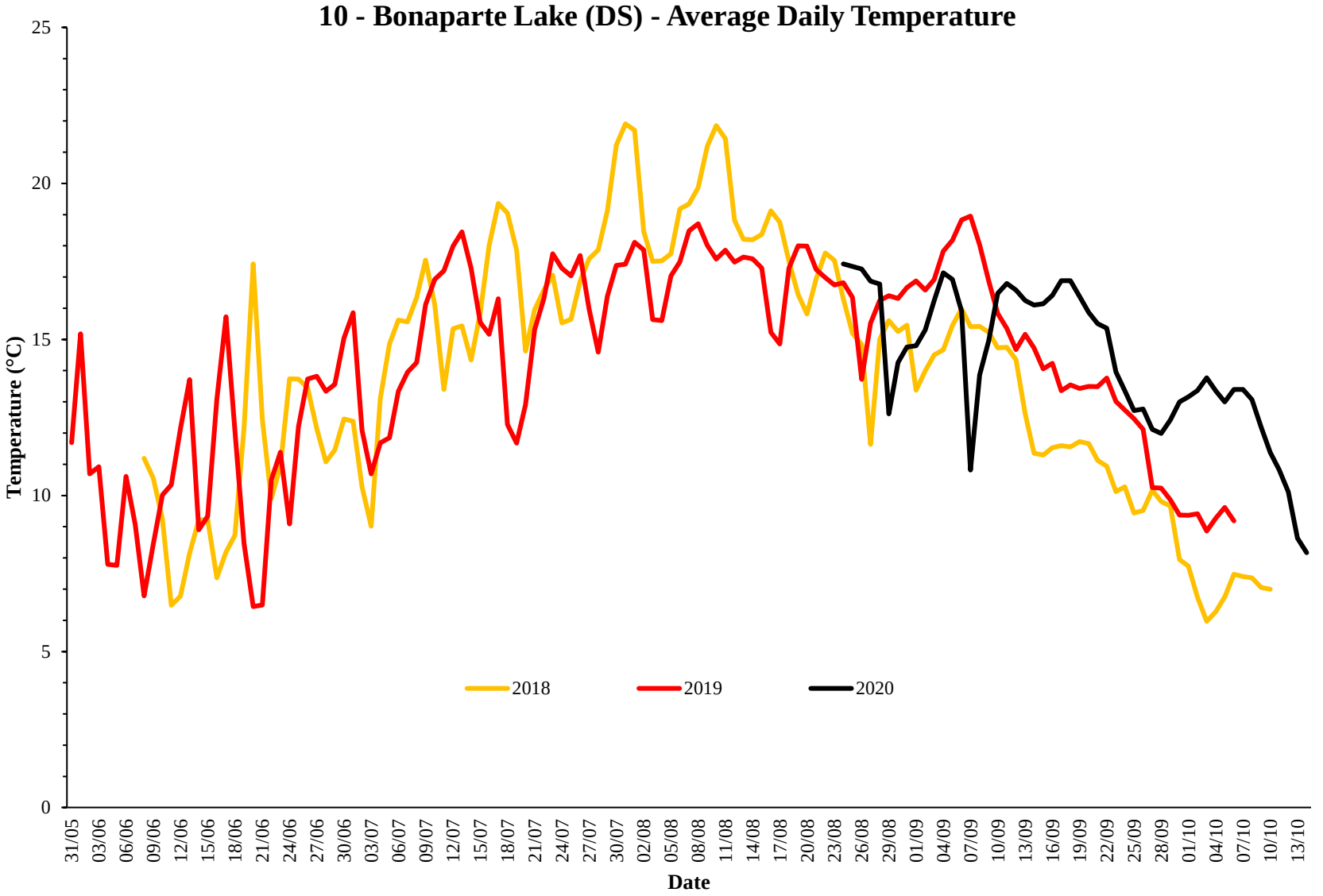


Results

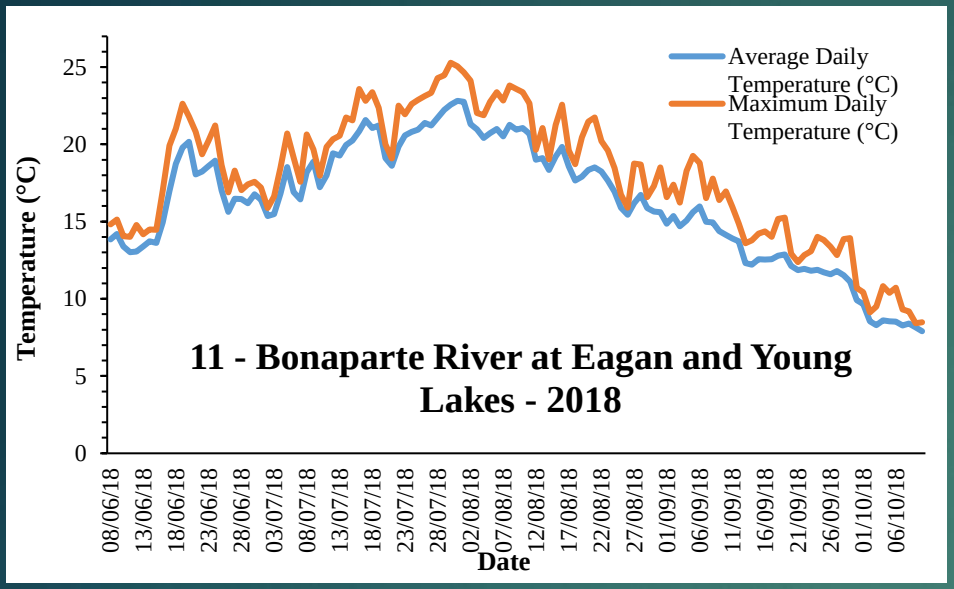
2018 -2020 Average Daily Temperature



Results

Heavy harvest areas
Eagan Creek, 1045 m elevation

2018



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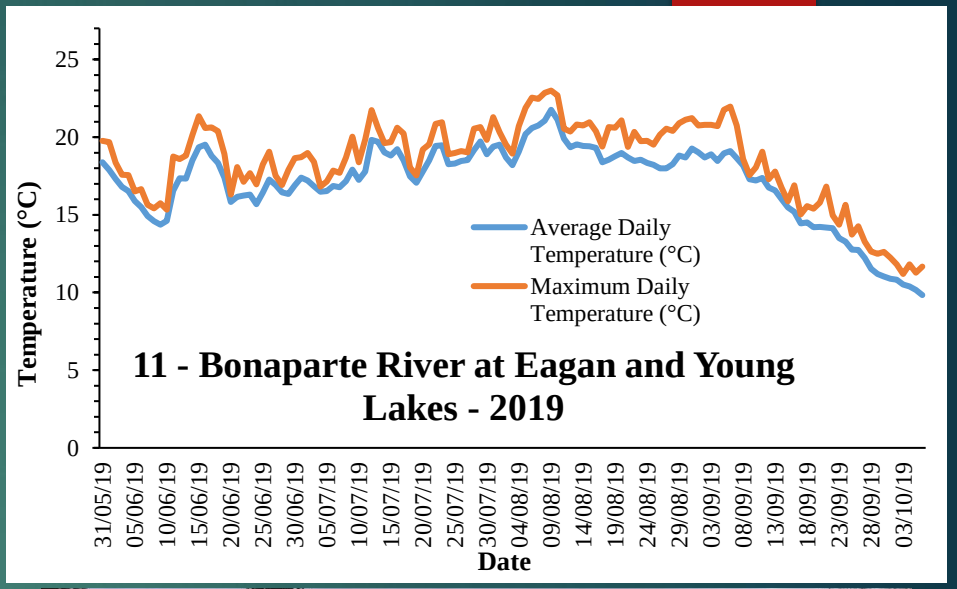

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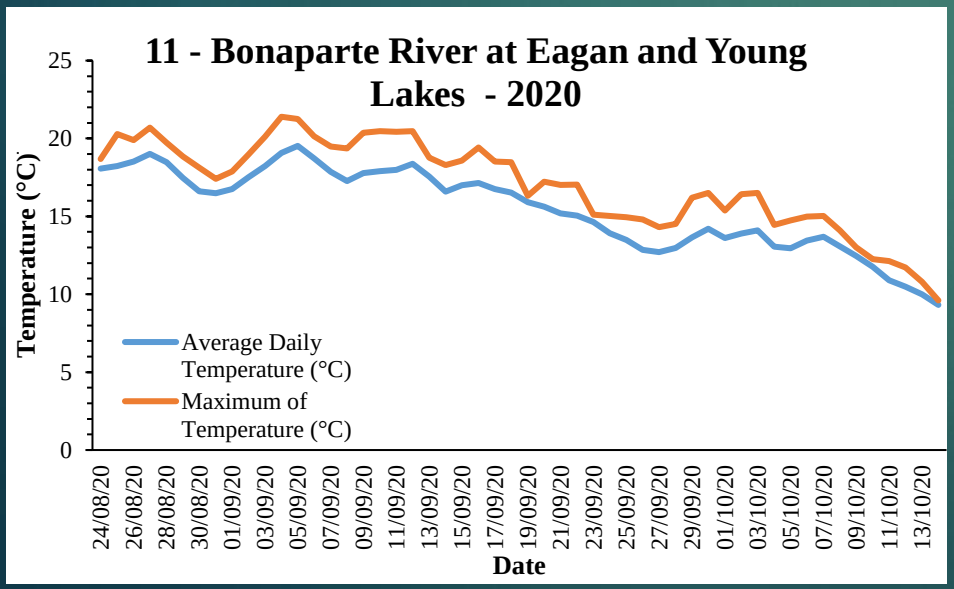
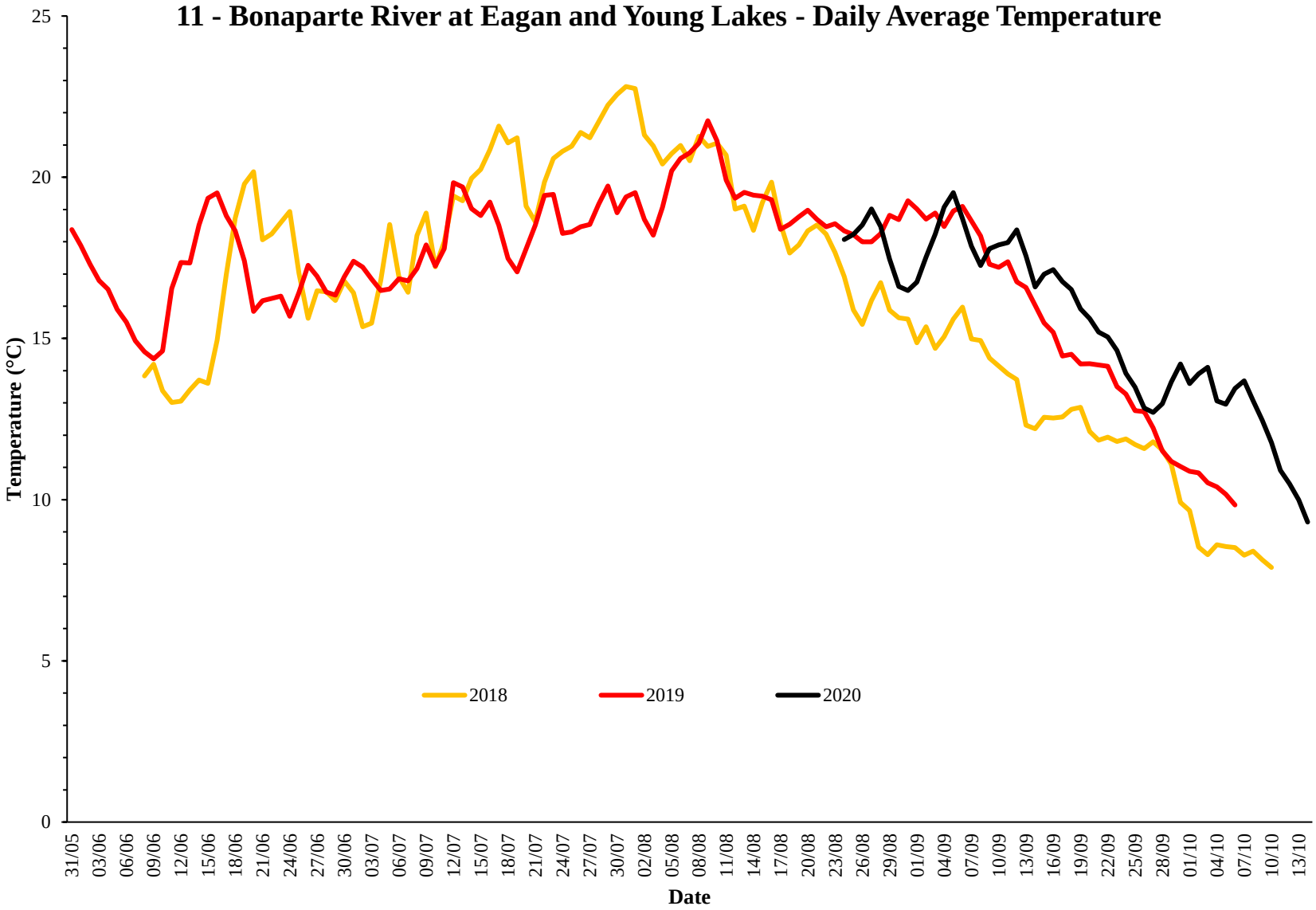


Results

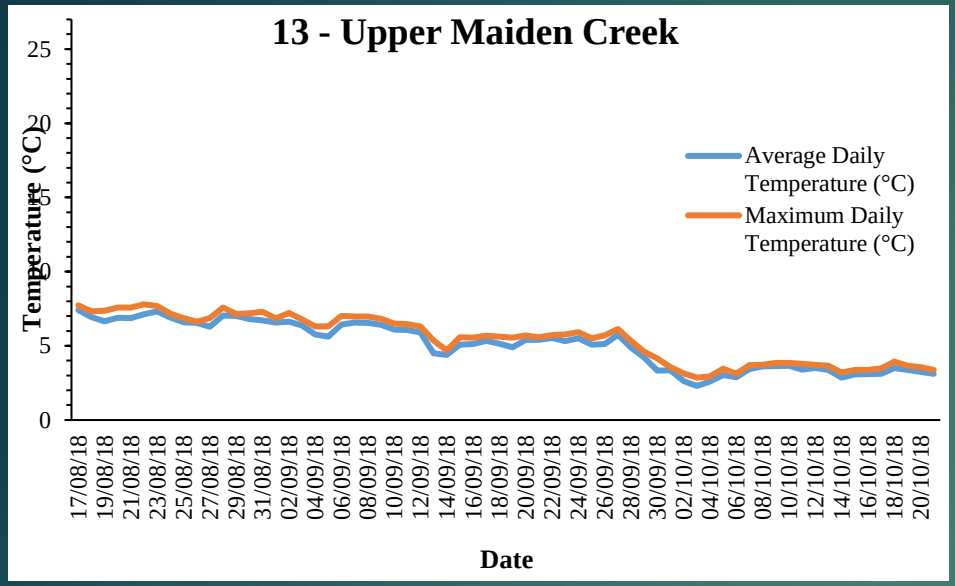
2018 -2020 Average Daily Temperature



Results

Light harvest areas
Upper Maiden Creek, 1247m elevation

2018



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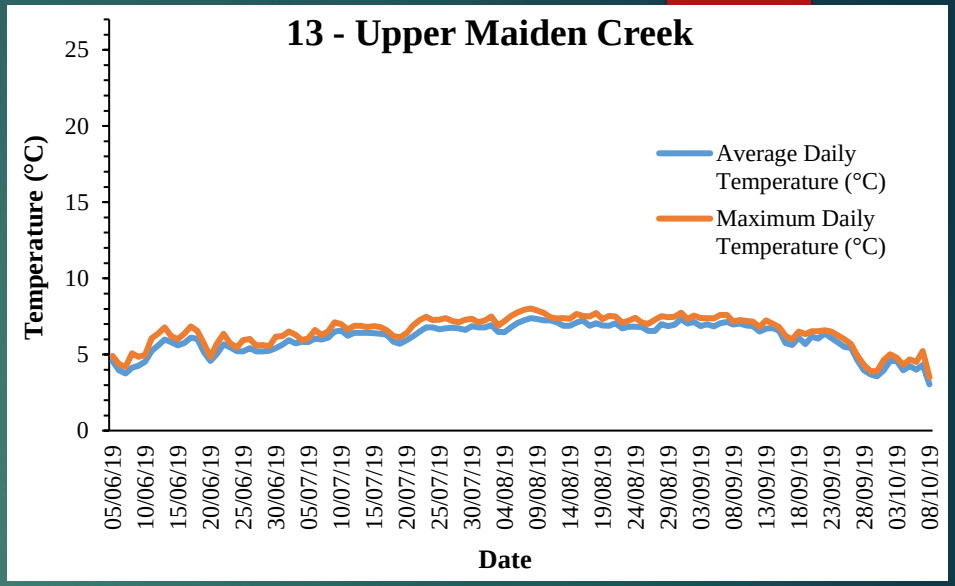

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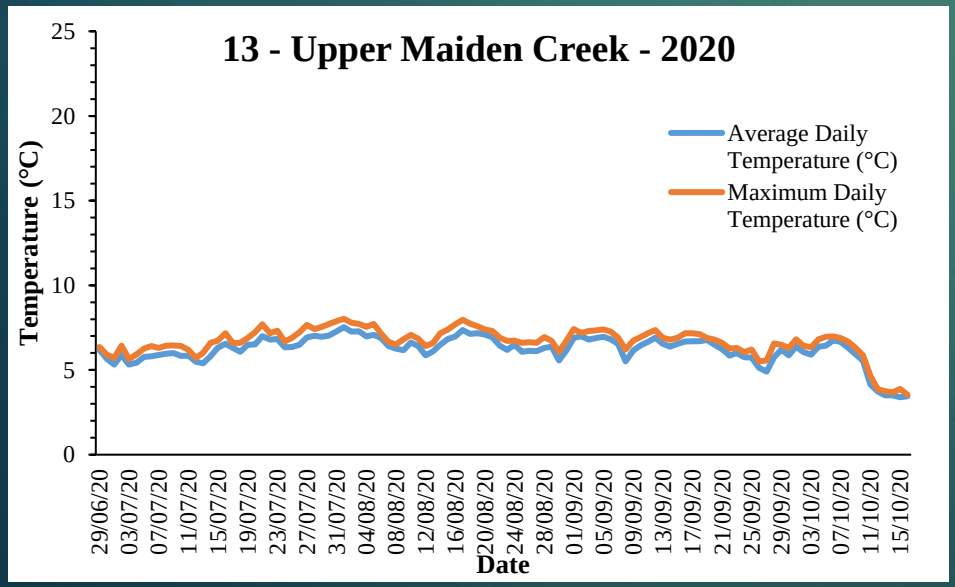
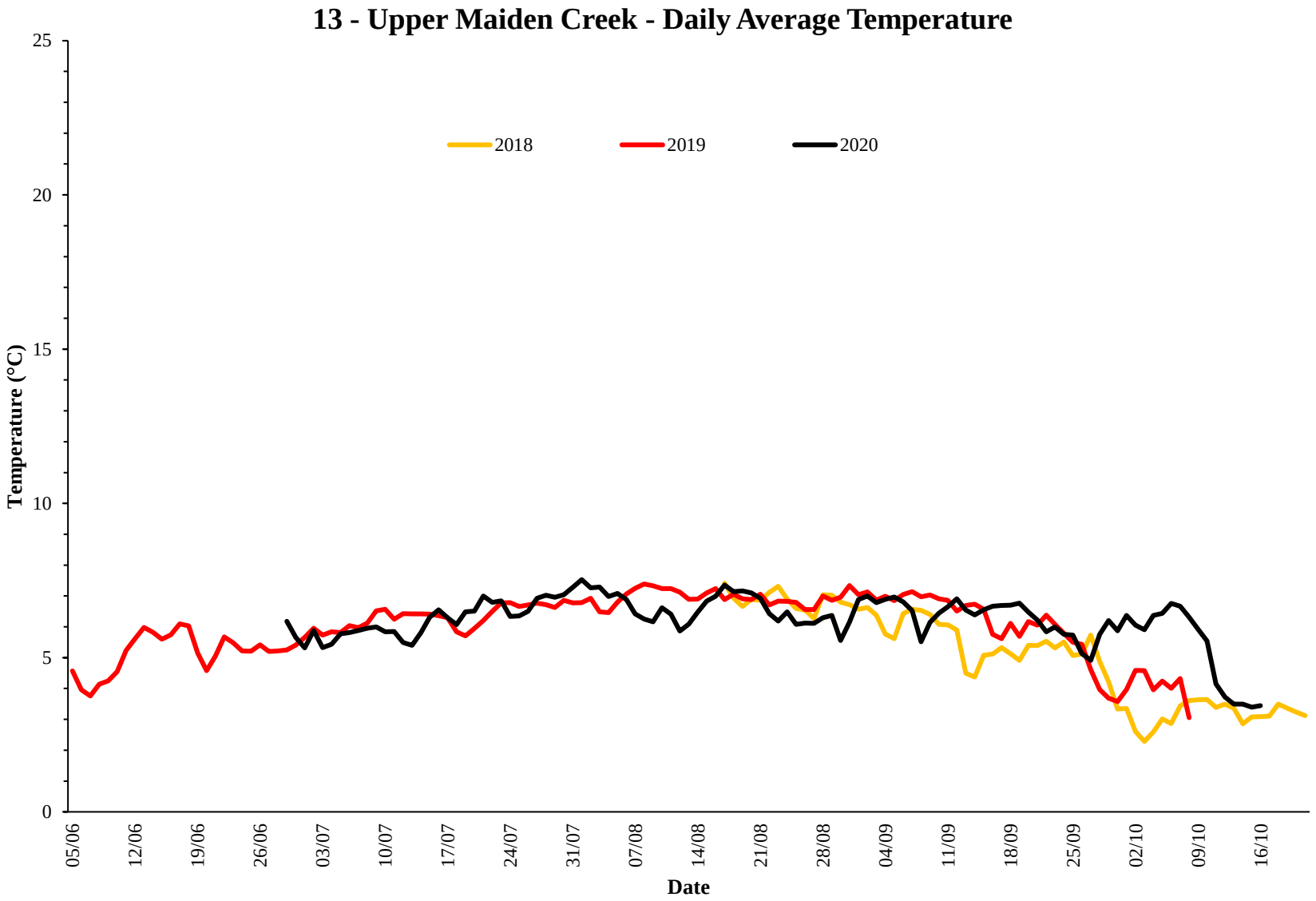


Results

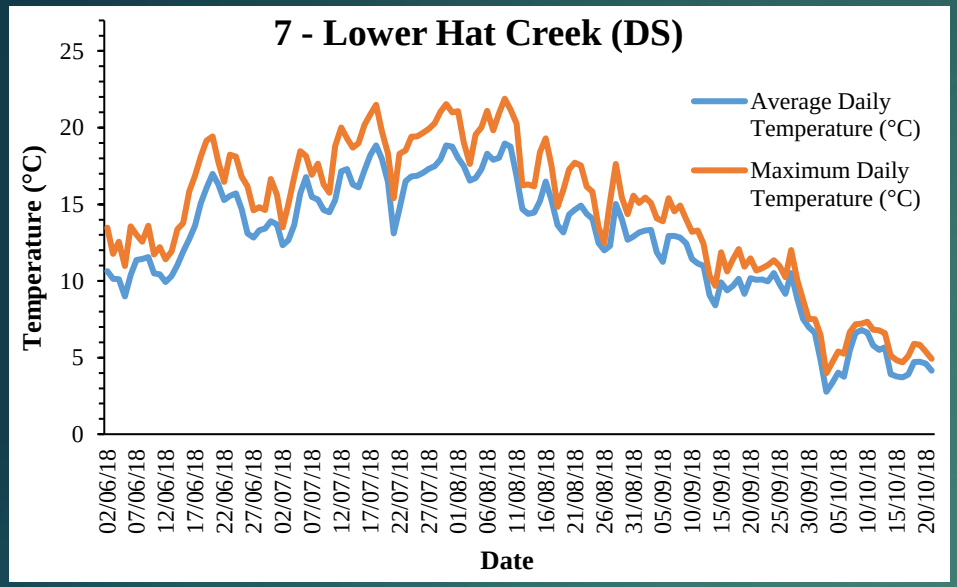
2018 -2020 Average Daily Temperature



Results

Light harvest areas
Lower Hat Creek, 514m elevation

2018



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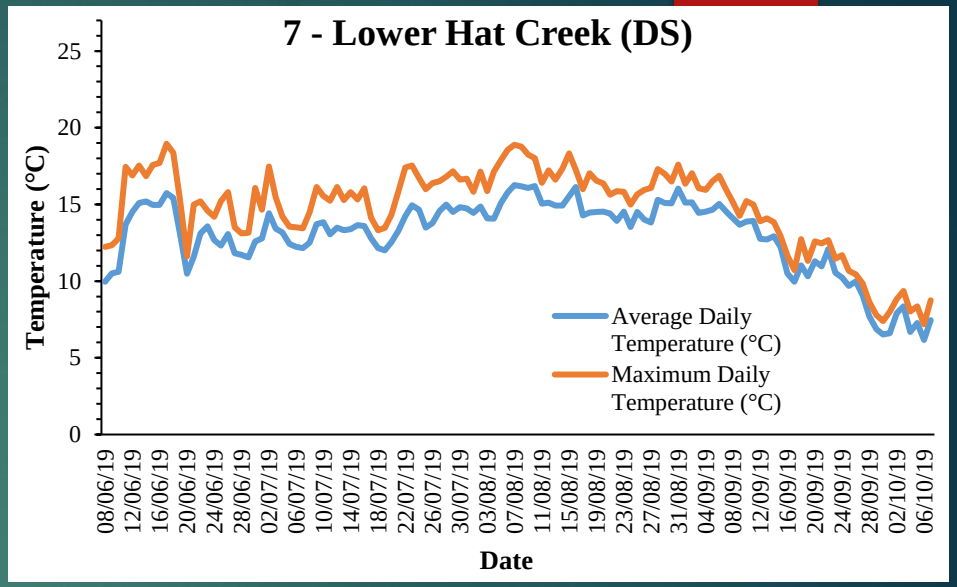

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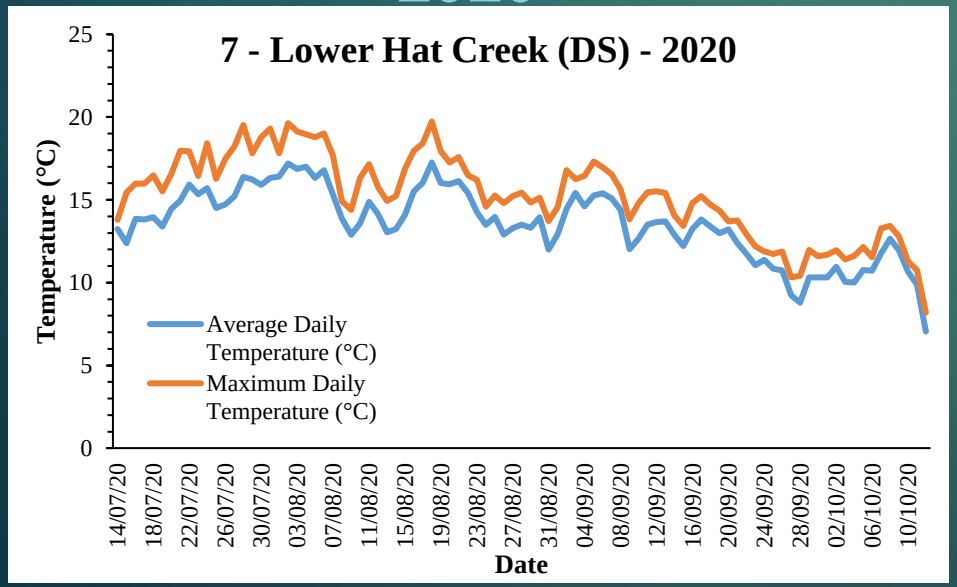
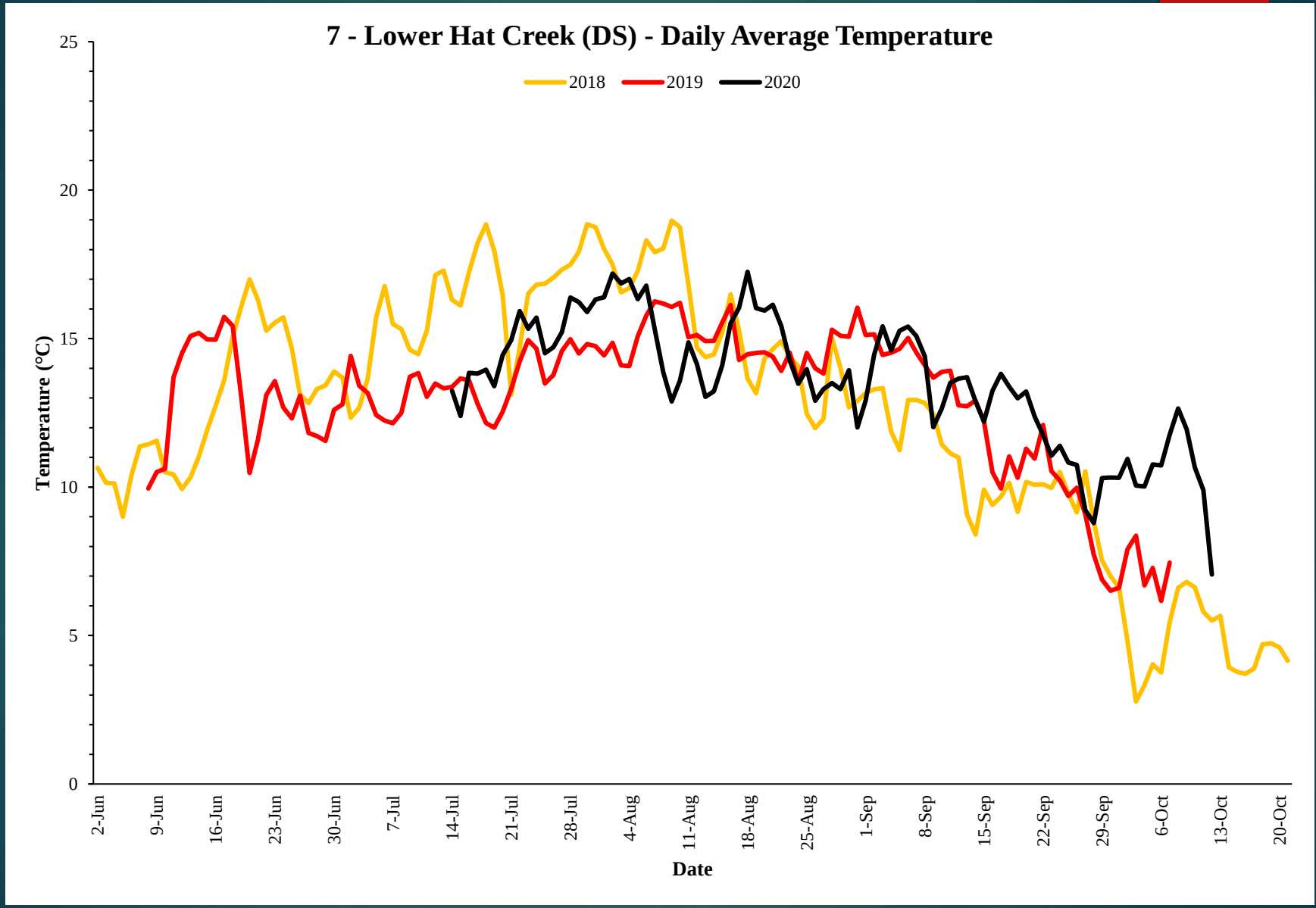


Results

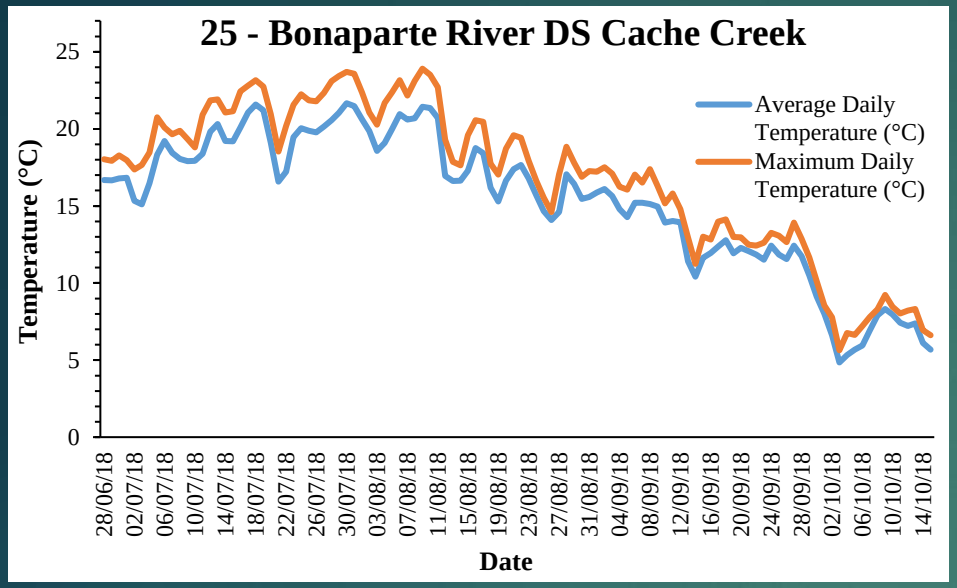
2018 -2020 Average Daily Temperature



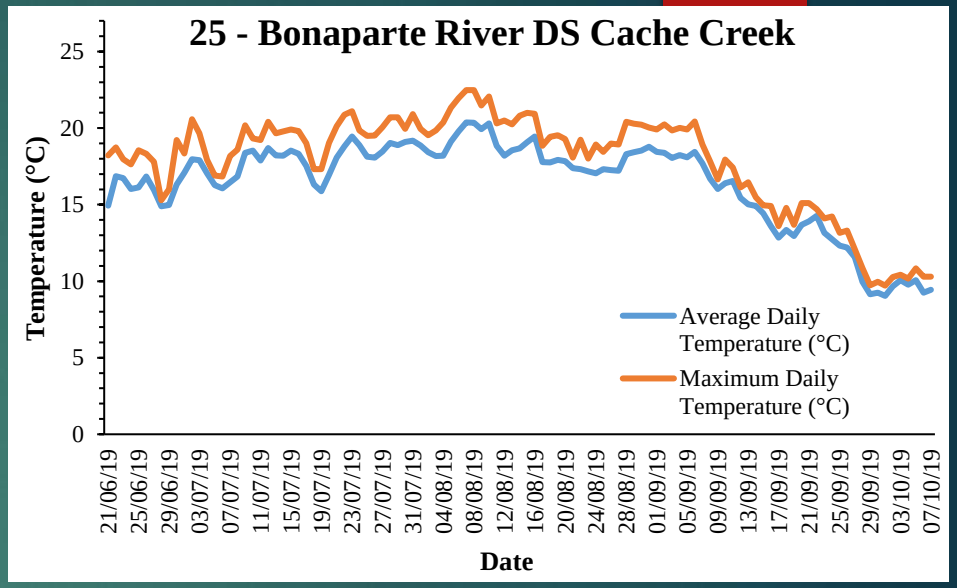
Results

Lowest point downstream
Bonaparte River Fishway, 364m elevation

2018



2019



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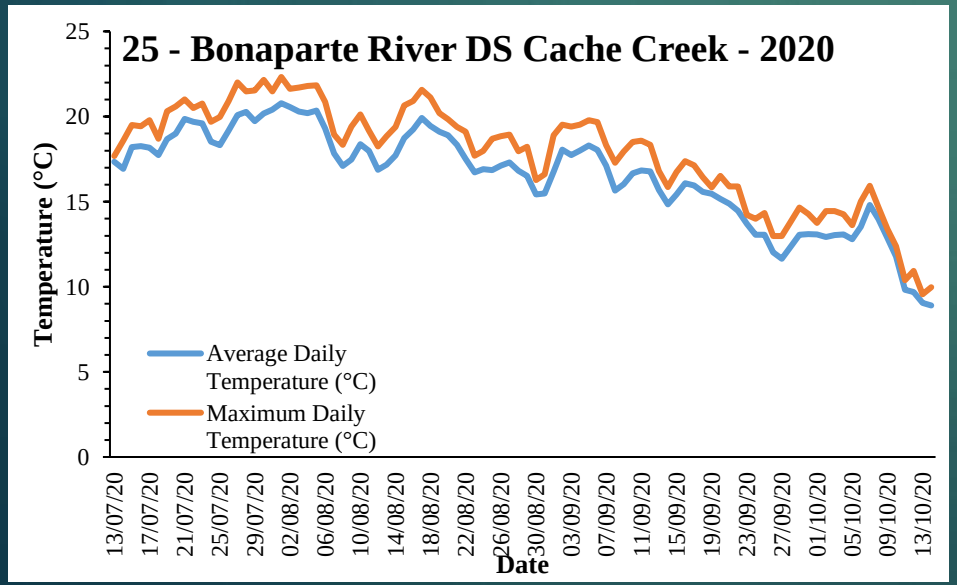
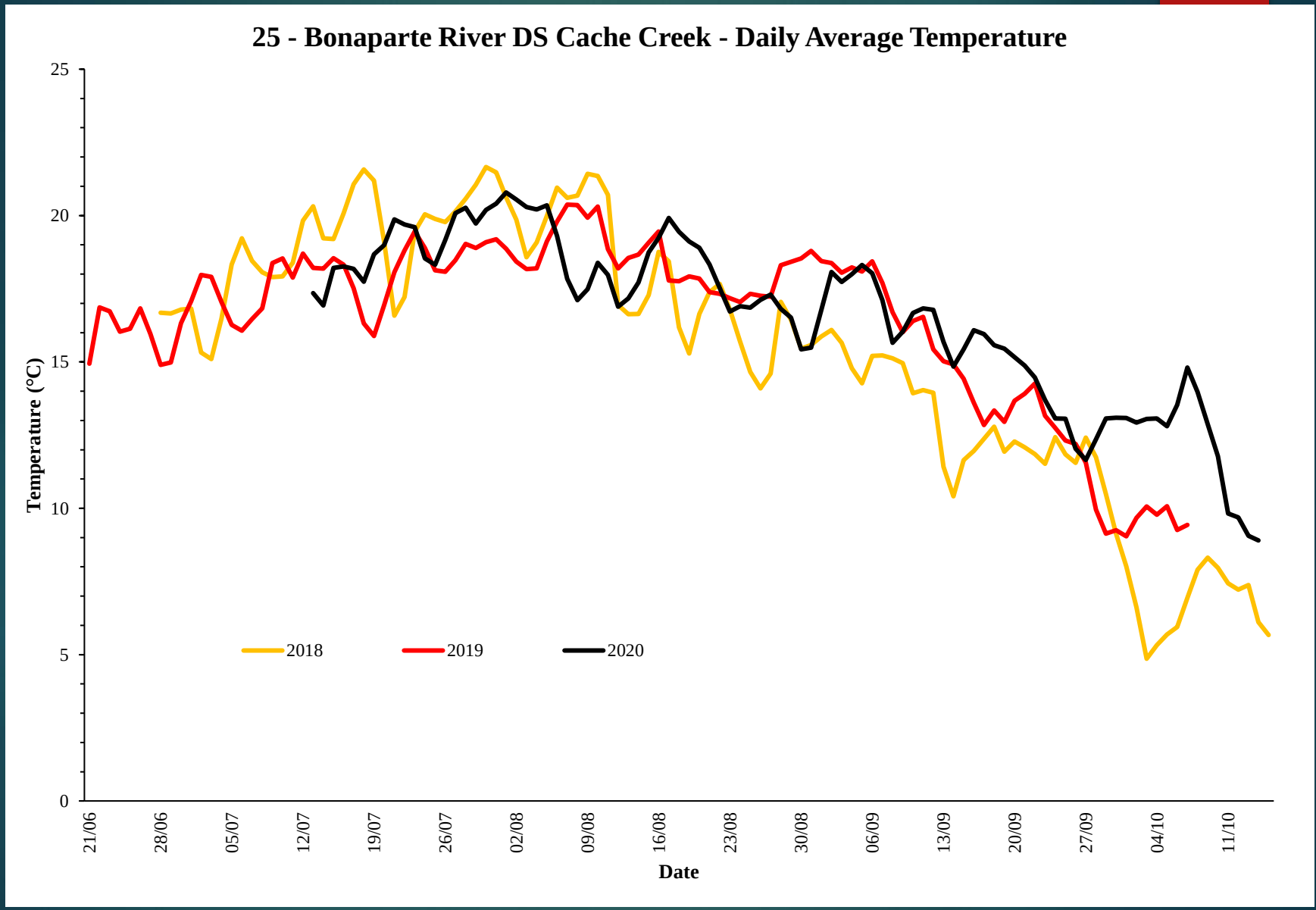


Results

2018 -2020 Average Daily Temperature



Applying Temperature Monitoring Results

- SFC identified Maiden Creek as a high priority creek to seek habitat restoration funding.
- At the completion of year 1, SFC started to search for restoration funding and after year 2 was successful.
- This past field season there was significant restoration work completed on Maiden Creek (approximately 1.5km).

Maiden Creek Restoration Site

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