

Technical Memorandum BCWA



Date: March 2, 2017
To: Bear Creek Watershed Association
From: Russell N. Clayshulte, Manager
Re: BCWA TM 2016.10 Fishery

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2016 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 12 to 14, 2016, 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 Idledale station due to high water turbidity. Table 2 is the 2016 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 2016 fishery summaries.



Figure 1 Fish Collection Method

Table 1 2016 Bear Creek Watershed Fishery Survey Sites

Station Location	Station Length	Avg Width	Survey Date
Downtown Evergreen Across From Little Bear	423	34	9-12-2016
O'Fallon Park Picnic Areas (#14)	372	28	9-16-2016
BLW Bear Creek Cabins (#1)	441	32	9-16-2016
ABV Golf Course at Dedisse Park	368	33	9-12-2016
Just above Golden Willow Rd.	342	23	9-16-2016
Lair O Bear Picnic Areas (#13)	491	29	9-14-2016
Morrison Park Just BLW Bridge	476	30	9-14-2016

Table 2 2016 Fishery Data Summary

	Width (ft)	Species	2016		
			No./Mile Total	No./Acre Total	lb/Acre Total
Golden Willow	23	Brown Trout	1543	553	83
		Rainbow Trout	15	6	1
		Total	1558	559	84
Dedisse Park	33	Brown Trout	2583	646	75
		Rainbow Trout	158	39	5
		Total	2740	685	79
Downtown Evergreen	34	Brown Trout	1427	346	103
		Rainbow Trout	399	97	29
		Total	1827	443	131
Bear Creek Cabins	32	Brown Trout	1126	290	77
		Rainbow Trout	263	68	18
		Total	1389	358	95
O'Fallon Park	28	Brown Trout	909	268	54
		Rainbow Trout	57	17	3
		Total	966	285	57
Lair O' the Bear	29	Brown Trout	1293	368	94
		Rainbow Trout	86	24	6
		Total	1379	392	101
Morrison West	30	Brown Trout	1353	372	99
		Rainbow Trout	91	25	7
		Total	1443	397	105

note: No Idledale sample

2014-2016 Comparison of Fish Surveys

Table 3 2014 to 2016 Fishery Summary Comparison

Station	Width (ft)	Trout Species	2014			2015			2016		
			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	354	988	70	3,438	1,233	170	1543	553	83
		Rainbow	138	385	27	141	51	7	15	6	1
		TOTAL	492	1,373	97	3,579	1,284	177	1558	559	84
Dedisse Park	33	Brown	1,284	321	42	2,718	679	42	2583	646	75
		Rainbow	427	107	14	386	96	6	158	39	5
		TOTAL	1,711	428	56	3,103	776	48	2740	685	79
Downtown Evergreen	34	Brown	1,855	450	101	1,872	454	123	1427	346	103
		Rainbow	1,450	352	79	795	193	52	399	97	29
		TOTAL	3,305	802	180	2,667	647	175	1827	443	131
Bear Creek Cabins	32	Brown	2,962	764	68	1,837	474	95	1126	290	77
		Rainbow	1,051	271	24	528	136	27	263	68	18
		TOTAL	4,013	1,035	92	2,365	610	123	1389	358	95
O'Fallon Park	28	Brown	1,938	571	83	2,262	666	84	909	268	54
		Rainbow	128	38	5	118	35	4	57	17	3
		TOTAL	2,066	609	88	2,380	701	88	966	285	57
Lair O' the Bear	29	Brown	1,631	464	127				1293	368	94
		Rainbow	387	110	80				86	24	6
		TOTAL	2,018	574	207				1379	392	101
Idledale	25	Brown	1,820	601	127	1,714	566	138			
		Rainbow	311	103	22	178	59	14			
		TOTAL	2,131	704	149	1,893	625	152			
Morrison	30	Brown				2,047	563	130	1353	372	99
		Rainbow				156	43	10	91	25	7
		TOTAL				2,203	606	140	1443	397	105

2016 Fishery Graphs

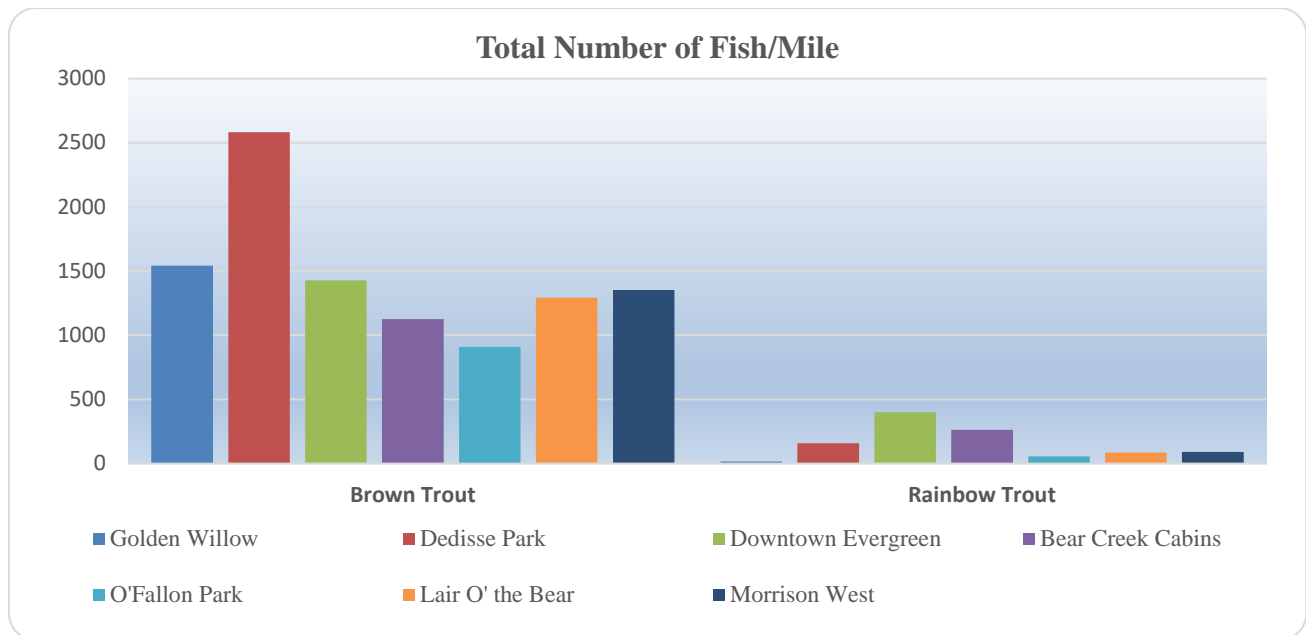


Figure 2 2016 Number of Fish per Mile

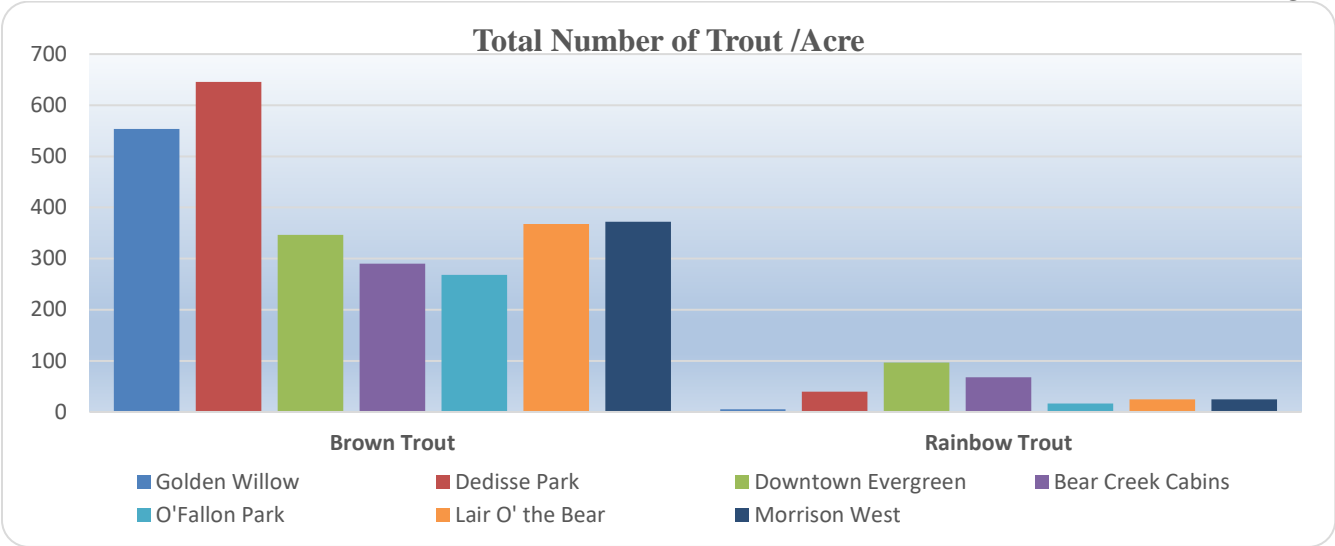


Figure 3 2016 Number of Fish per Acre

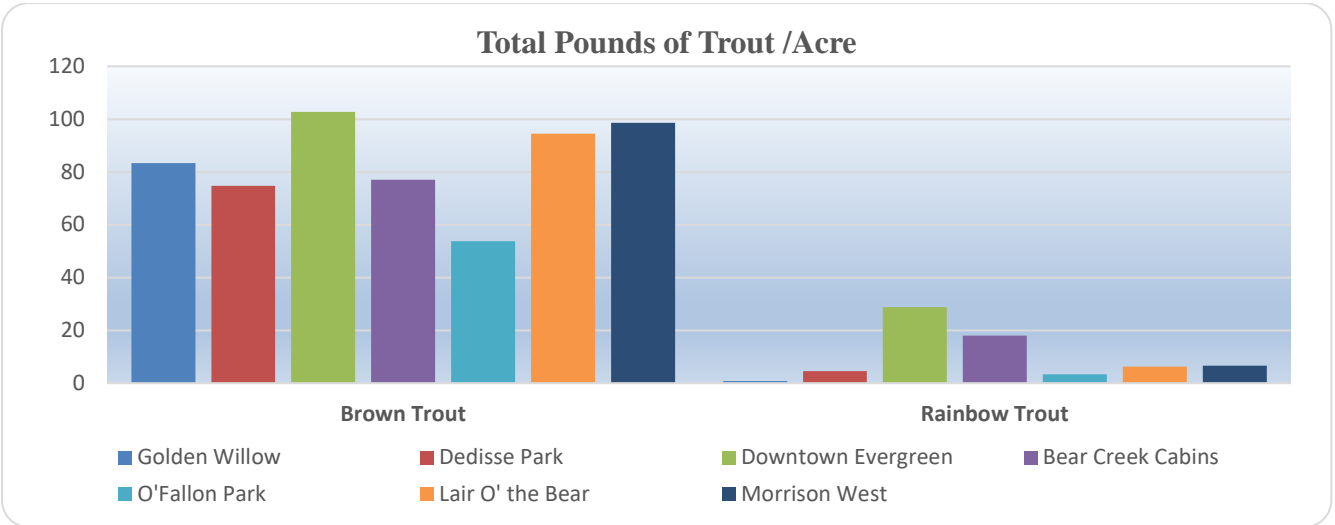


Figure 4 2016 Total Pounds of Fish per Acre

2014-2016 Comparison of Fishery Summaries

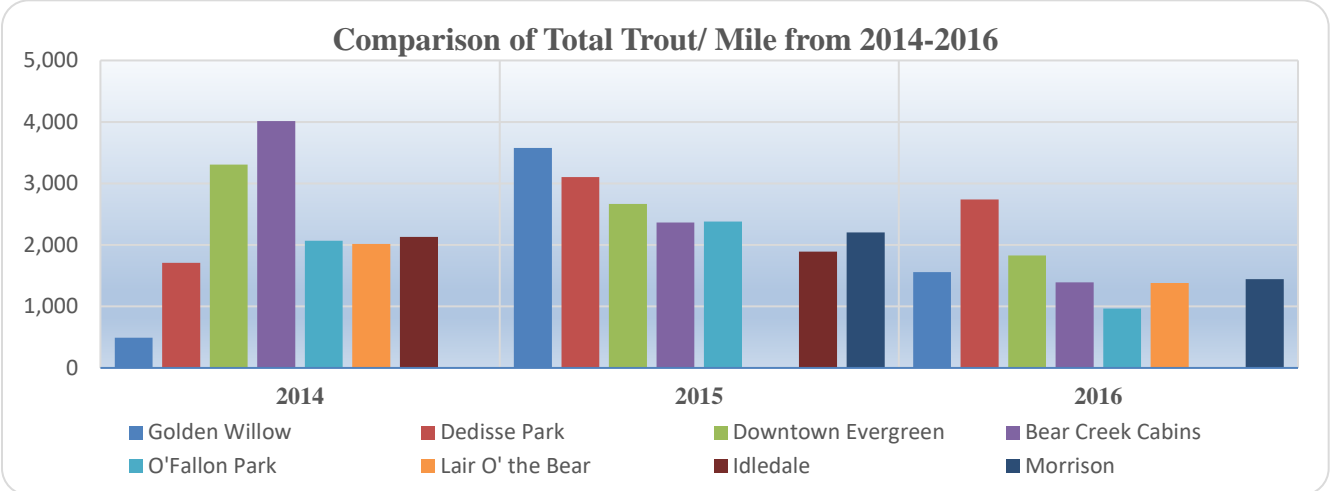


Figure 5 Comparison of Trout per Mile from 2014 to 2016

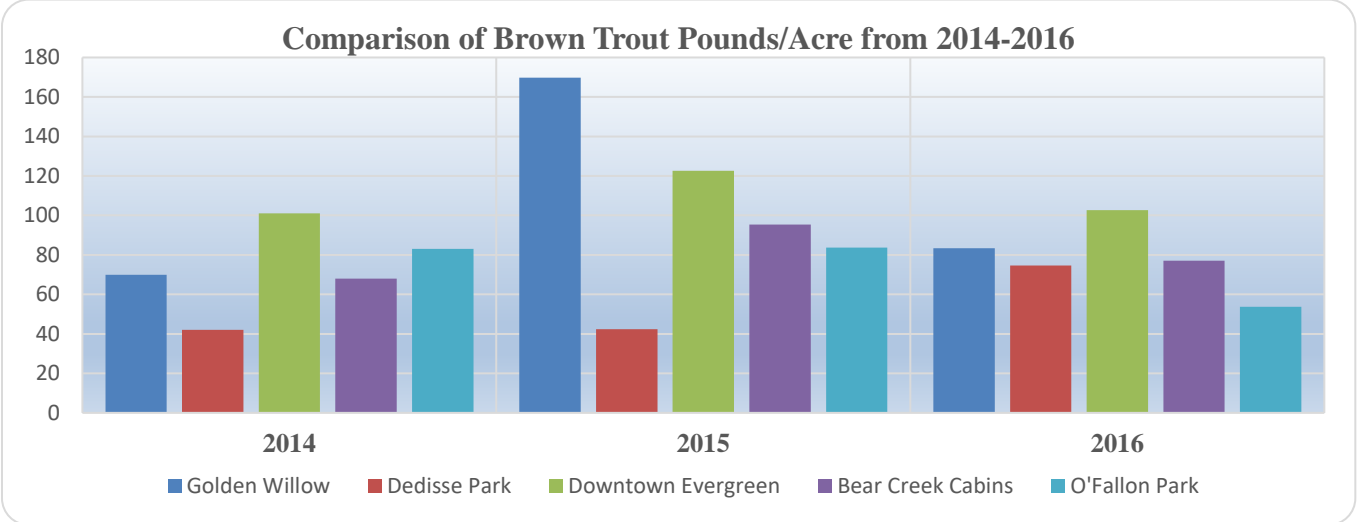


Figure 6 Comparison of Brown Trout per Acre from 2014-2016

Long-Term Fishery Trends

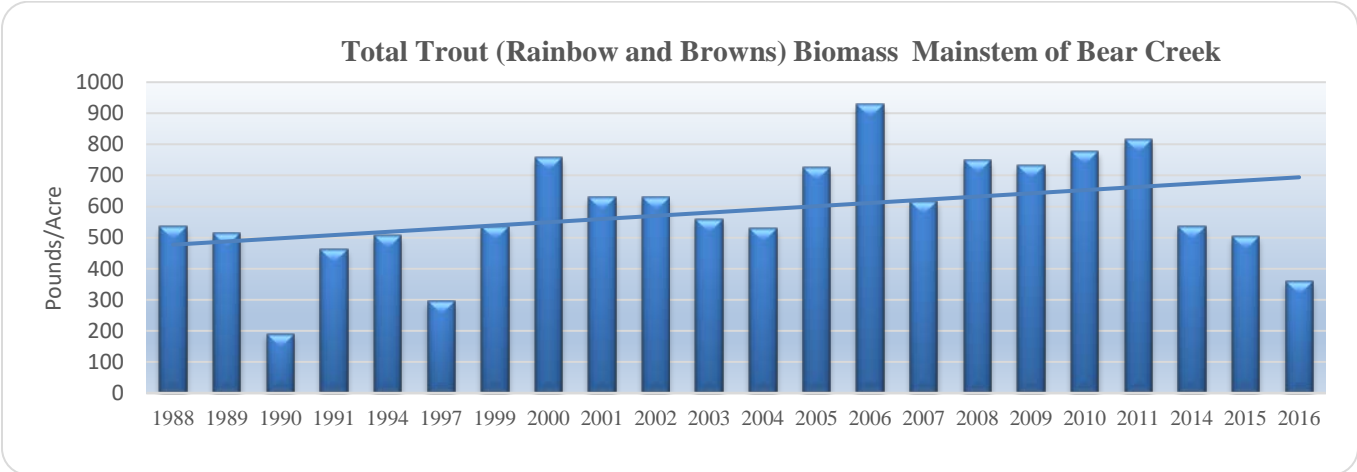


Figure 7 Total Trout Pounds per Acre from 1988-2016

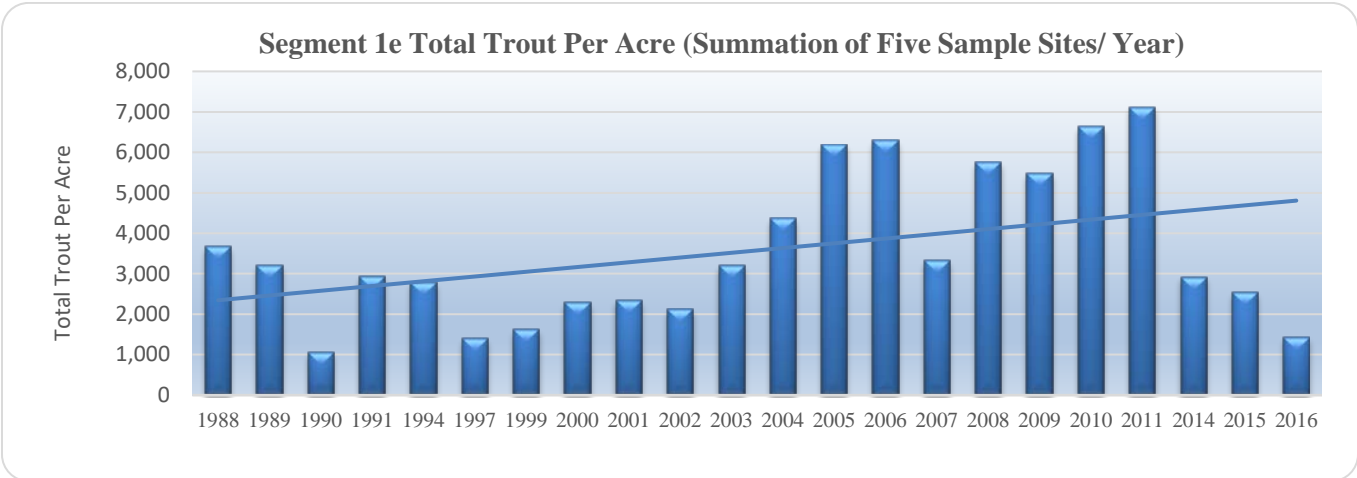


Figure 8 Segment 1e Total Trout per Acre from 1988-2016

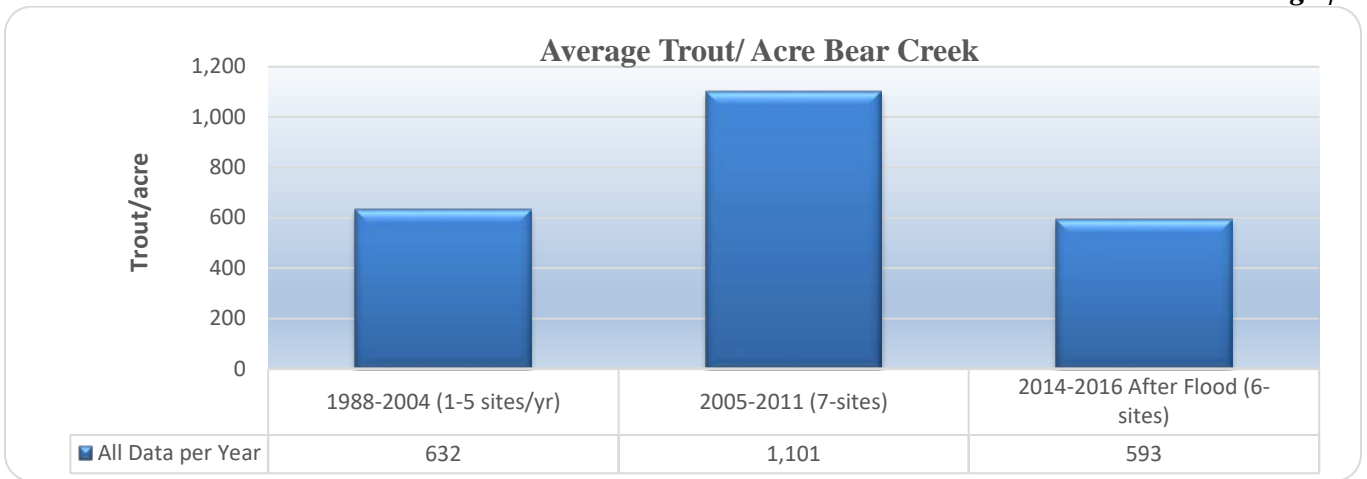


Figure 9 Average Trout per Acre after 2013 Flooding Event

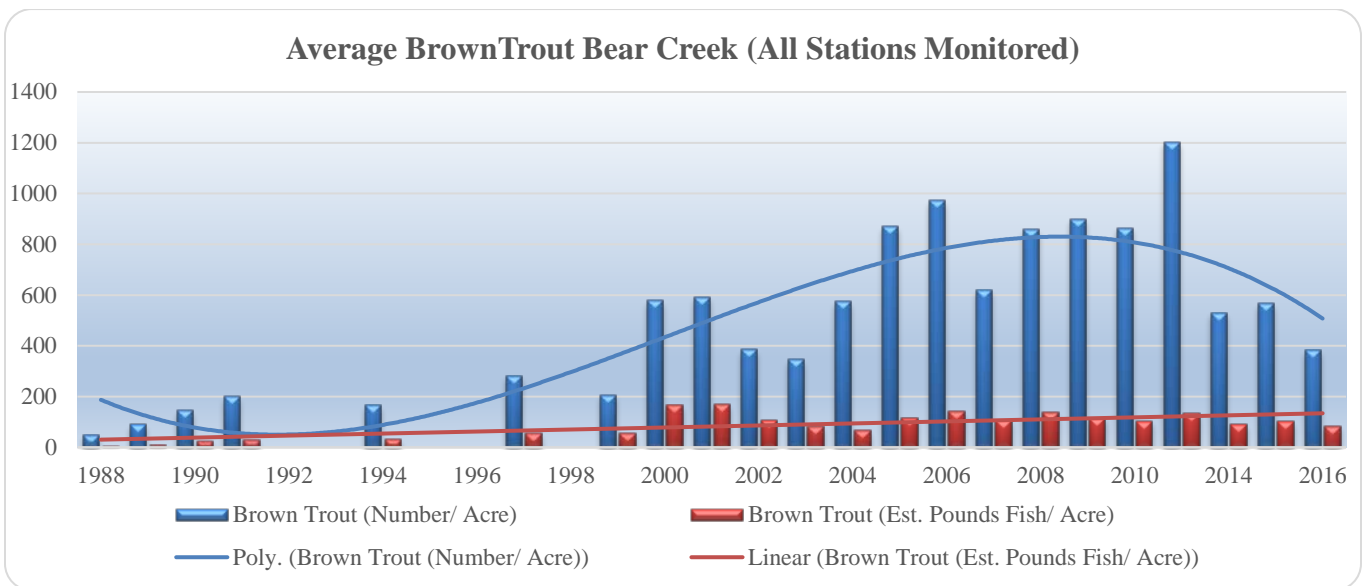


Figure 10 Average Brown Trout Trends

Brown Trout Station Trends

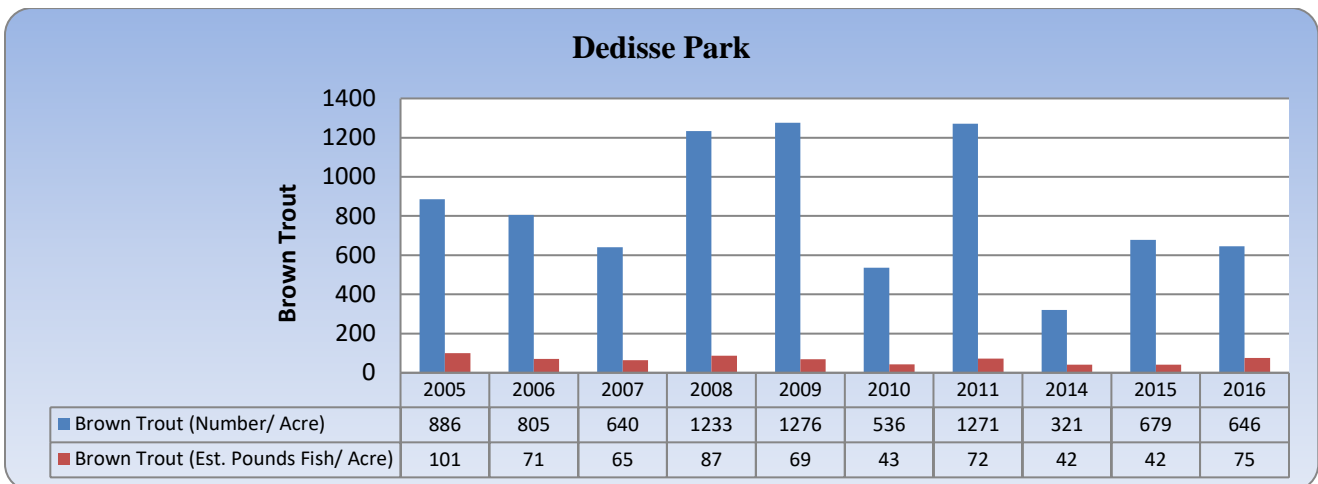


Figure 11 Dedisse Park Trend

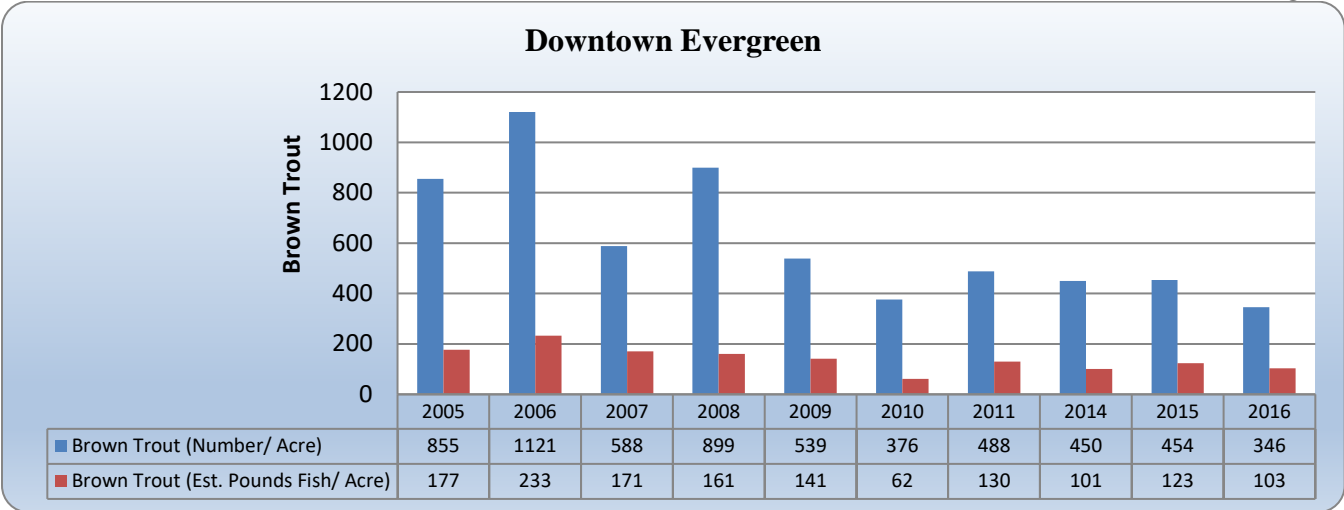


Figure 12 Downtown Evergreen Trend

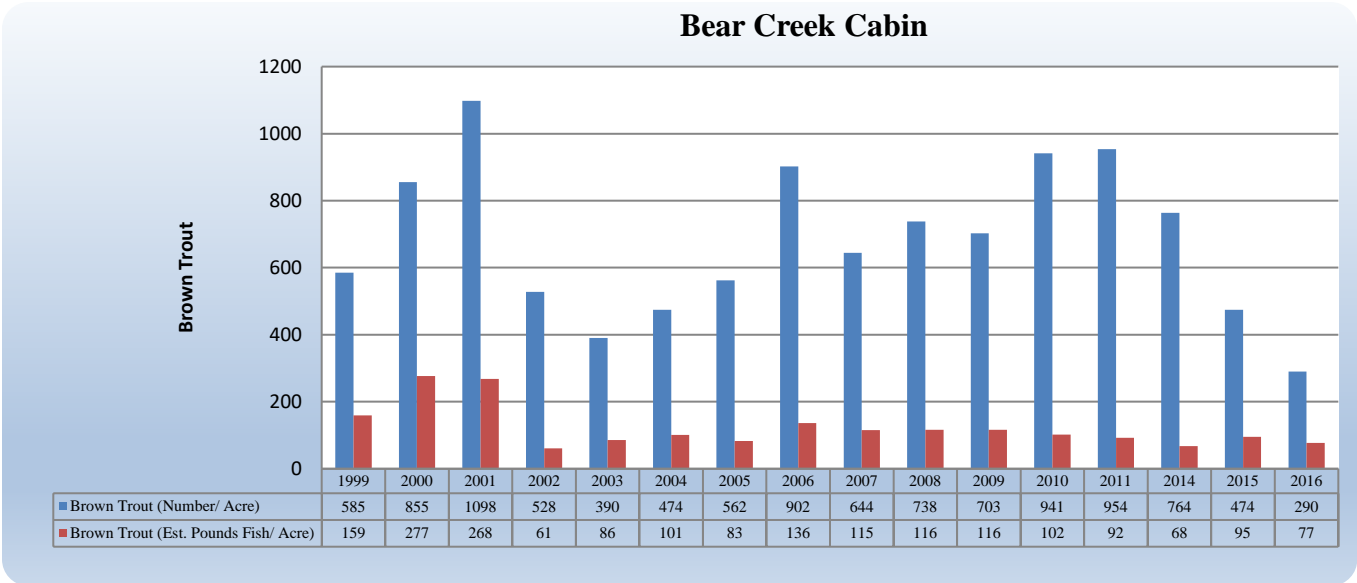


Figure 13 Bear Creek Cabin Trend

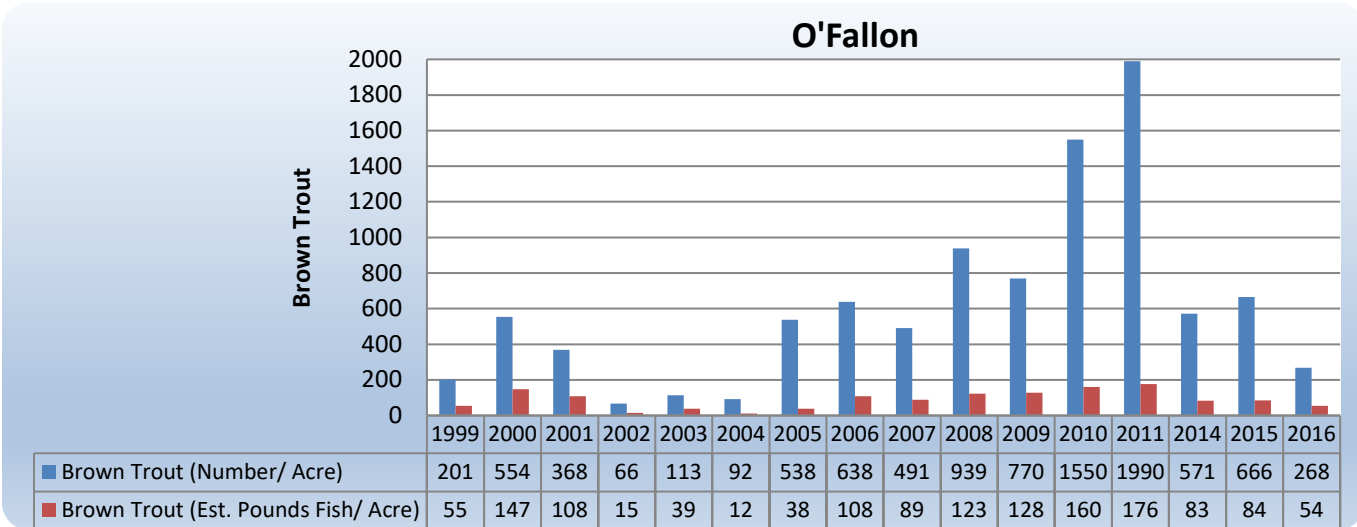


Figure 14 O'Fallon Trend

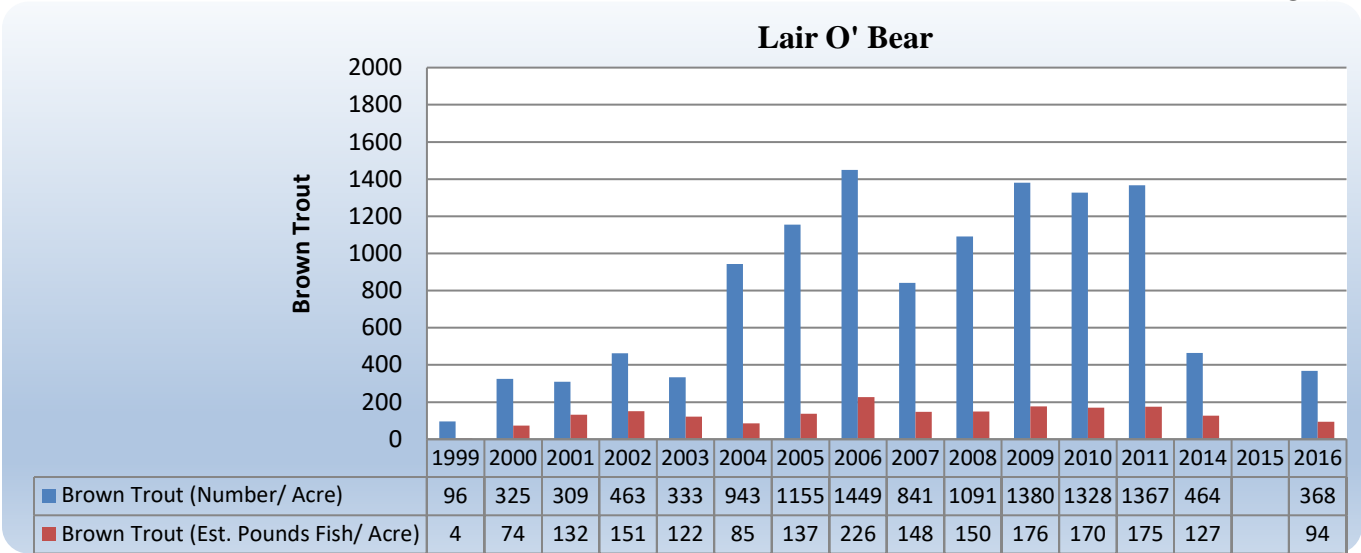


Figure 15 Lair O' Bear Trend

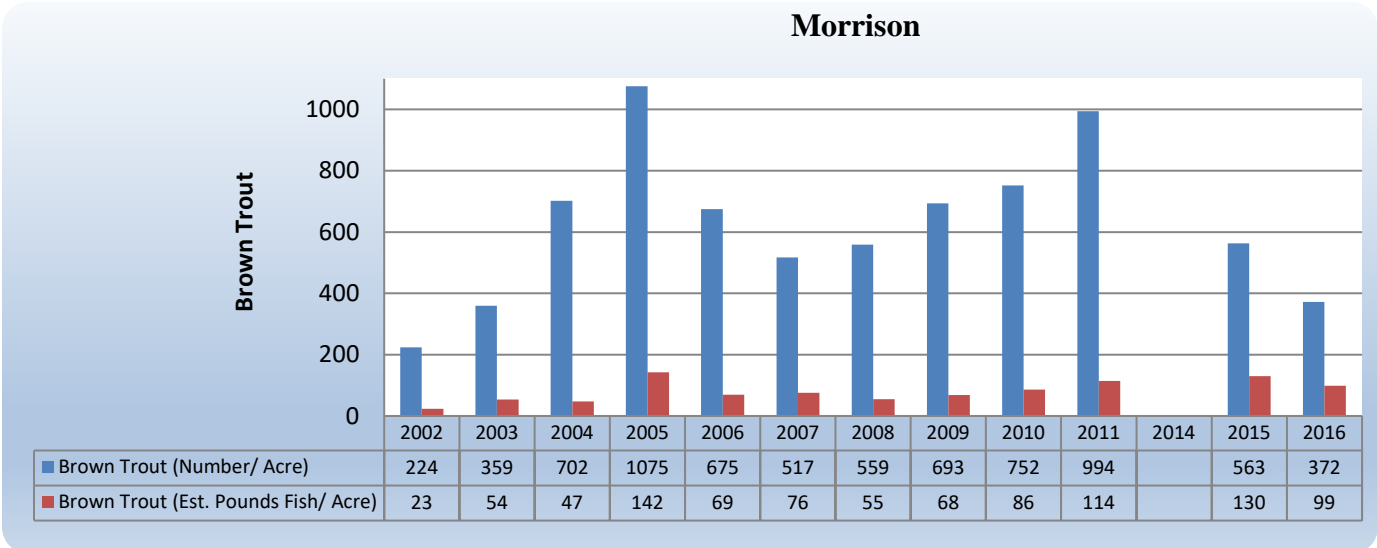


Figure 16 Morrison Trend

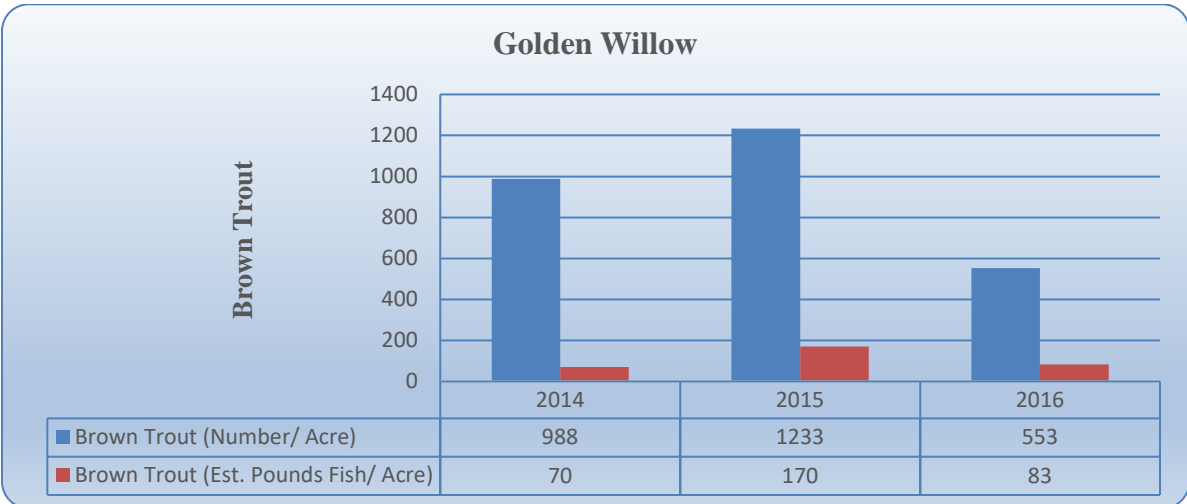


Figure 17 Golden Willow