

Technical Memorandum BCWA



Date: February 28, 2018
To: Bear Creek Watershed Association
From: Russell N. Clayshulte, Manager
Re: BCWA TM 2017.10 Fishery

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2017 Survey Sites and Data

The Colorado Parks and Wildlife (“CPW”) collects aquatic data from both internal sources and a variety of external governmental and non-governmental agencies. CPW provides this data, upon request, solely as a public service. In September 11 to 14, 2017, personnel from the CPW conducted fishery surveys on Bear Creek. The fishery data is graphically summarized in this technical memorandum as processed by the BCWA. CPW makes no warranty, representation, or guarantee as to the content, accuracy or completeness of any of the data provided.

Fishery surveys were done at 7 sites (Table 1). No data was collected from the Bear Creek Cabins station due to access. Table 2 is the 2017 fishery data supplied to the BCWA for use in its watershed management program. This data may not be re-published without approval of the BCWA. Table 4 compares the 2014 to 2017 fishery summaries.



Figure 1 Fish Collection Method

Table 1 2017 Bear Creek Watershed Fishery Survey Sites

Station	Width (ft)	Length (ft)	Sample Date
Golden Willow Rd.	23	342	9/13/2017
Dedisse Park (Keys on the Green)	33	368	9/13/2017
Downtown Evergreen (Little Bear)	34	423	9/13/2017
O'Fallon Park Picnic Areas (#14)	28	372	9/12/2017
Lair O Bear Picnic Areas (#13)	29	491	9/11/2017
Idledale ABV Bridge	25	505	9/11/2017
Morrison Park Just BLW Bridge	30	476	9/14/2017

Table 2 2017 Fishery Data Summary

Station	Width (ft)	Species	2017		
			No./Mile Total	No./Acre Total	lb/Acre Total
Golden Willow	23	Brown	1551	556	107
		Rainbow	0	0	0
		Total	1551	556	107
Dedisse Park	33	Brown	2666	666	80
		Rainbow	184	46	5
		Total	2849	712	85
Evergreen	34	Brown	1932	469	147
		Rainbow	726	176	55
		Total	2658	645	202
O'Fallon Park	28	Brown	2364	697	122
		Rainbow	57	17	3
		Total	2421	713	125
Lair O' the Bear	29	Brown	1363	388	95
		Rainbow	176	50	12
		Total	1538	438	107
Idledale	30	Brown	2130	703	203
		Rainbow	151	50	14
		Total	2281	753	217
Morrison West	30	Brown	2163	595	144
		Rainbow	177	49	12
		Total	2341	644	156

Note - No Bear Creek Cabin Sample

2017 Comparison of Fish Surveys

Table 3 2015 to 2017 Fishery Summary Comparison

Station	Width (ft)	Species	2015			2016			2017		
			No/Mile Total	No./Acre Total	lb/Acre Total	No/Mile Total	No./Acre Total	lb/Acre Total	No/Mile Total	No./Acre Total	lb/Acre Total
Golden Willow	23	Brown	3,438	1,233	170	1,543	553	83	1,551	556	107
		Rainbow	141	51	7	15	6	1	0	0	0
		TOTAL	3,579	1,284	177	1,558	559	84	1,551	556	107
Dedisse Park	33	Brown	2,718	679	42	2,583	646	75	2,666	666	80
		Rainbow	386	96	6	158	39	5	184	46	5
		TOTAL	3,103	776	48	2,740	685	79	2,849	712	85
Evergreen	34	Brown	1,872	454	123	1,427	346	103	1,932	469	147
		Rainbow	795	193	52	399	97	29	726	176	55
		TOTAL	2,667	647	175	1,827	443	131	2,658	645	202
Bear Creek Cabins	32	Brown	1,837	474	95	1,126	290	77			
		Rainbow	528	136	27	263	68	18			
		TOTAL	2,365	610	123	1,389	358	95			
O'Fallon Park	28	Brown	2,262	666	84	909	268	54	2,364	697	122
		Rainbow	118	35	4	57	17	3	57	17	3
		TOTAL	2,380	701	88	966	285	57	2,421	713	125
Lair O' Bear	29	Brown				1,293	368	94	1,363	388	95
		Rainbow				86	24	6	176	50	12
		TOTAL				1,379	392	101	1,538	438	107
Idledale	25	Brown	1,714	566	138				2,130	703	203
		Rainbow	178	59	14				151	50	14
		TOTAL	1,893	625	152				2,281	753	217
Morrison	30	Brown	2,047	563	130	1,353	372	99	2,163	595	144
		Rainbow	156	43	10	91	25	7	177	49	12
		TOTAL	2,203	606	140	1,443	397	105	2,341	644	156

2017 Fishery Graphs

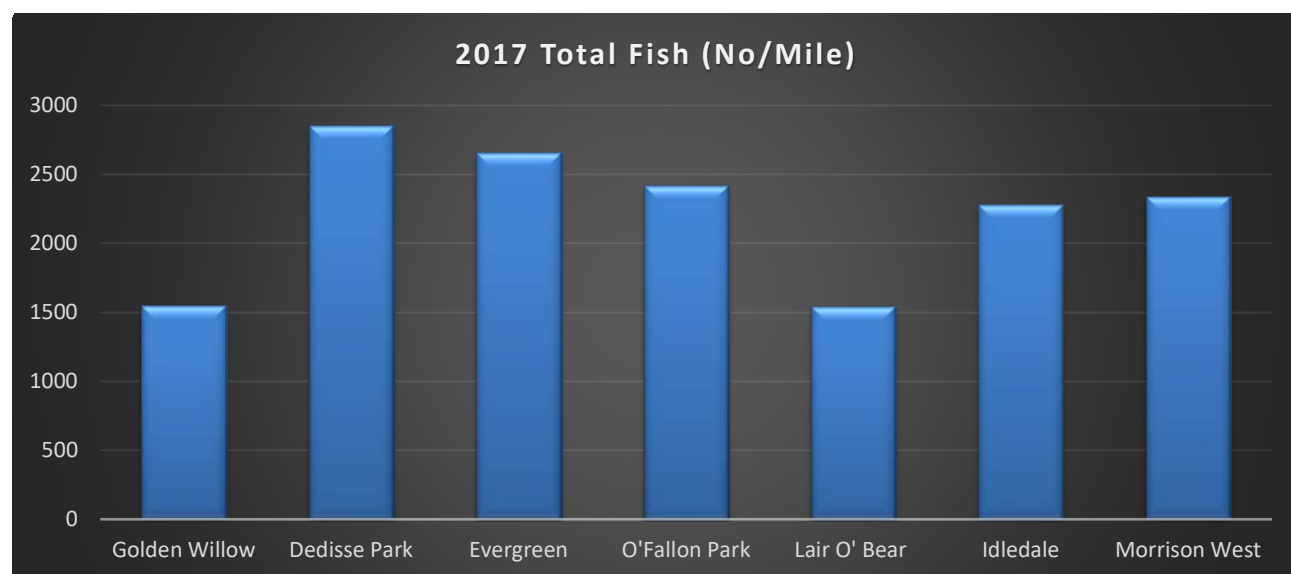


Figure 2 2017 Number of Fish per Mile



Figure 3 2017 Number of Fish per Acre



Figure 4 2017 Total Pounds of Fish per Acre

2014-2017 Comparison of Fishery Summaries

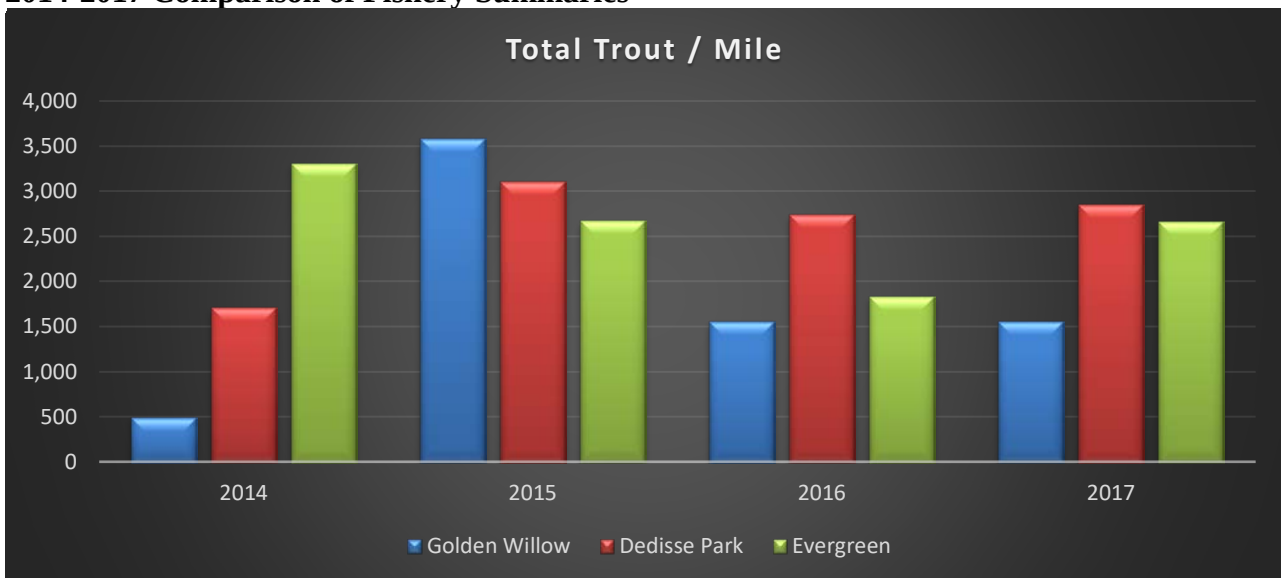


Figure 5 Comparison of Trout per Mile from 2014 to 2017 at 3 Upper Bear Creek Sites

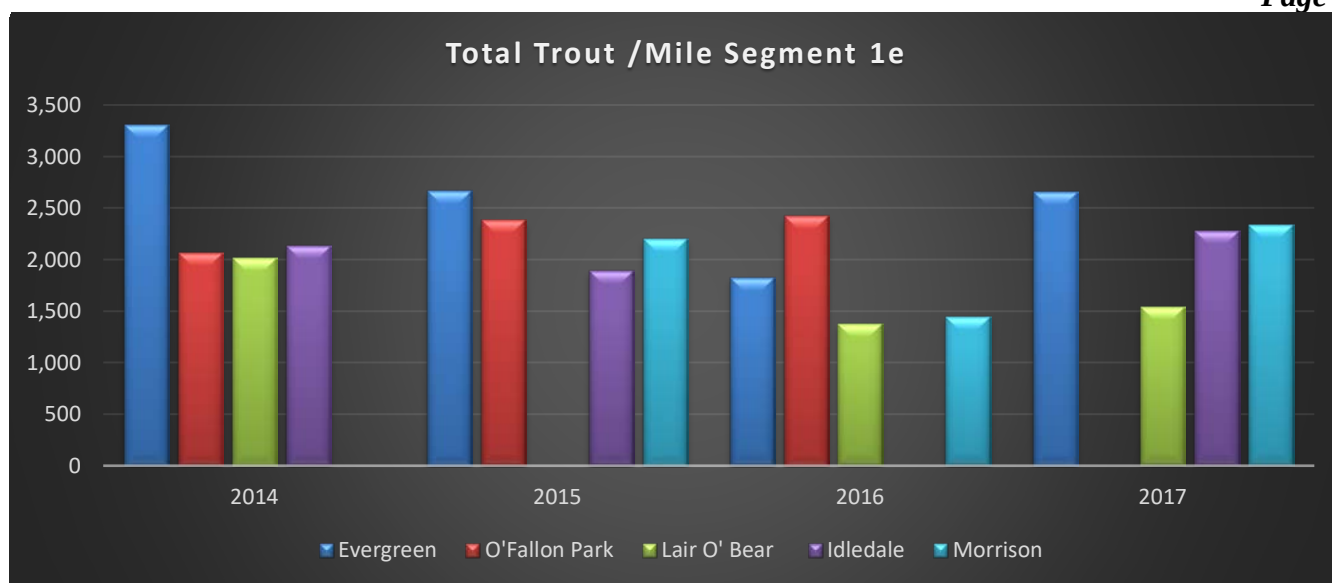


Figure 6 Comparison of Trout per Mile from 2014-2017 On Bear Creek Segment 1e

Long-Term Fishery Trends

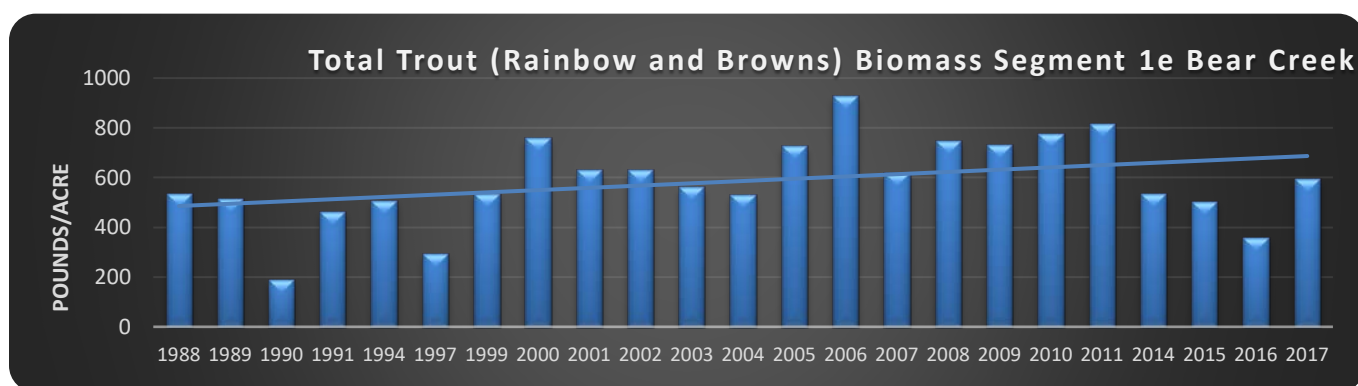


Figure 7 Total Trout Pounds per Acre from 1988-2017

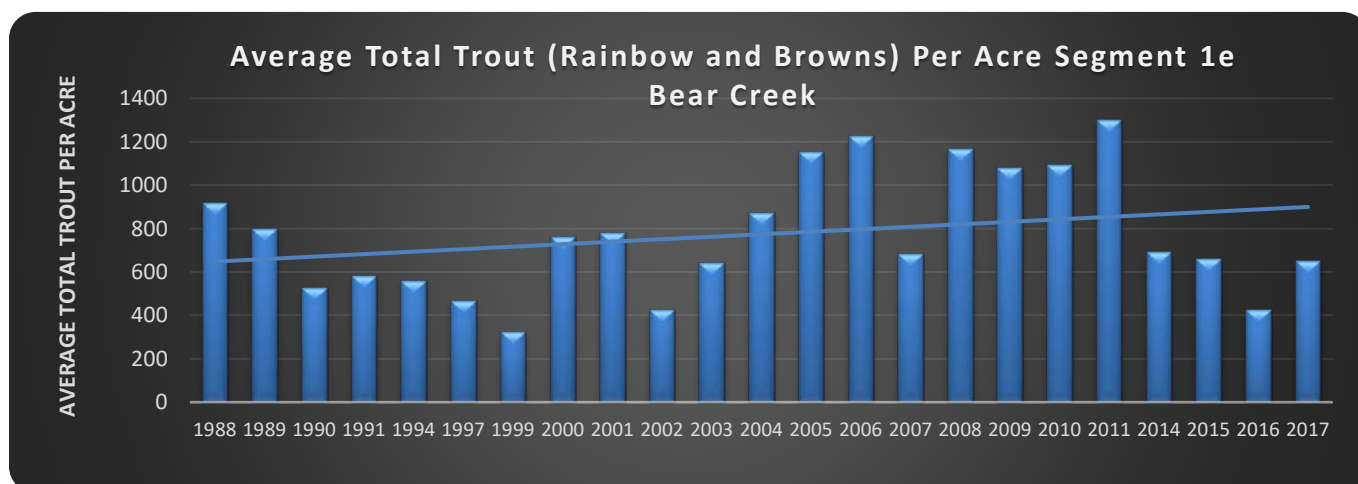


Figure 8 Segment 1e Total Trout per Acre from 1988-2017

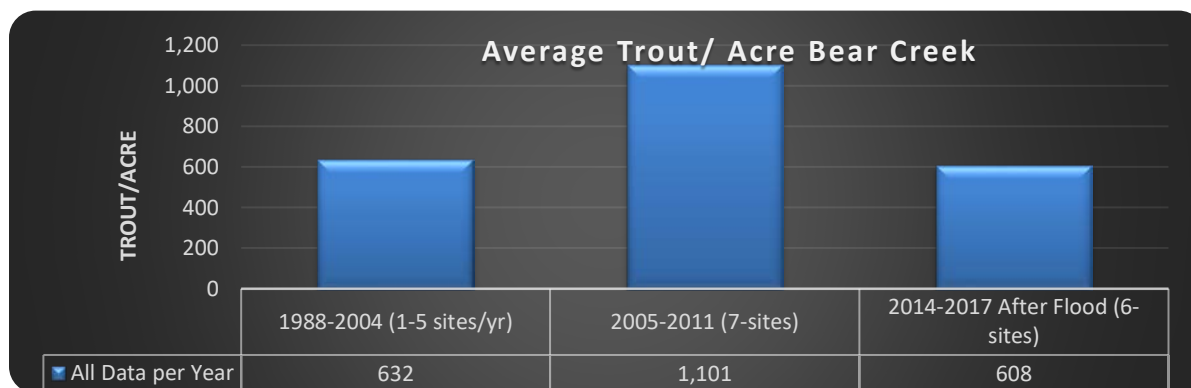


Figure 9 Average Trout per Acre after 2013 Flooding Event

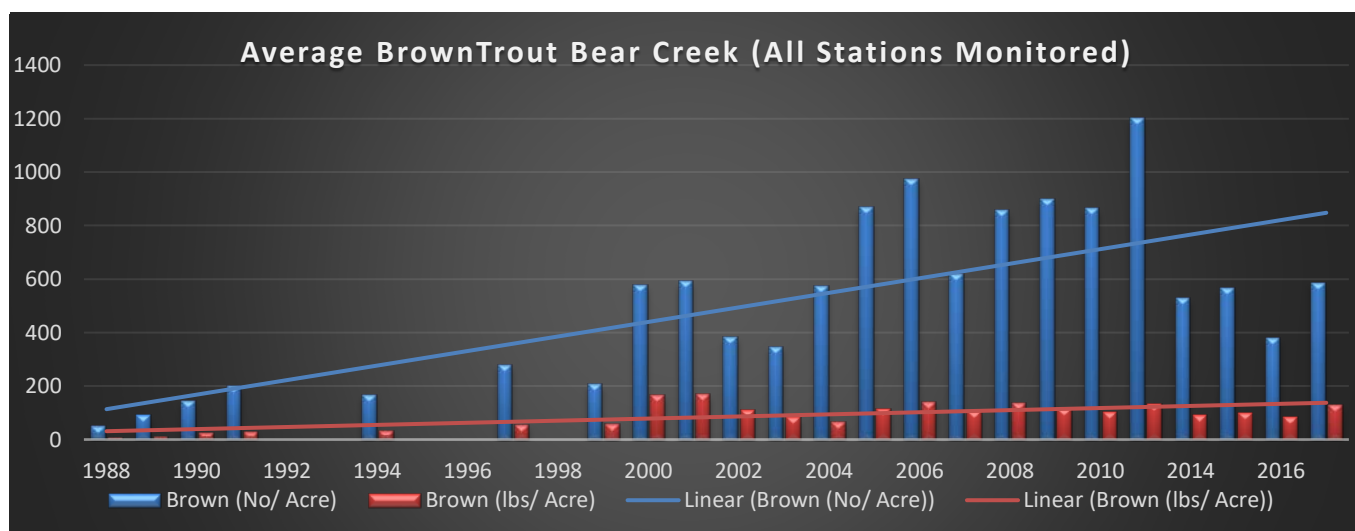


Figure 10 Average Brown Trout Trends

Brown Trout Station Trends

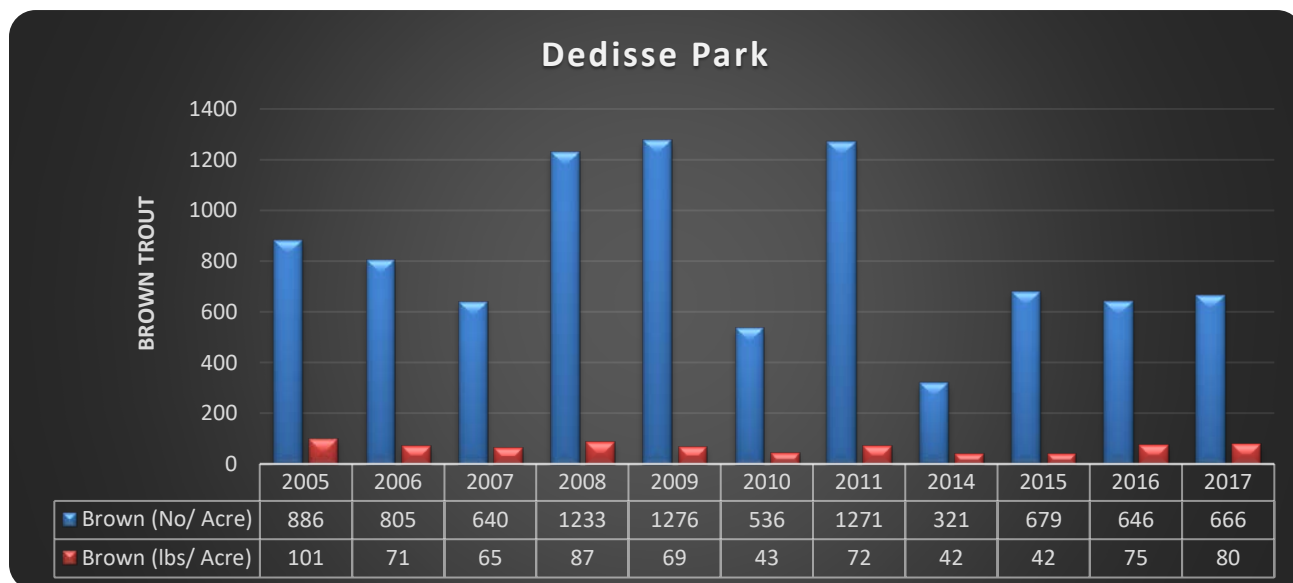


Figure 11 Dedisse Park Trend

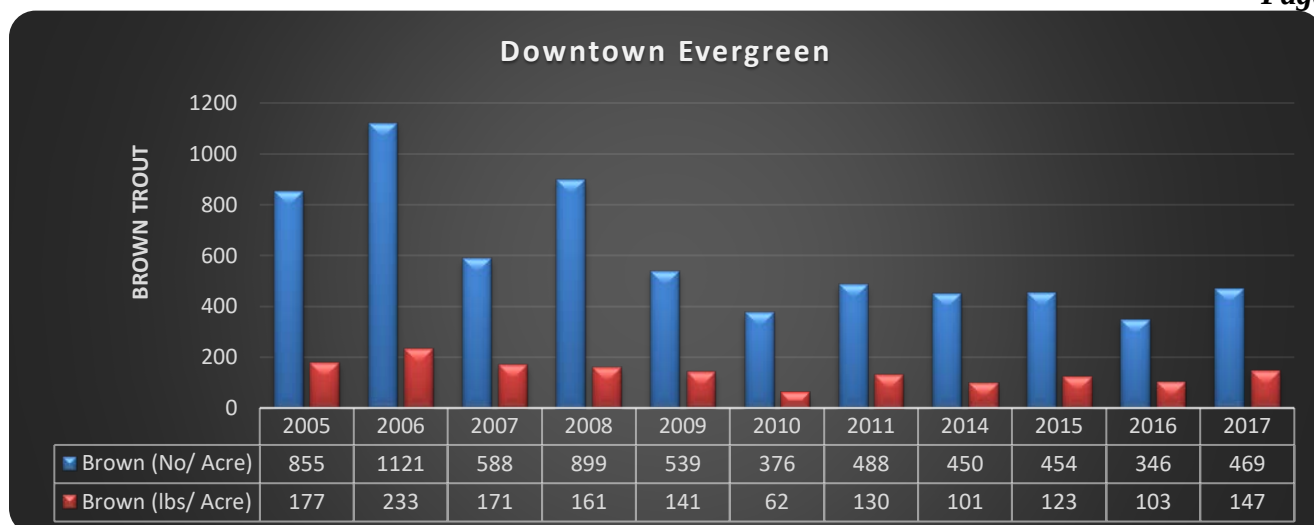


Figure 12 Downtown Evergreen Trend

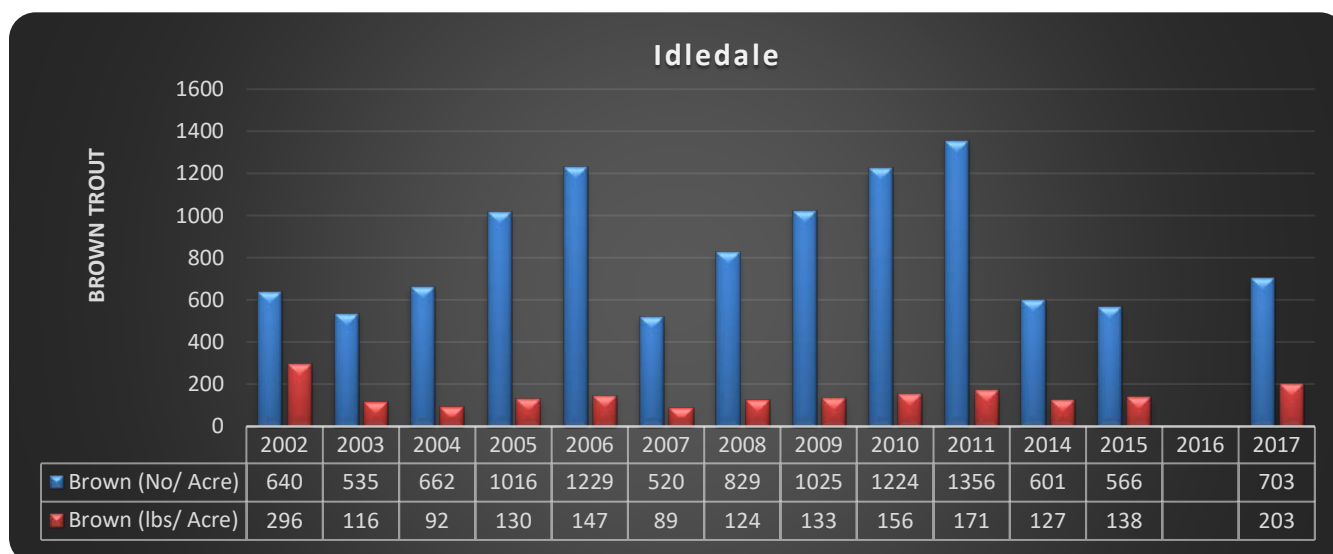


Figure 13 Idledale

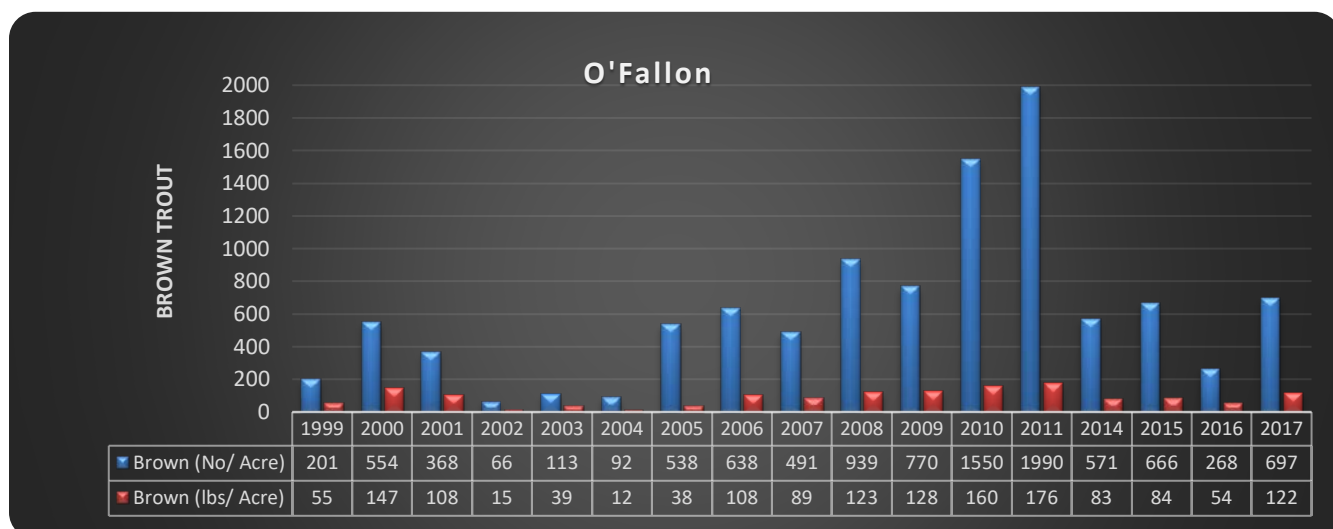


Figure 14 O'Fallon Trend



Figure 15 Lair O' Bear Trend



Figure 16 Morrison Trend

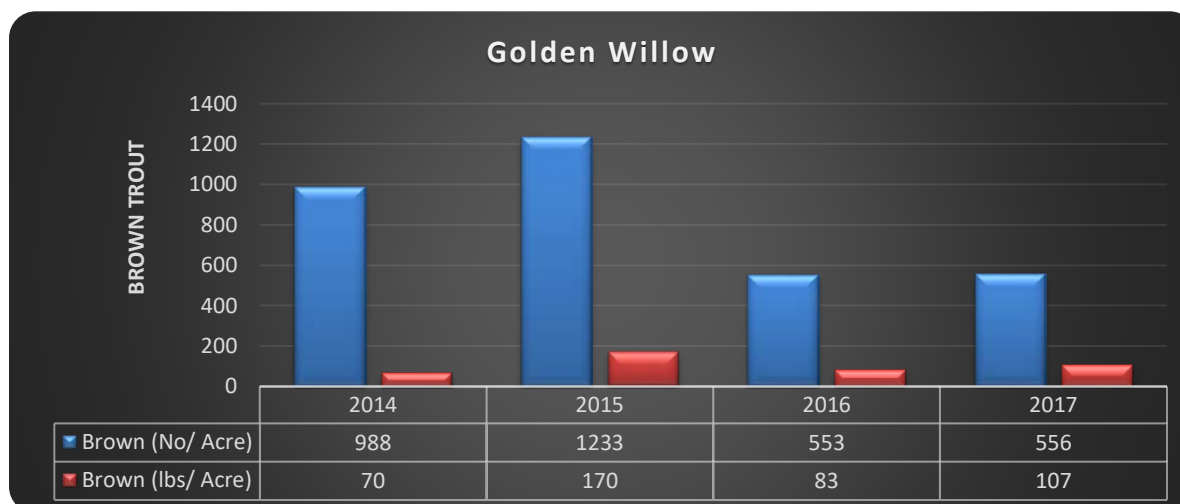


Figure 17 Golden Willow