APPENDIX C—LAND-BASED CARRYING CAPACITY STUDY

Prepared by Adam Brown, Regional Economist, US Army Corps of Engineers, Mobile District

CONTENTS

A. PURPOSE

Carrying capacity is the amount and type of use that an area can sustain over a given period. Carrying capacities can protect users' experiences by preventing overcrowding, which causes deterioration of natural attributes and impedes users' ability to move freely and to fully enjoy the natural setting without undue stress and distraction.

The purpose of this Recreation Carrying Capacity Study is to evaluate the ability of the Lake Sidney Lanier Project to accommodate existing and future recreation uses and assess whether these uses are suitable given the potential effects on recreational, environmental, and social resources.

B. REGIONAL RECREATION RESOURCES

(1) PROJECT LOCATION

Situated approximately 36 miles northeast of Atlanta, GA, Lake Sidney Lanier (commonly known as Lake Lanier) is the uppermost project on the Chattahoochee River. Buford Dam,

located at Mile 348.5 on the Chattahoochee River near Buford, GA, provides water storage for power, flood control, and regulation of stream flow as well as water supply for Atlanta. The main arm of the lake extends 44 miles up the Chattahoochee from the dam while a secondary arm extends approximately 19 miles up the Chestatee River, the lake's principal tributary. Lake Lanier's approximately 692 miles of irregular shoreline, bays, and channels spans five Georgia counties—Hall, Lumpkin, Dawson, Forsyth, and Gwinnett. Gainesville, located in Hall County, is the largest community bordering in the lake. Along with Flowery Branch, Gainesville is located on the east side of the lake while Cumming and Buford flank the southern end.

(2) PROJECT DESCRIPTION

Located on the Chattahoochee River in the upper reaches of the Piedmont Plateau, just at the base of the Blue Ridge Mountains, Lake Sidney Lanier collects and releases drainage from a 1,034 mi^2 area located on the southern slopes of the Blue Ridge Mountains. The Chattahoochee River's headwaters are formed just 4 miles south of Brasstown Bald in the Chattahoochee National Forest and about 71 miles northeast of Buford Dam. The Chattahoochee River is fed by several tributaries, including Center, Dukes, Sautee, Blue, and Smith Creeks. Each of these tributaries has its headwaters high on the southern tier of the Blue Ridge Mountains.

Lake Sidney Lanier has approximately 47,000 acres of surface water at the top of its flood pool storage of 1,085' MSL while at the conservation pool of 1,071' MSL it has approximately 38,425 acres of surface water. In times of drought, the lake may be drawn down as far as 1,035' MSL and still be able to generate hydropower while providing minimum flow downstream. The lake has a total storage capacity of 2,554,000 acre-feet at the full flood control pool elevation of 1,085' MSL, a storage capacity of 1,917,000 acre-feet at the conservation pool elevation 1,071' MSL, and a storage capacity of 867,000 acre-feet at the minimum power pool of 1,035' MSL.

(3) RECREATION

Lake Sidney Lanier has 38 developed recreational areas, 37 undeveloped recreational areas, 45 recreational areas leased to other entities, including 9 marinas and Lake Lanier Islands. Recreation opportunities include fishing, camping, boating, picnicking, swimming, and many other activities. Other common recreation in the area is more urban-oriented and includes softball, golf, and tennis.

(4) LAKE LANIER OVERVIEW MAP

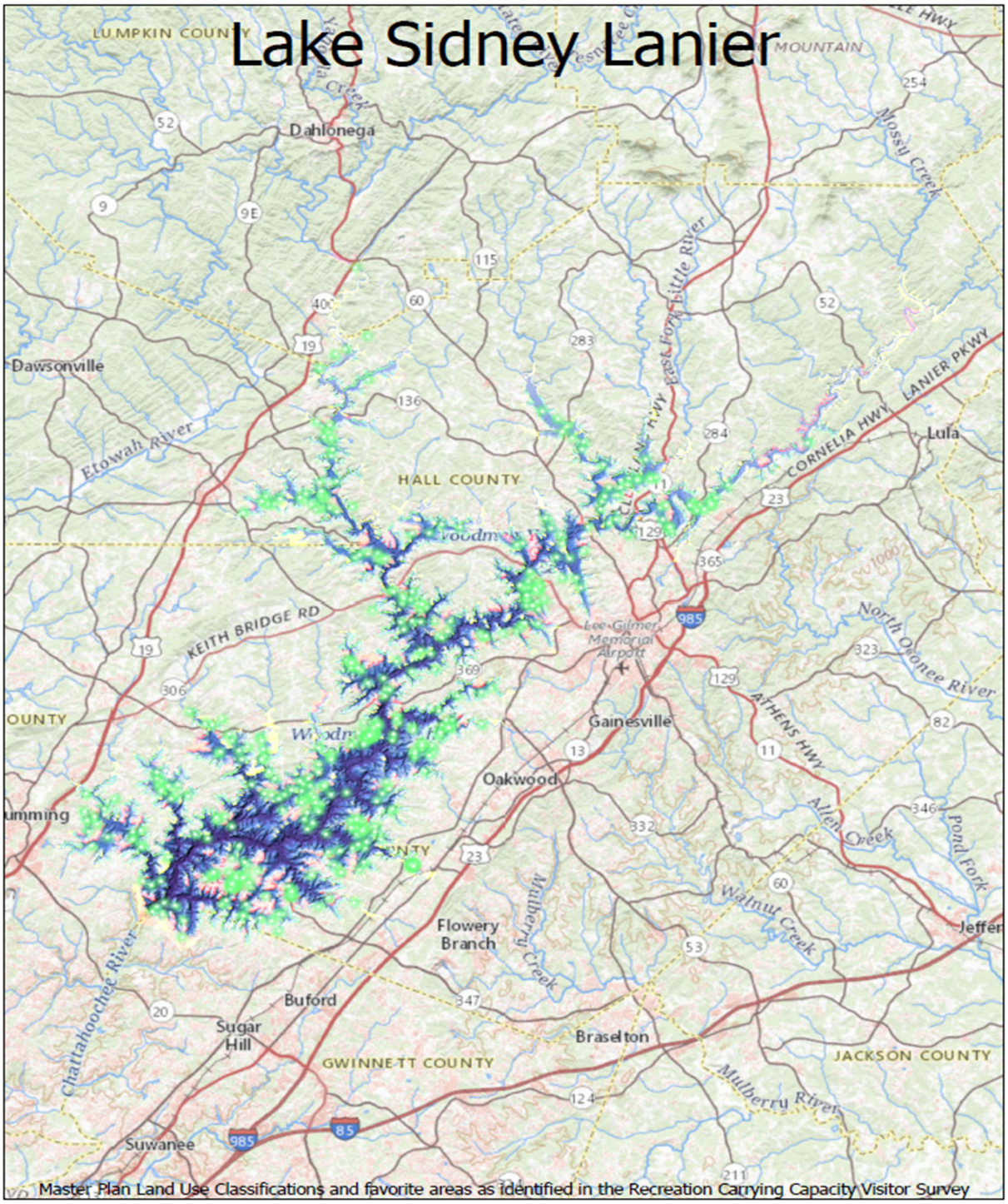

Figure C-1: Lake Sidney Lanier Overview Map and Favorite Points Noted from the Public Survey.

(5) REGIONAL RECREATIONAL RESOURCES

Three other USACE projects servicing North Georgia—Allatoona Lake, Hartwell Lake, and Carters Lake—provide recreational opportunities similar to Lake Lanier. Each project was authorized for power generation, water regulation and flood control; however, the diversity of recreational opportunities offered by the four closely located projects draws a substantial recreation population from North Georgia. One other USACE project, West Point Lake, has a minor impact on the market due to its proximity to Atlanta.

The Chattahoochee-Oconee National Forests in North Georgia manage nearly 867,000 acres across 26 counties. The forests offer approximately 850 miles of recreation trails and dozens of campgrounds, picnic areas, and other recreation activity opportunities. Some of the recreational opportunities that differ from Lake Sidney Lanier include back country hiking, back country camping, equestrian trails, equestrian camping, and shooting ranges.

The National Park Service administers the Chattahoochee River National Recreation Area from Peachtree Creek in Metropolitan Atlanta to Buford Dam. It is unique in that is relatively undisturbed natural river in the heart of a metropolitan area. This area contains 18 developed recreation units and several undeveloped units. It is popular for trout fishing, canoeing, kayaking, rafting, mountain-biking, hiking, picnicking and other day use activities.

Numerous areas under the jurisdiction of the Georgia Parks, Recreation and Historic Sites that offer similar recreational opportunities as Lake Lanier are also located within the market area for the Lake Sidney Lanier Project.

The influence of these competing areas was considered in developing the visitation estimates for Lake Lanier.

C. VISITATION

(1) VISITATION PROFILE

Overall project visitation was examined from 2014 through 2018. In general, Lake Sidney Lanier is visited predominately by local residents. Peak recreation season is from May through September. Visitation is generally concentrated during the weekends in both peak and non-peak seasons. This study discusses the visitation patterns in detail.

(2) PROJECT VISITATION

Area population and project visitation for 2014–2018 are displayed below. Area population includes the following 25 counties in Georgia: Banks, Barrow, Cherokee, Clarke, Cobb, Dawson, DeKalb, Forsyth, Franklin, Fulton, Gilmer, Gwinnett, Habersham, Hall, Hart, Jackson, Lumpkin, Oconee, Pickens, Rabun, Stephens, Towns, Union, Walton, and White.

The populations for these counties were chosen based on the area of influence, which includes the counties within a 50-mile radius of the project.

Table C-1: Population by County.

County	2014	2015	2016	2017	2018
Banks	18,223	18,378	18,321	18,638	18,988
Barrow	72,853	74,964	76,965	78,843	80,809
Cherokee	230,208	235,387	241,912	247,894	254,149
Clarke	120,413	123,552	124,984	126,820	127,330
Cobb	727,757	739,319	748,563	752,783	756,865
Dawson	22,978	23,312	23,608	24,324	25,083
DeKalb	725,039	734,770	747,482	752,088	756,558
Forsyth	202,659	211,228	220,311	228,588	236,612
Franklin	22,176	22,262	22,292	22,815	23,023
Fulton	992,022	1,005,775	1,022,714	1,038,884	1,050,114
Gilmer	28,979	29,497	29,907	30,409	30,816
Gwinnett	871,394	888,884	905,277	918,153	927,781
Habersham	43,583	43,804	44,123	44,547	45,388
Hall	189,239	192,458	196,523	199,439	202,148
Hart	25,372	25,431	25,497	25,756	26,099
Jackson	62,103	63,436	65,100	67,716	70,422
Lumpkin	31,147	31,324	31,505	32,822	32,955
Oconee	35,072	35,856	36,871	38,012	39,272
Pickens	29,834	30,158	30,661	31,526	31,980
Raburn	16,165	16,226	16,471	16,557	16,867
Stephens	25,424	25,472	25,664	25,785	26,035
Towns	11,082	11,207	11,407	11,539	11,852
Union	21,758	22,017	22,671	23,427	24,001
Walton	87,251	88,358	89,873	91,406	93,503
White	28,019	28,374	28,824	29,455	29,970
Total	**4,640,750**	**4,721,449**	**4,807,526**	**4,878,226**	**4,938,620**

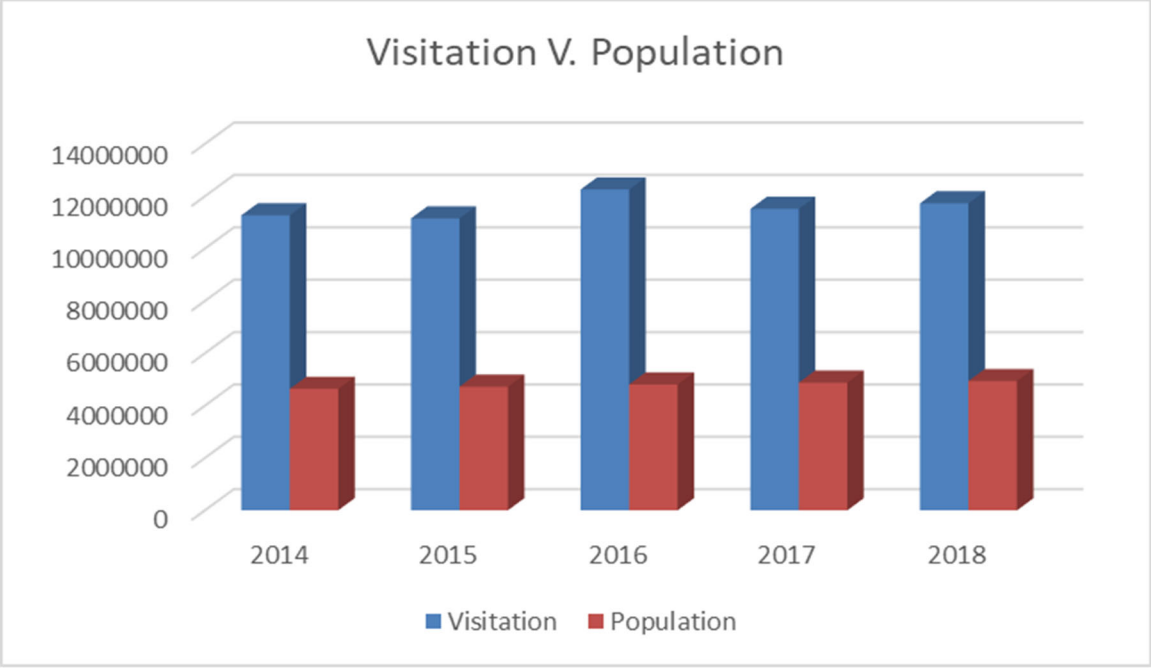

Figure C-2: Project Visitation and Area Population.

Future area population includes the 2019 population data retrieved from the US Census website. The average yearly population difference from 2014 to 2019 was calculated to estimate the population for 2020 to 2050. Also, population estimates developed by the Atlanta Regional Commission were considered. For example, the Cobb and Fulton Counties population estimates lined up with estimates determined using US Census data. However, Gwinnett County had a 10,000 higher increase per year and DeKalb County had a 3,500 higher increase per year, so the projections in those counties were increased by those amounts. The initial projection was an average increase of 58,987 per year, but with these inclusions, the average total population increased to 72,487 per year. Population between 2020 and 2050 is displayed below in 5-year increments. A population increase of 2,174,610 is expected over the next 30 years.

Table C-2: Area Population through 2050.

Year	Population
2020	5,067,161
2025	5,429,596
2030	5,792,031
2035	6,154,466
2040	6,516,901
2045	6,879,336
2050	7,241,771

(3) PER CAPITA USE RATE

Visitation and population data were used to determine the current per capita visitation rate for the zone of influence for 2014–2018. The average per capita use rate is 2.40. The visitation estimates through 2050 are determined by multiplying the above future population data times the average per capita use rate of 2.40. The table below shows the projected visitation and per capita use rate through 2050. The graph shows the per capita use rate and trend line from 2014-2018.

Table C-3: Population and Visitation Estimates through 2050.

Year	Population	Visitation	Per Capita
2014	4,640,750	11,271,594	2.428830254
2015	4,721,449	11,152,173	2.362023396
2016	4,807,526	12,256,543	2.549449135
2017	4,878,226	11,517,491	2.360999880
2018	4,938,620	11,731,178	2.375395961
2019	4,994,674	11,650,303	2.332545227
2020	5,067,161	12,168,993	2.401540642
2025	5,429,596	13,039,395	2.401540642
2030	5,792,031	13,909,798	2.401540642
2035	6,154,466	14,780,200	2.401540642
2040	6,516,901	15,650,603	2.401540642
2045	6,879,336	16,521,005	2.401540642
2050	7,241,771	17,391,407	2.401540642

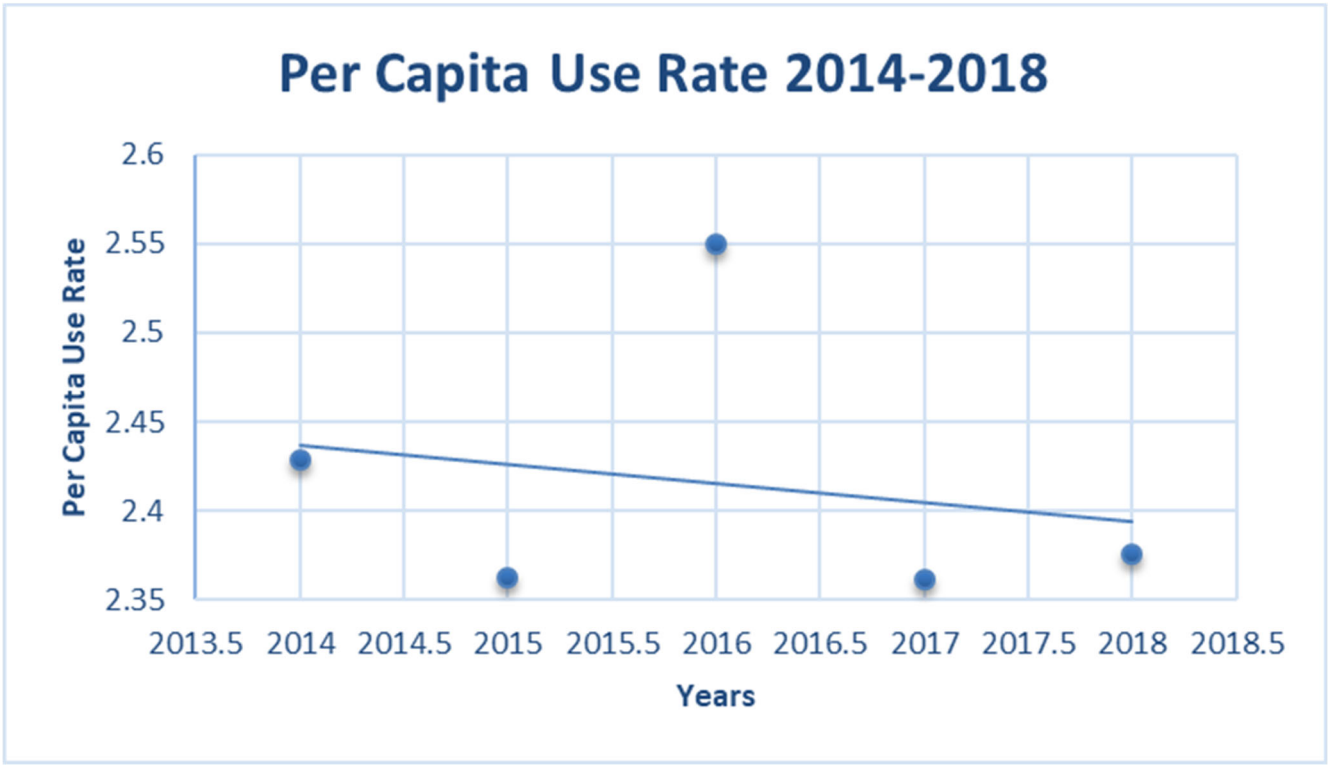

Figure C-3: Per Capita Use Rate 2014–2018.

(4) PROJECT SITE AREA VISITATION

The historic visitation records for 2014–2018 for each recreation area used in the design load calculations are provided below. Historic visitation data are recorded in detail, including visitation by year, month, and site. The visitation figures include visitors to USACE-managed areas and to other leased areas of the lake. The following graphs are estimates, and it is recognized there are some anomalies; however, decisions are based on averages or trends. Some graphs do not show all months/years because concrete data is not available for those months/years. Therefore, those months/years are omitted.

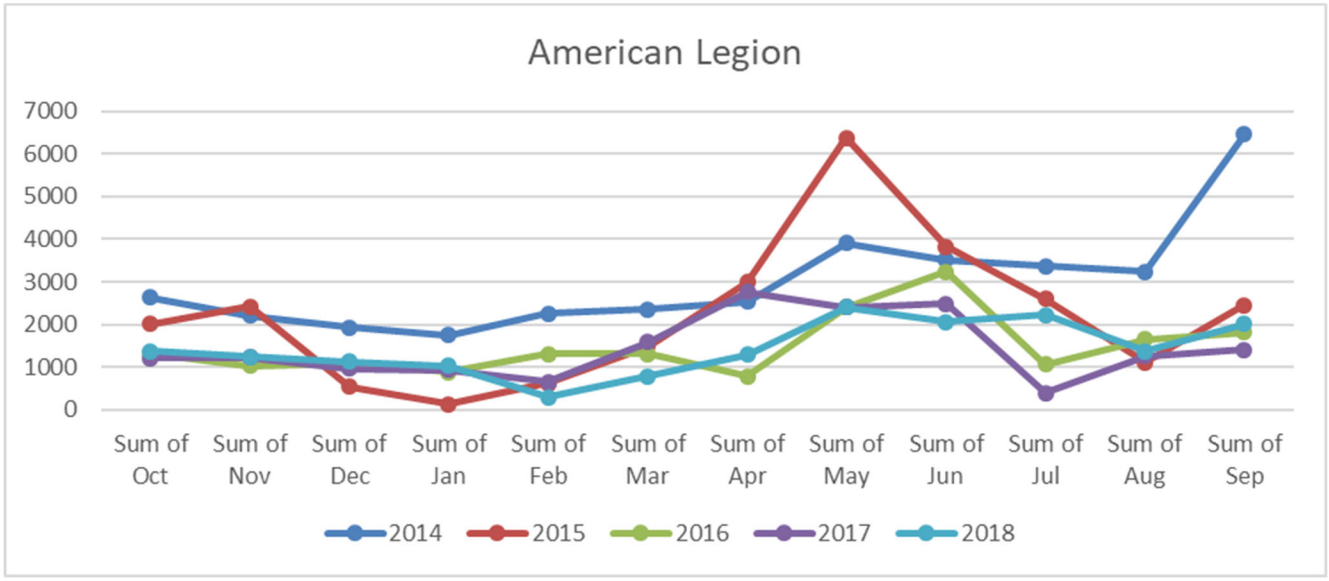

Figure C-4: American Legion Visitation 2014-2018.

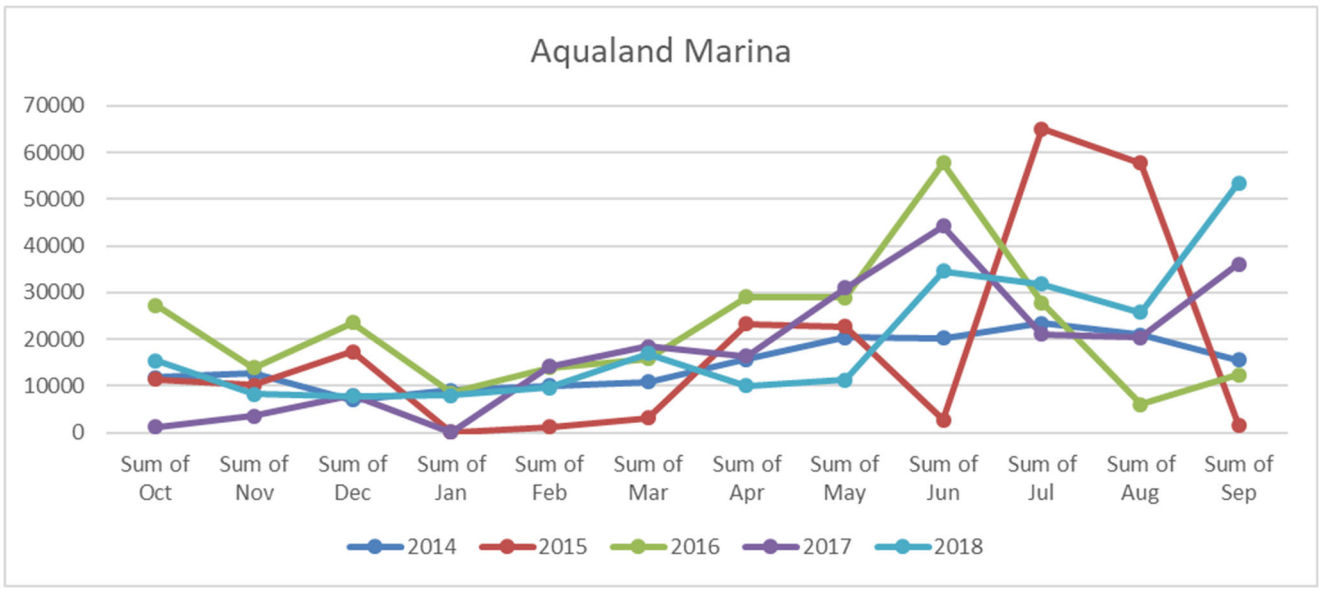

Figure C-5: Aqualand Marina Visitation 2014-2018.

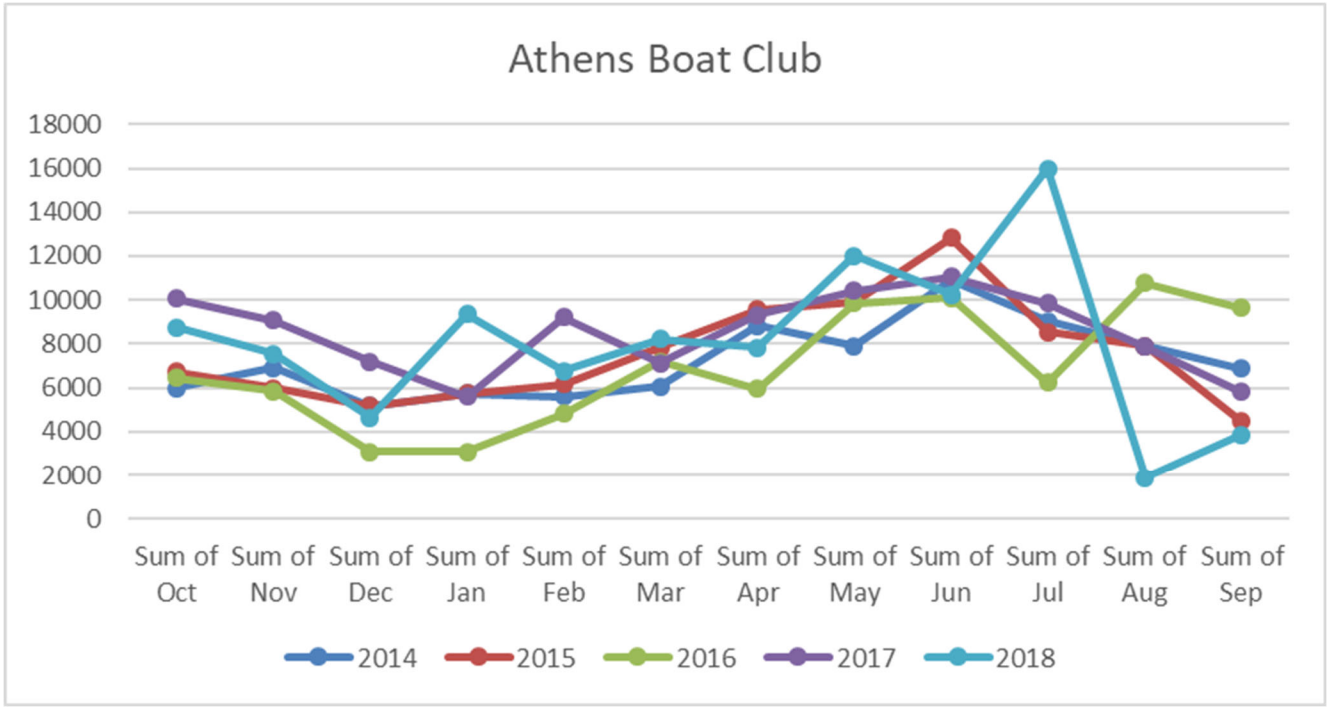

Figure C-6: Athens Boat Club Visitation 2014-2018.

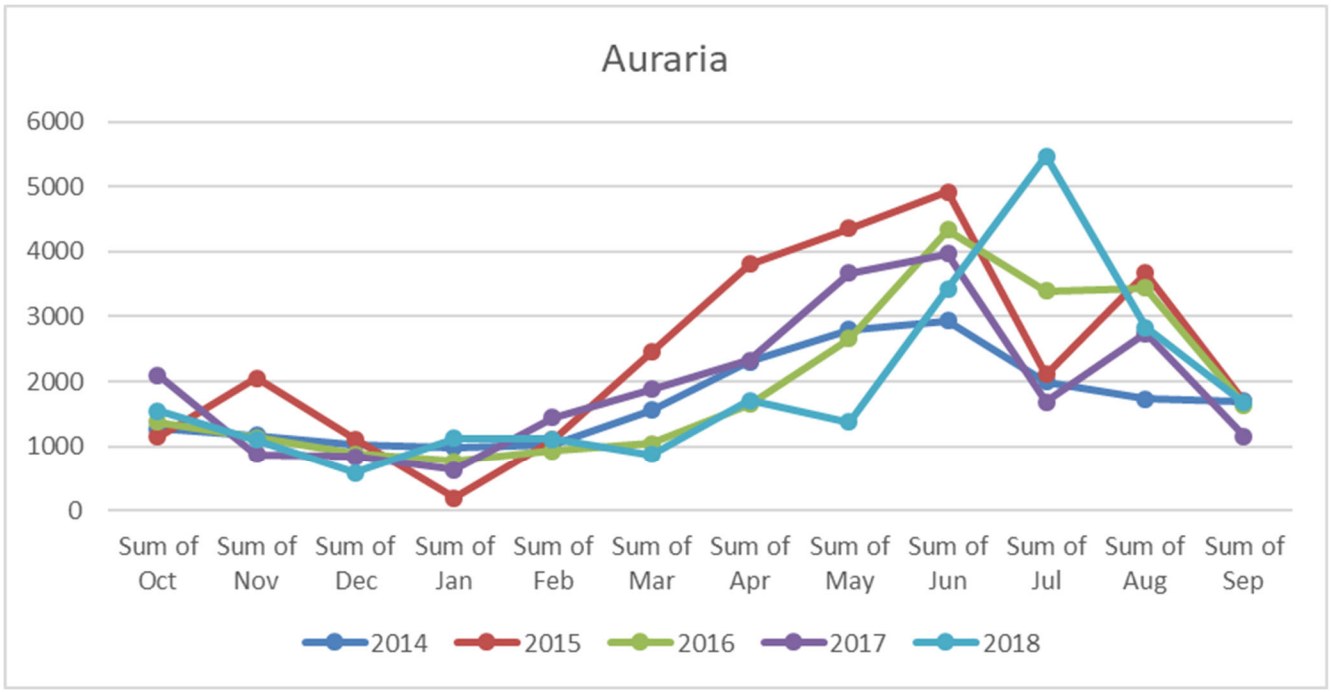

Figure C-7: Auraria Visitation 2014-2018.

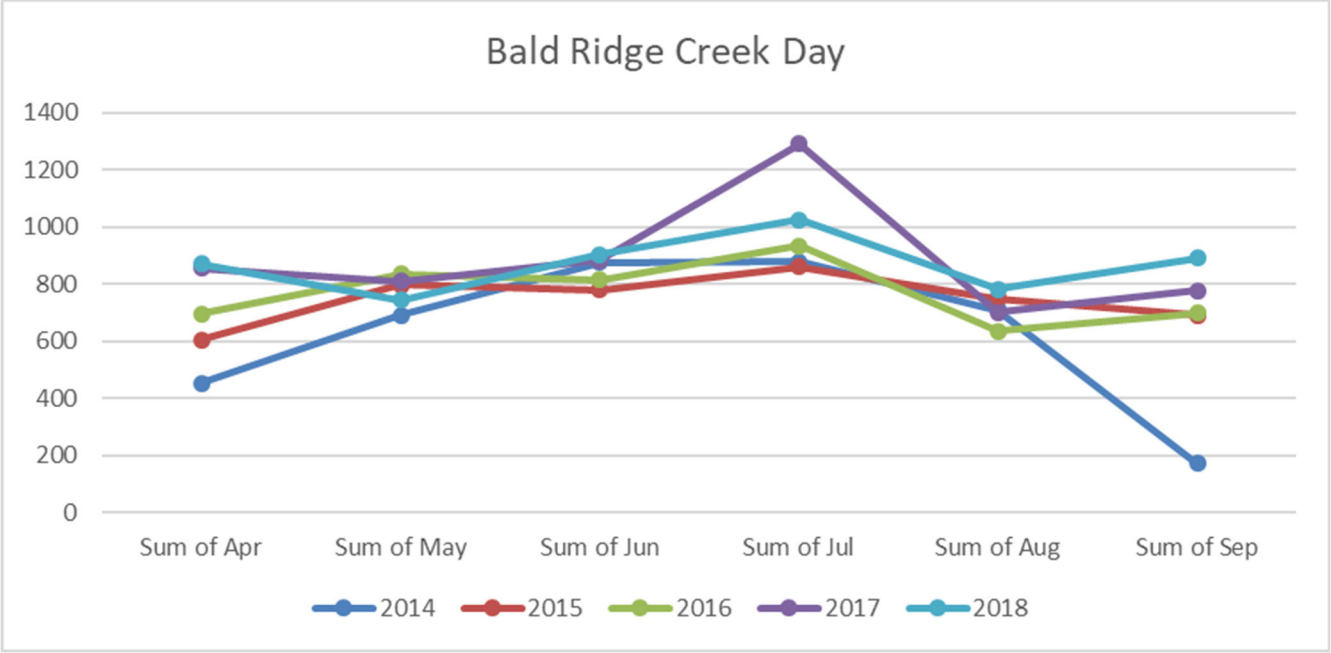

Figure C-8: Bald Ridge Creek (Day) Visitation 2014-2018.

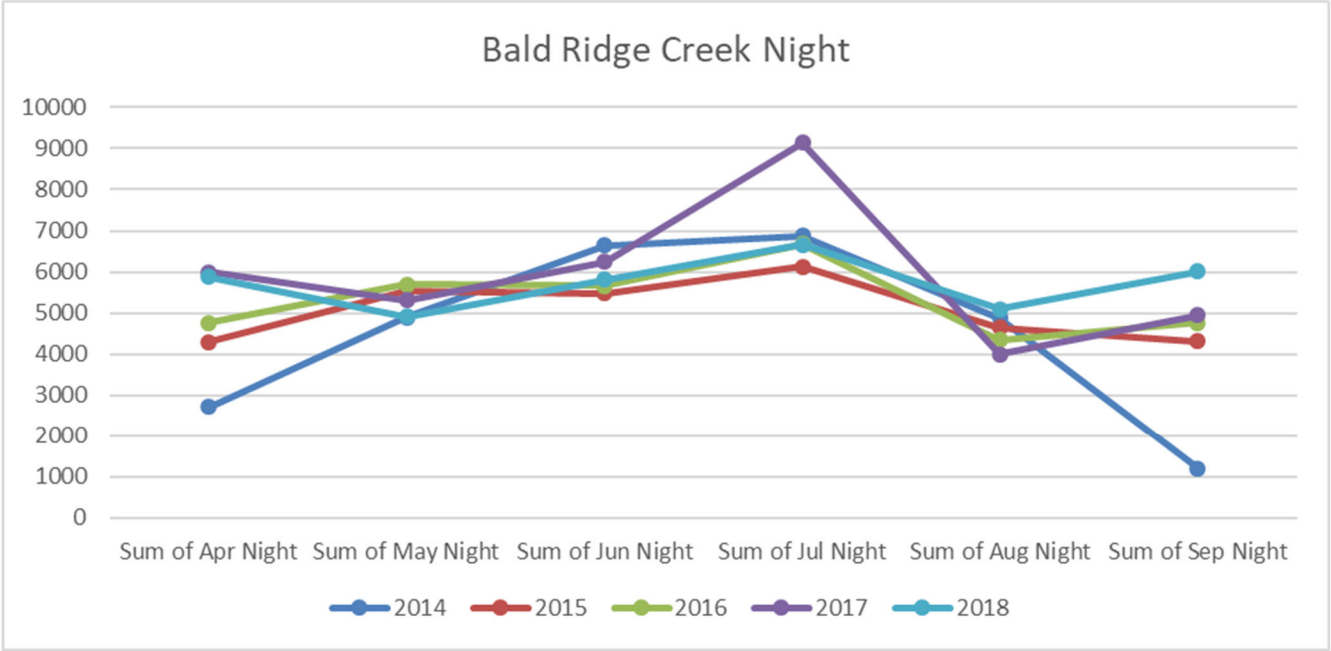

Figure C-9: Bald Ridge Creek (Night) Visitation 2014-2018.

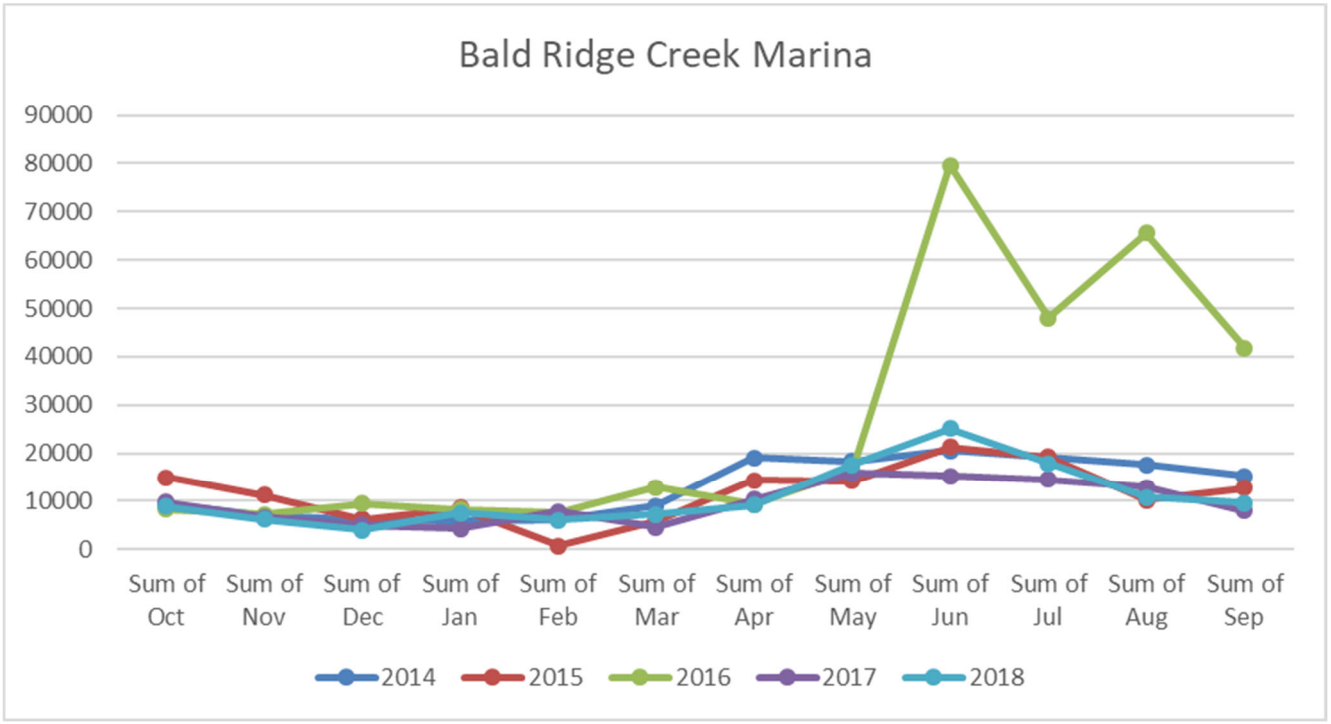

Figure C-10: Bald Ridge Creek Marina Visitation 2014-2018.

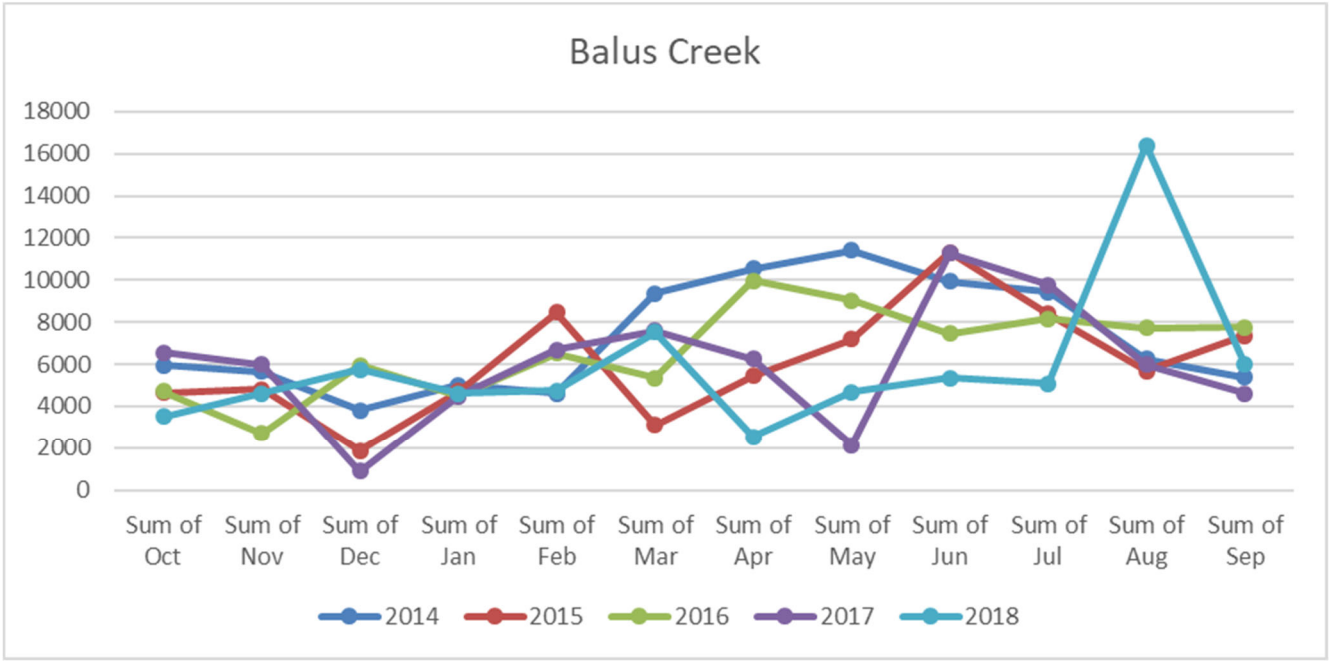

Figure C-11: Balus Creek Visitation 2014-2018.

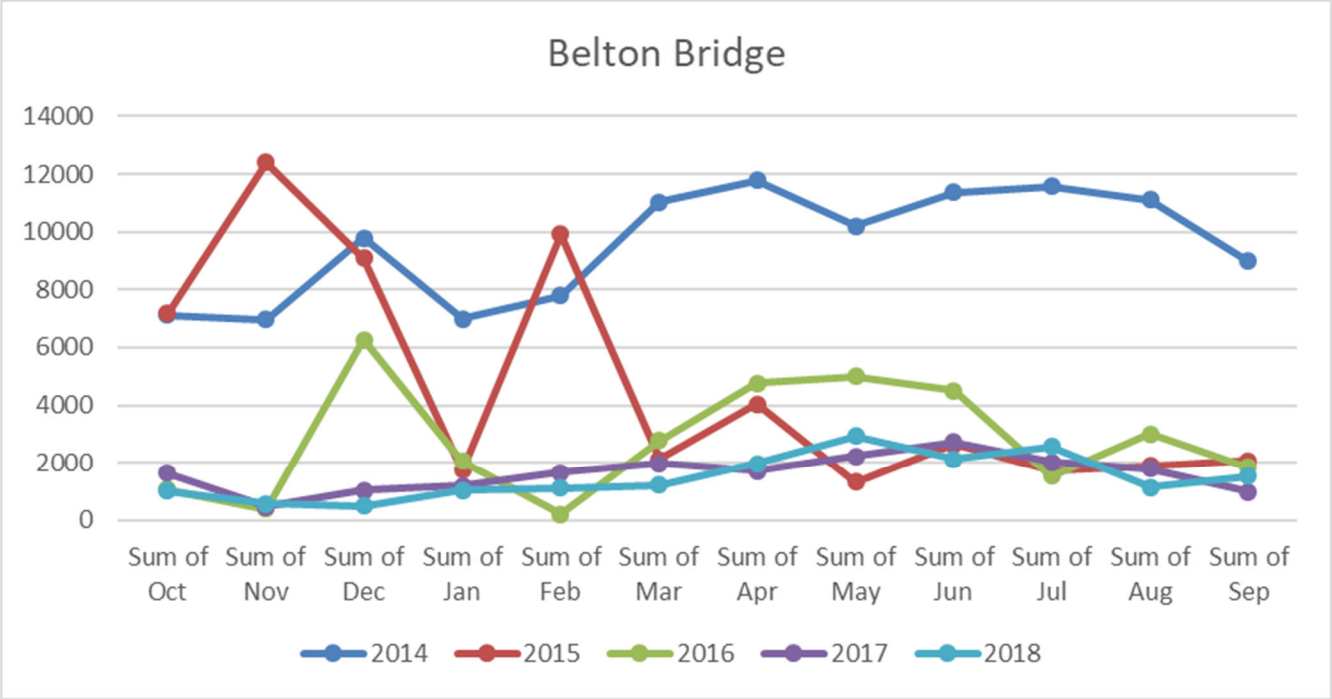

Figure C-12: Belton Bridge Visitation 2014-2018.

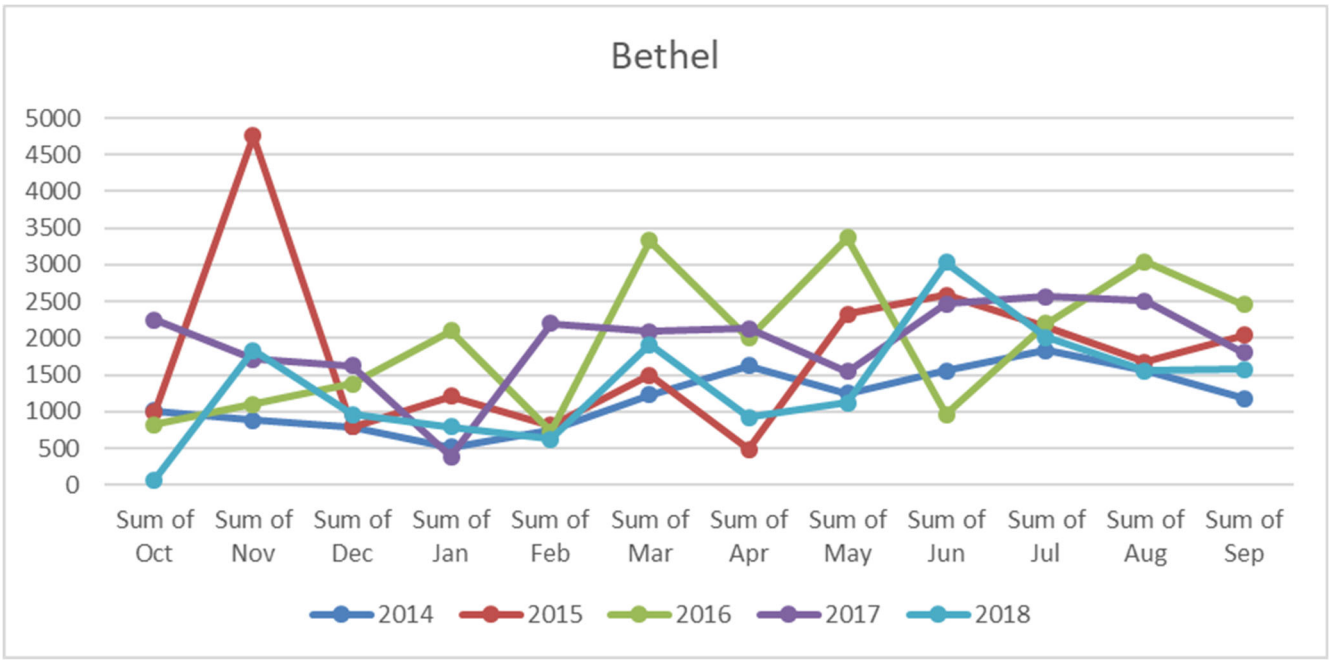

Figure C-13: Bethel Visitation 2014-2018.

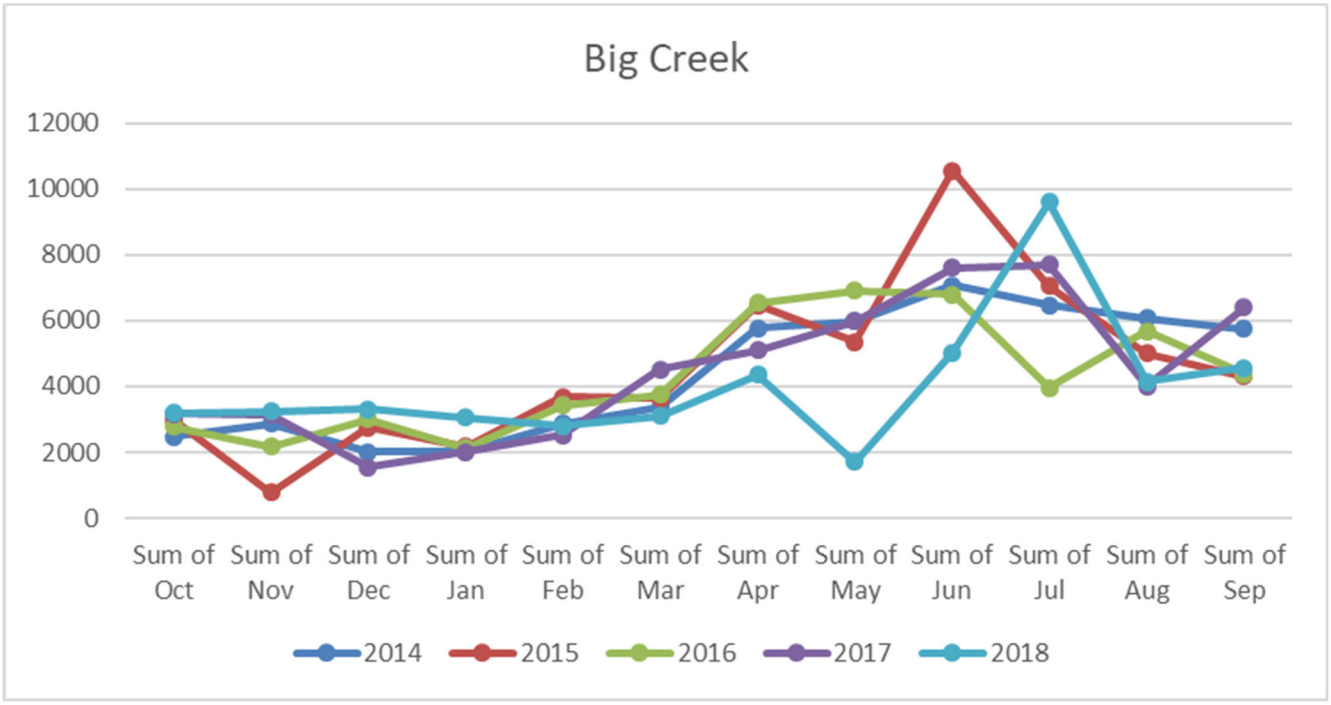

Figure C-14: Big Creek Visitation 2014-2018.

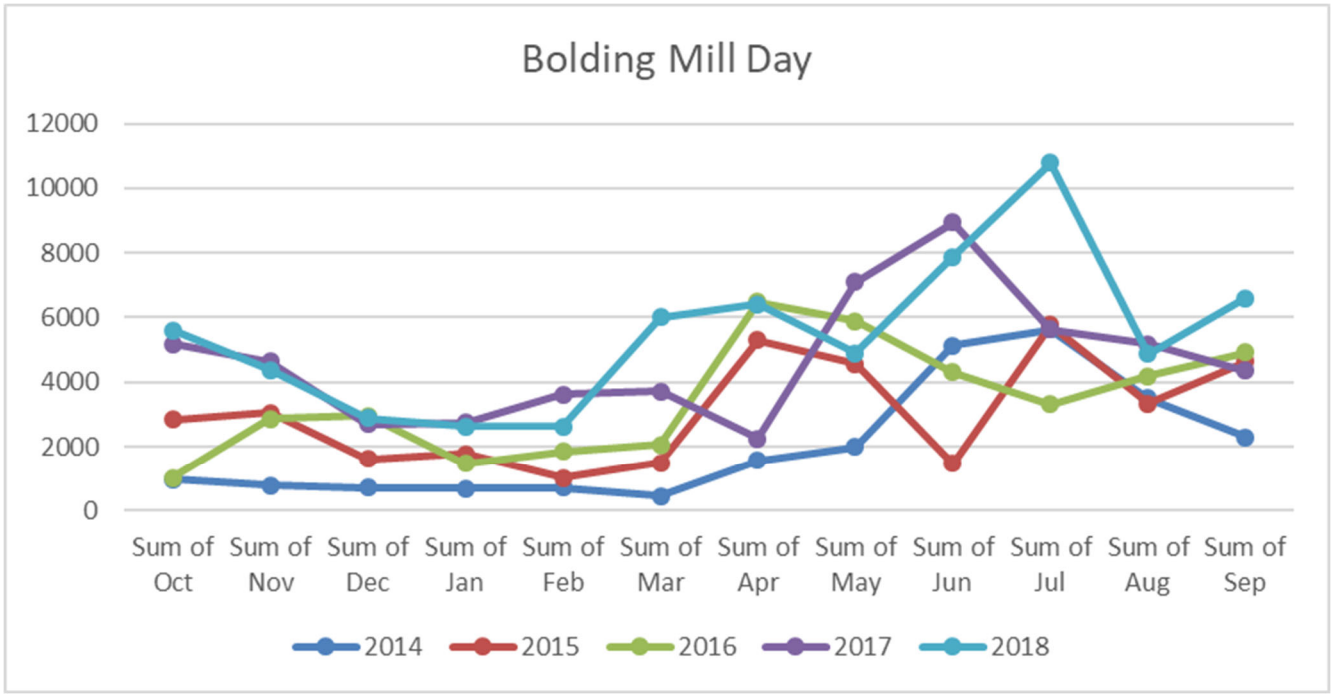

Figure C-15: Bolding Mill (Day) Visitation 2014-2018.

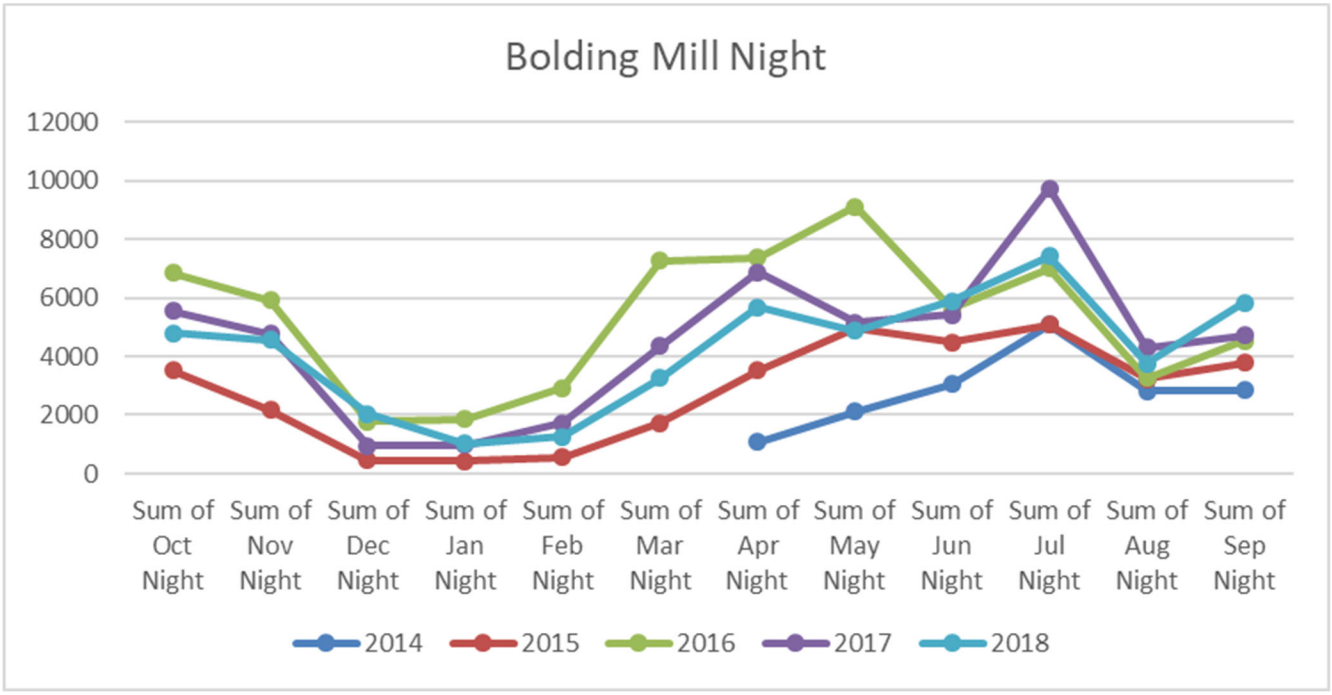

Figure C-16: Bolding Mill (Night) Visitation 2014-2018.

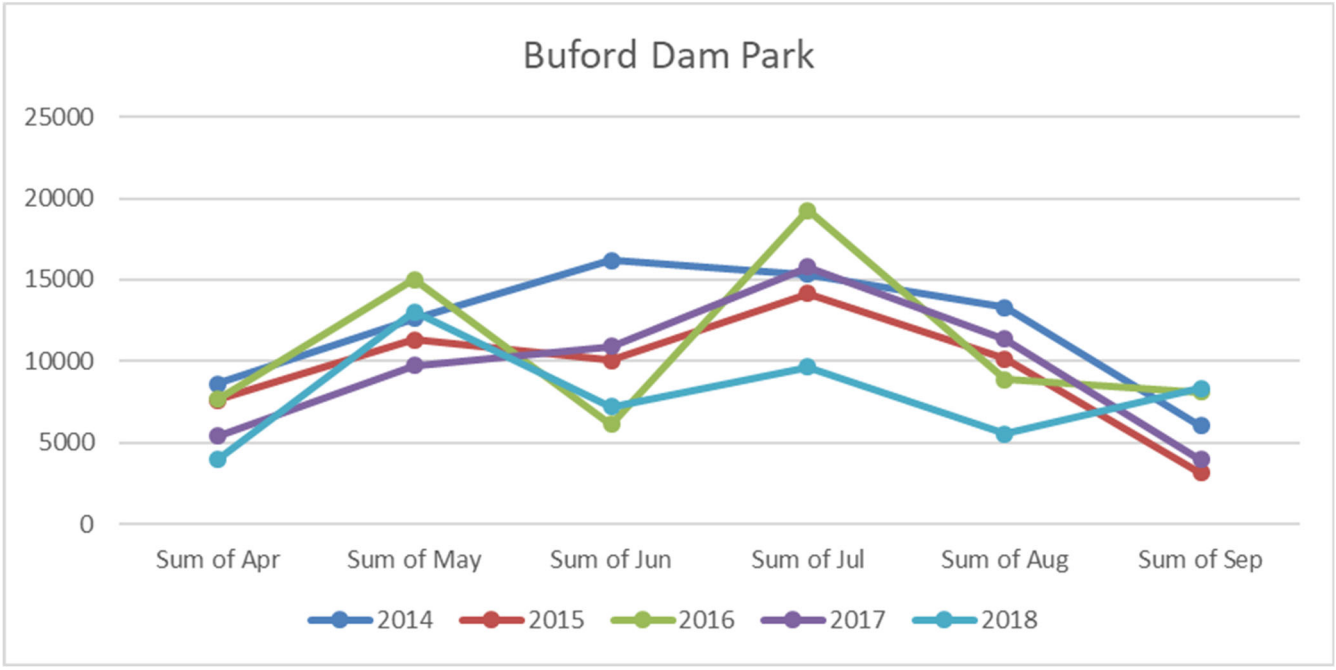

Figure C-17: Buford Dam Park Visitation 2014-2018.

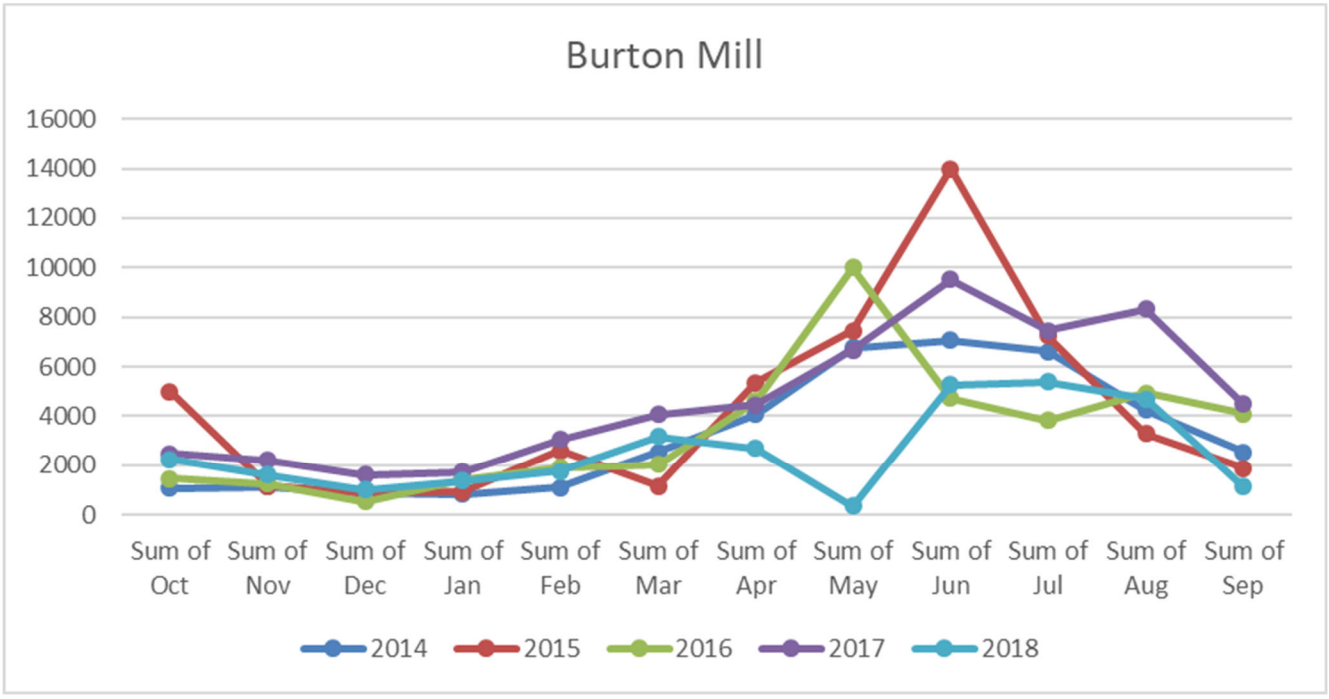

Figure C-18: Burton Mill Visitation 2014-2018.

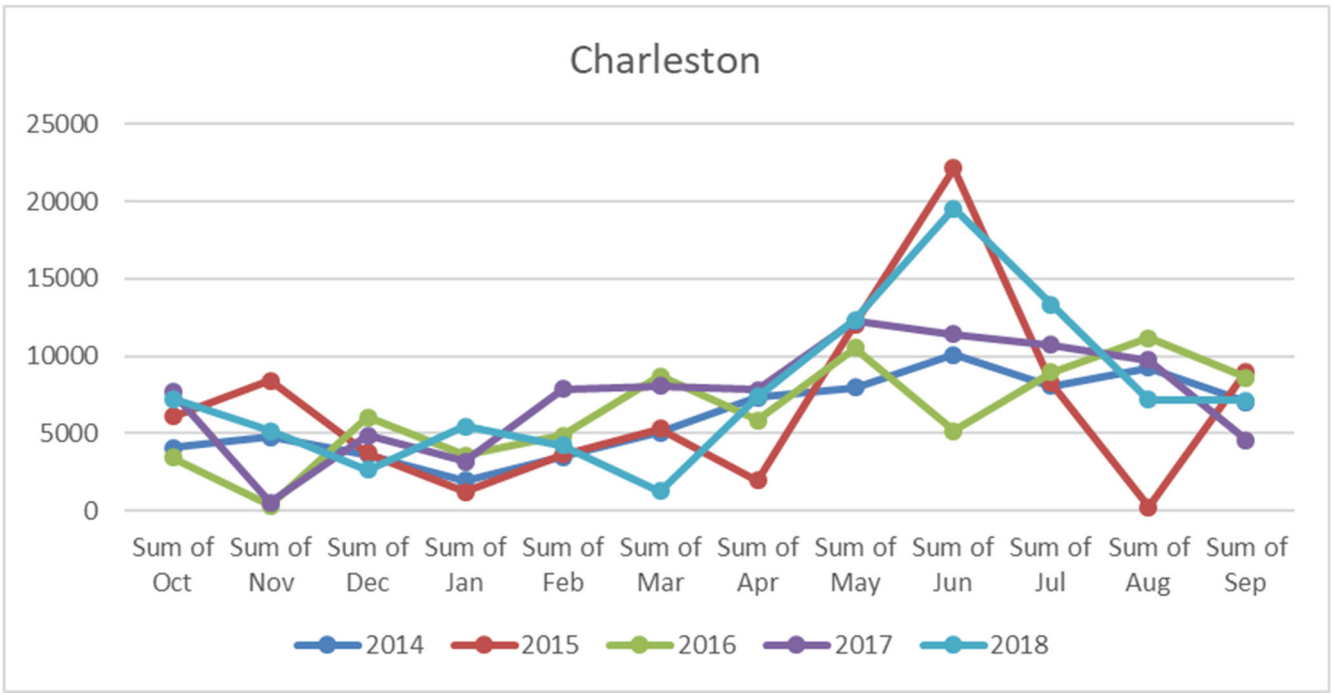

Figure C-19: Charleston Visitation 2014-2018.

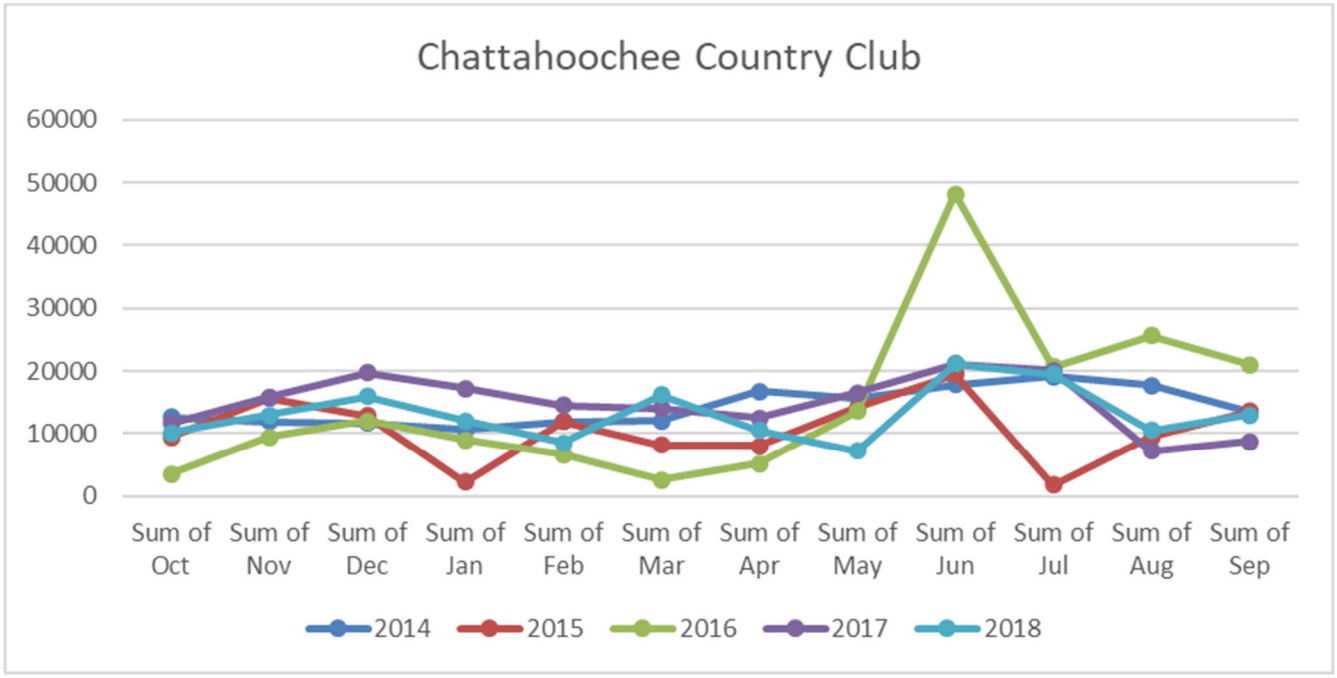

Figure C-20: Chattahoochee Country Club Visitation 2014-2018.

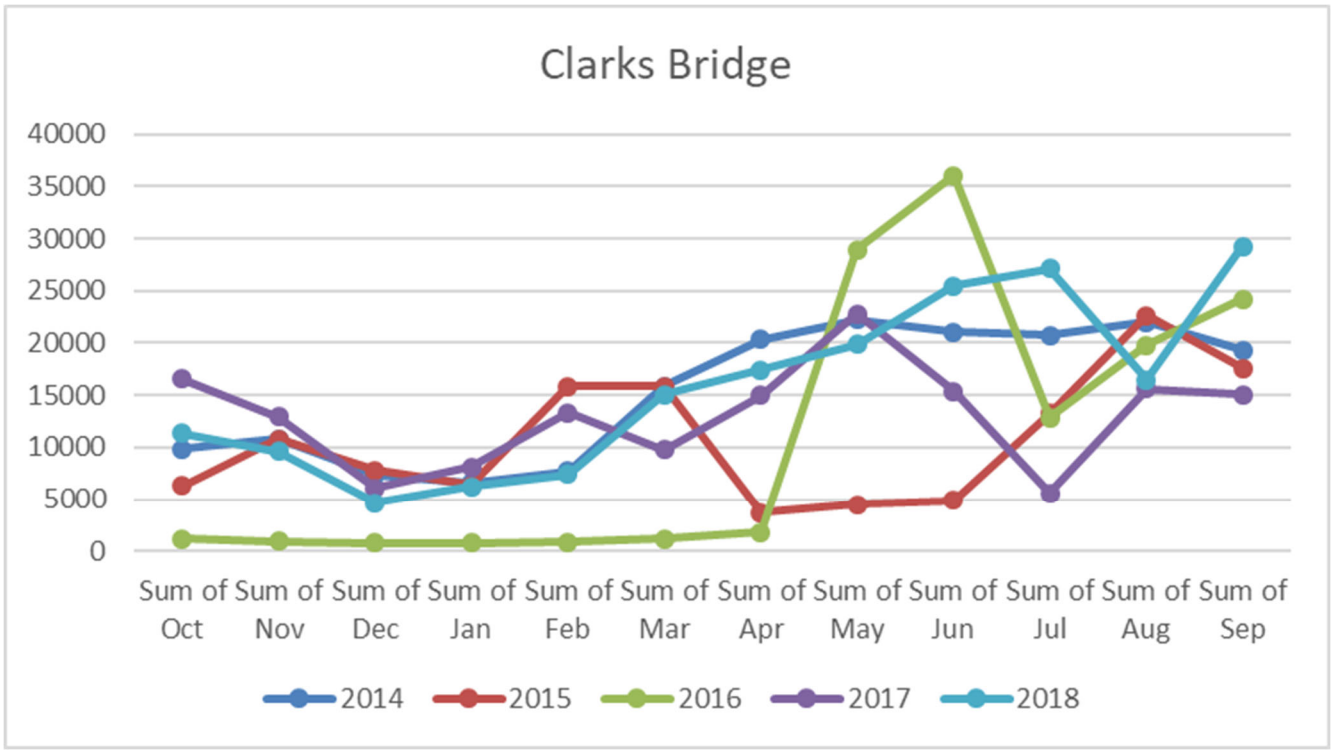

Figure C-21: Clarks Bridge Visitation 2014-2018.

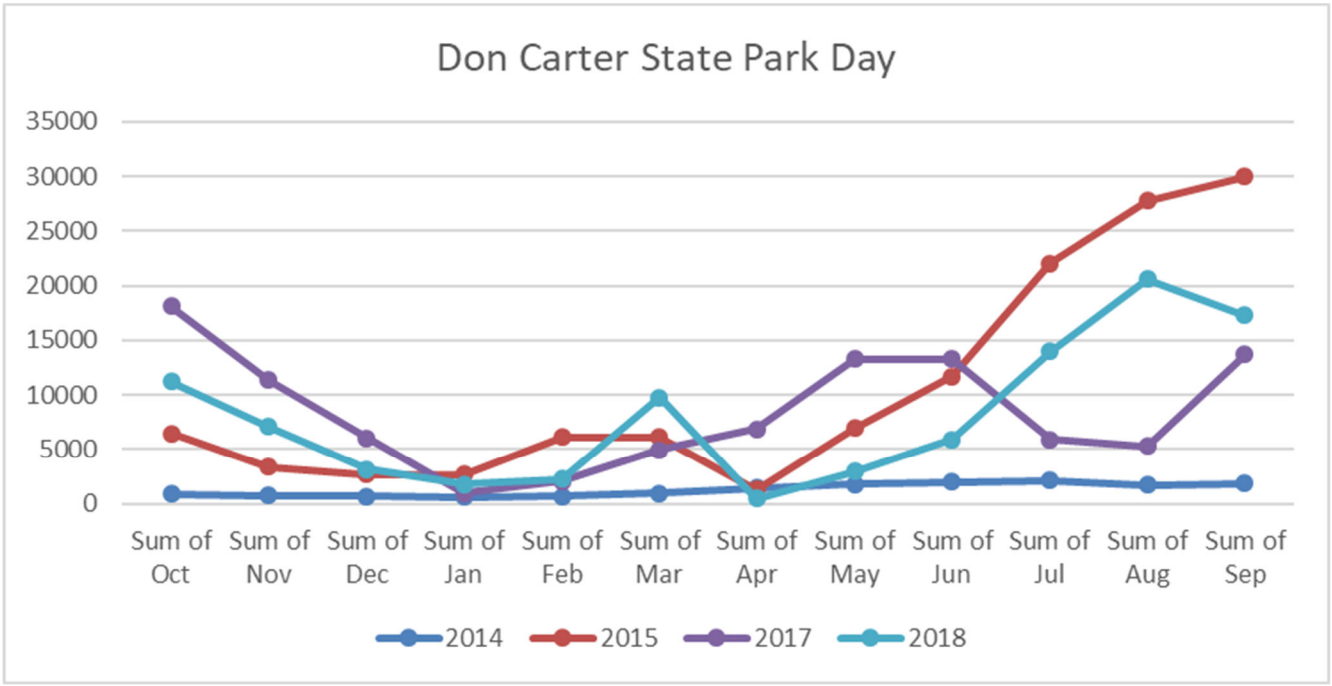

Figure C-22: Don Carter State Park (Day) Visitation 2014-2018.

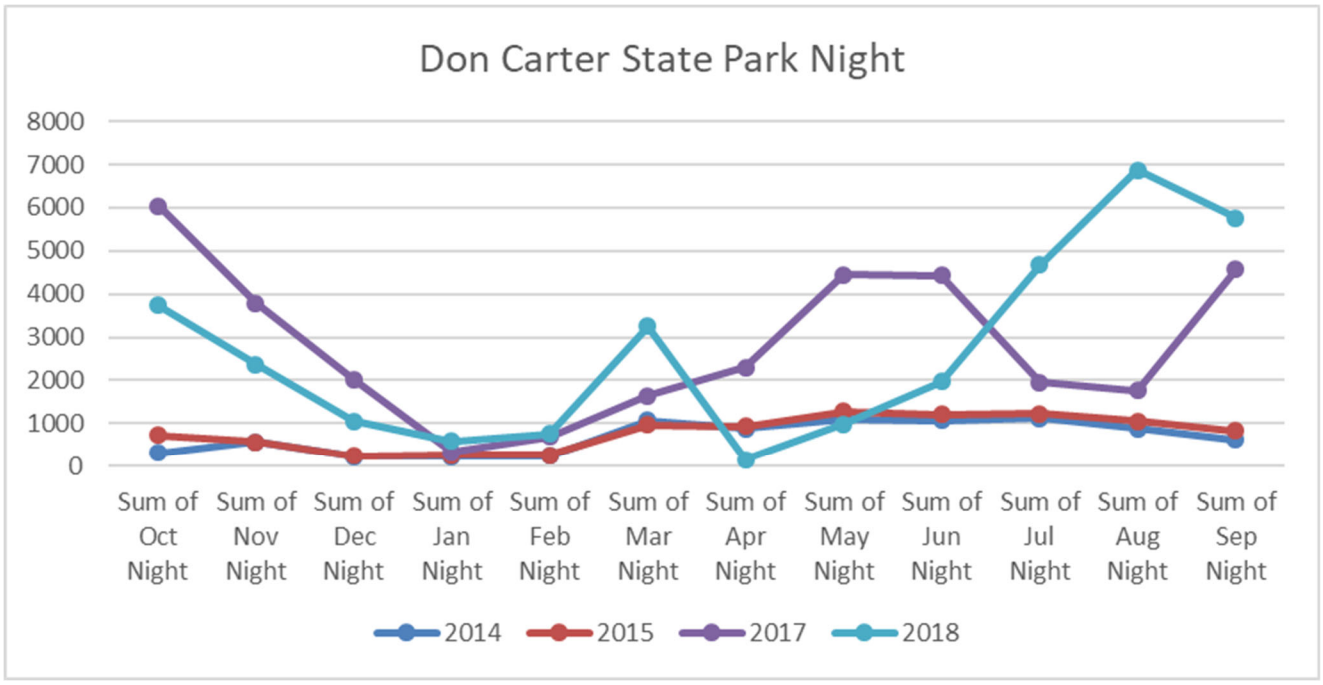

Figure C-23: Don Carter State Park (Night) Visitation 2014-2018.

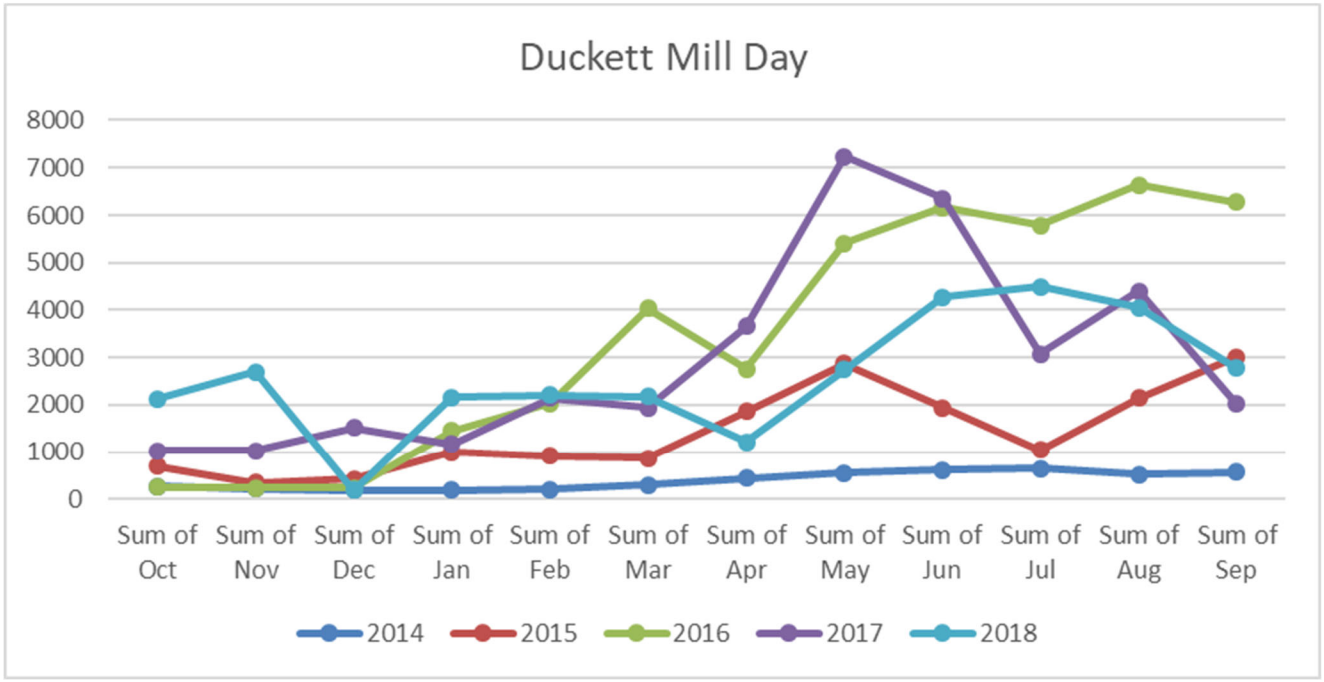

Figure C-24: Duckett Mill (Day) Visitation 2014-2018.

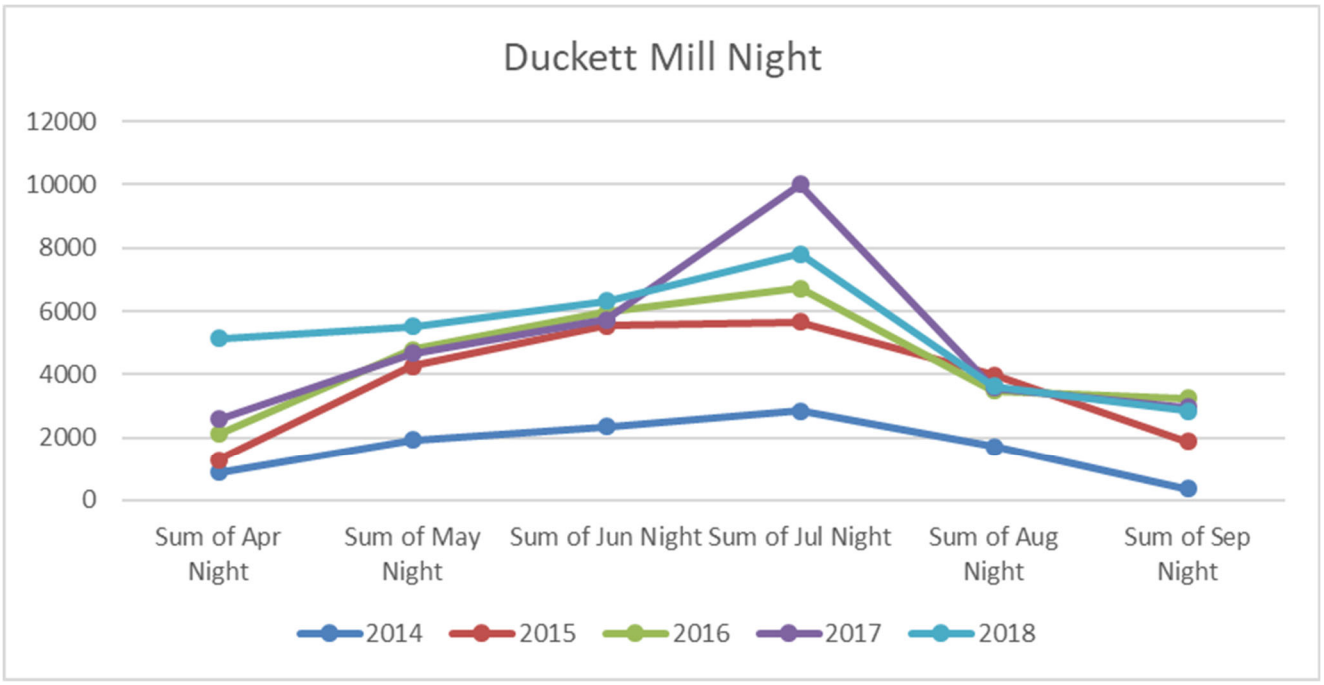

Figure C-25: Duckett Mill (Night) Visitation 2014-2018.

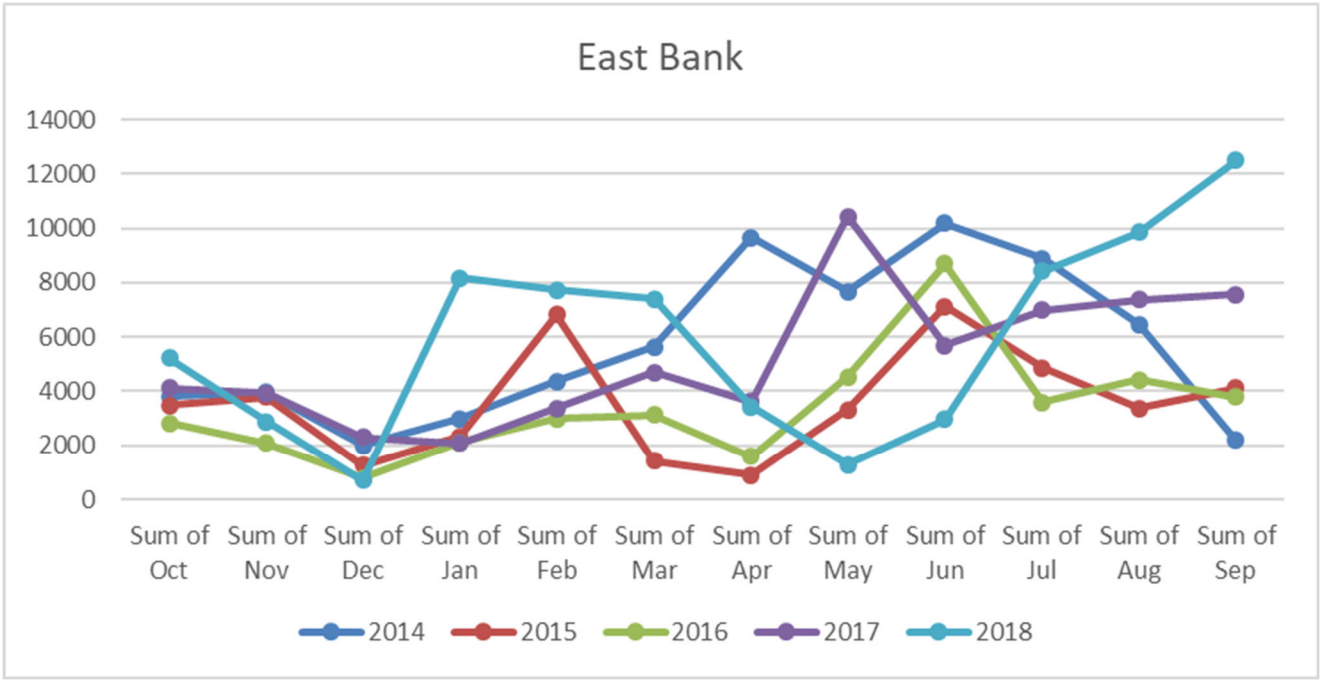

Figure C-26: East Bank Visitation 2014-2018.

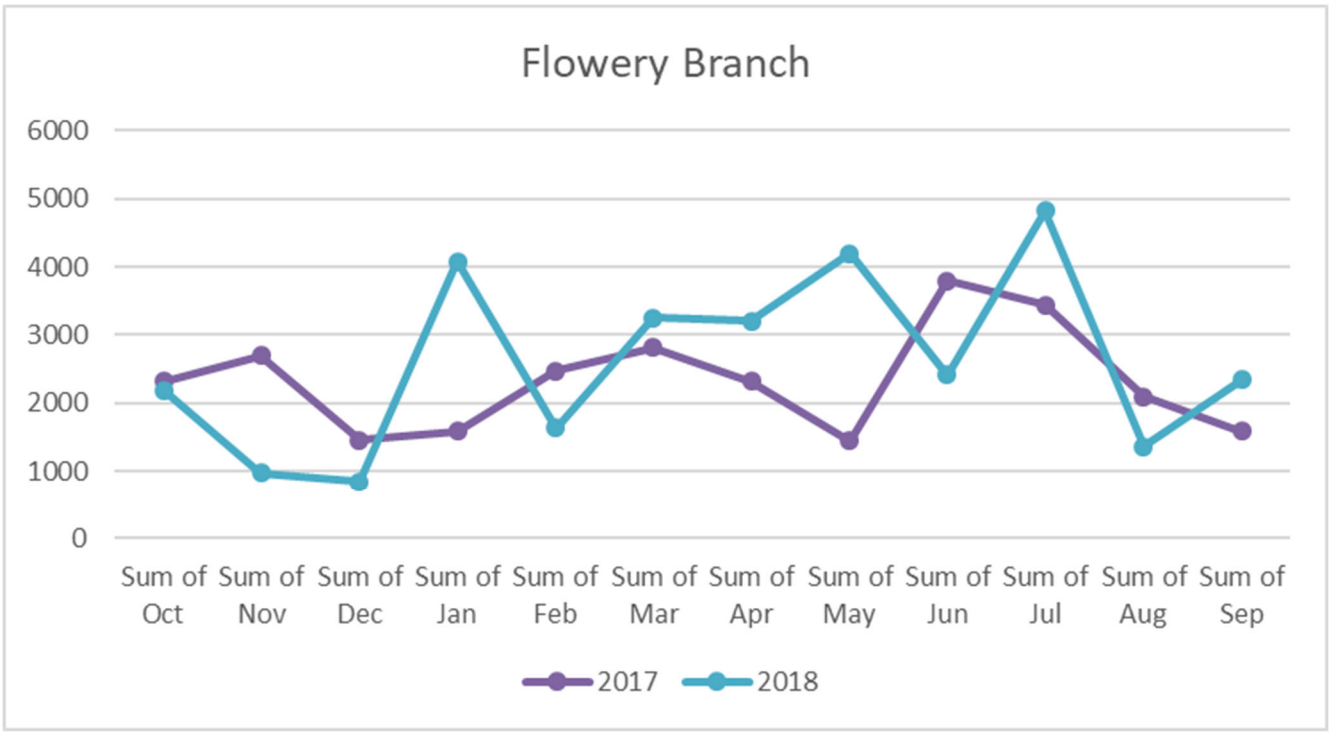

Figure C-27: Flowery Branch Visitation 2014-2018.

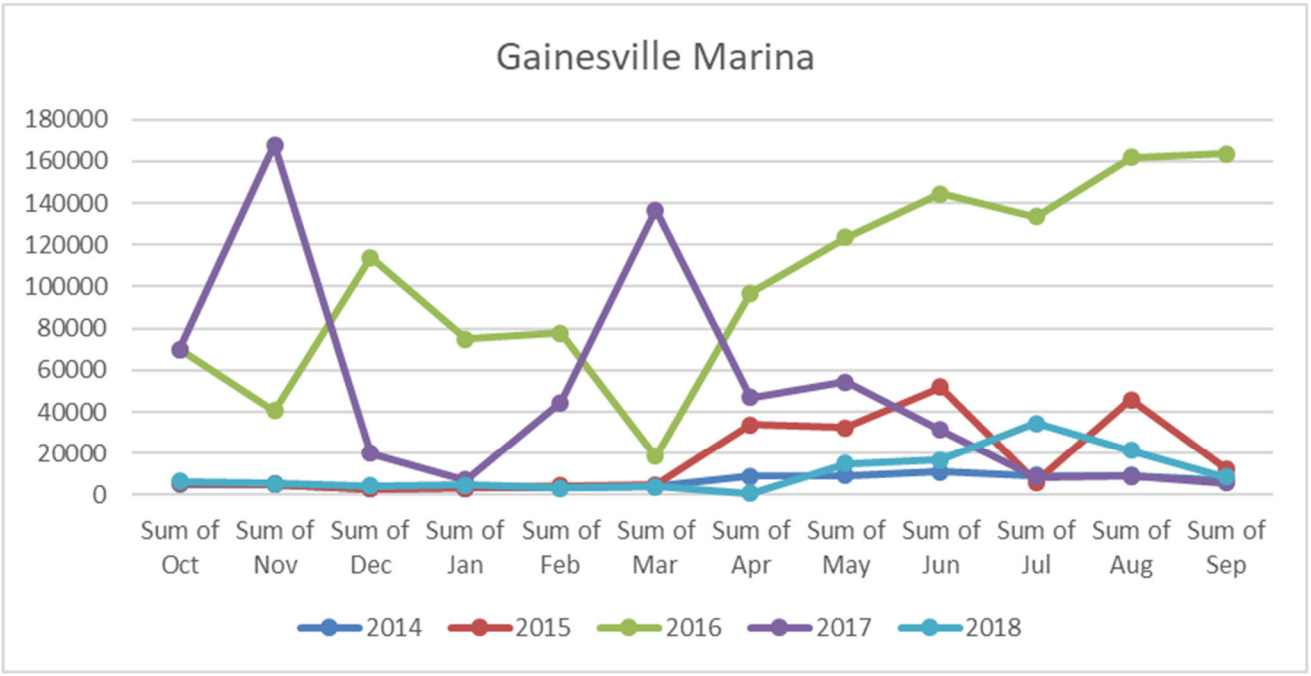

Figure C-28: Gainesville Marina Visitation 2014-2018.

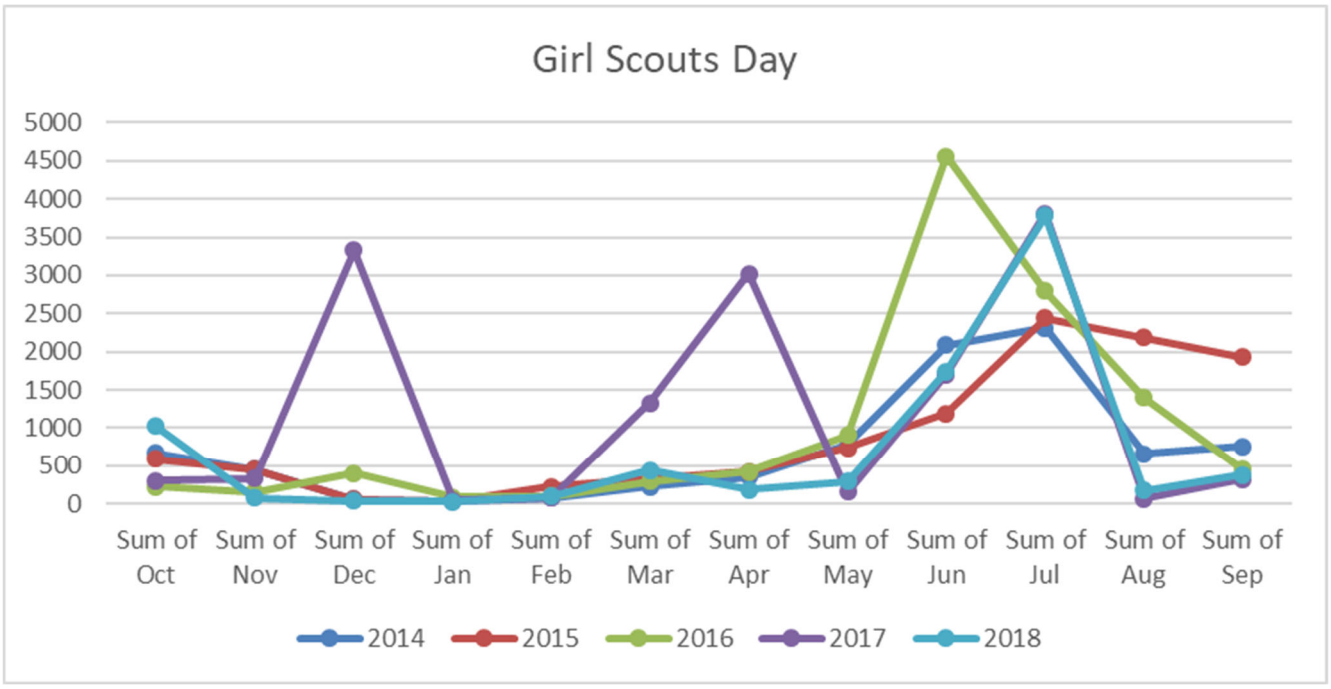

Figure C-29: Girl Scouts (Day) Visitation 2014-2018.

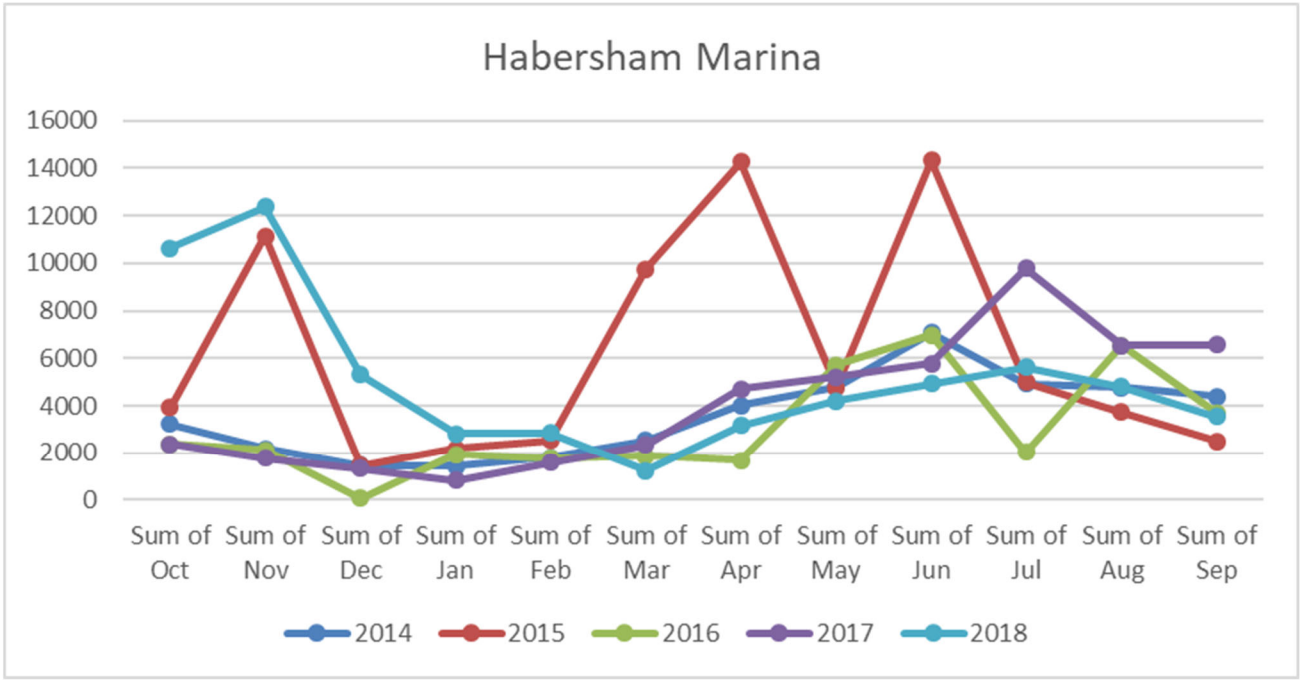

Figure C-30: Habersham Marina Visitation 2014-2018.

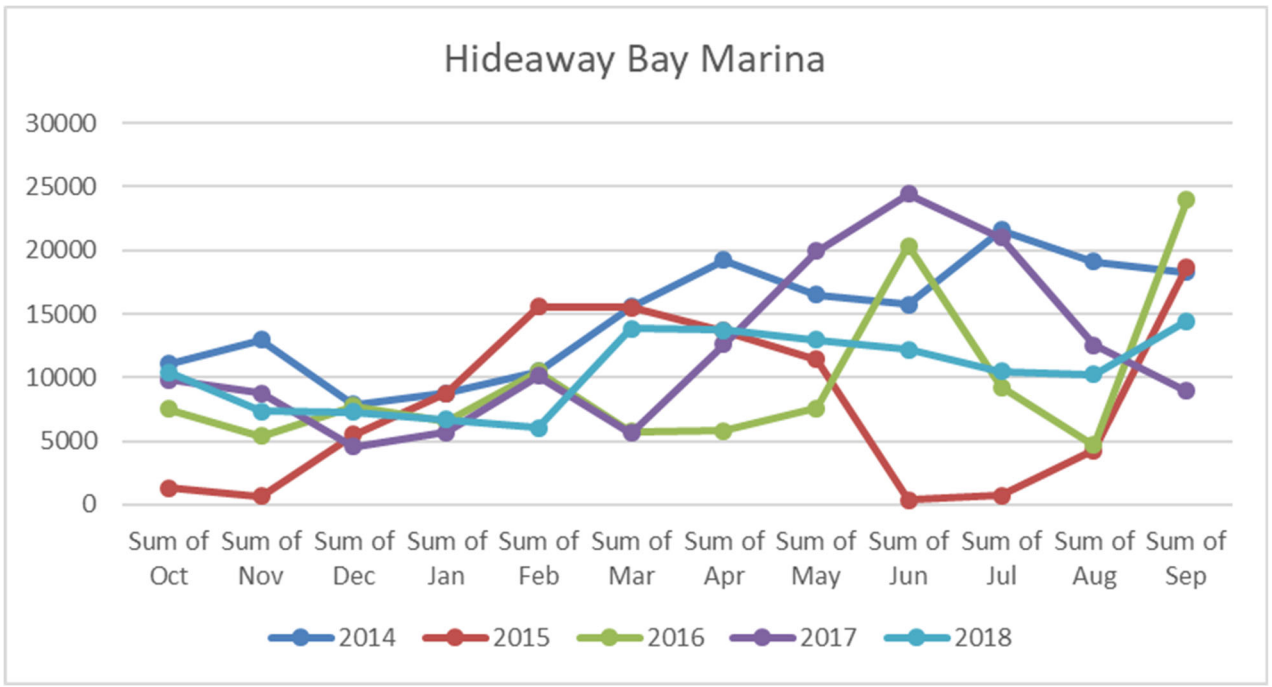

Figure C-31: Hideaway Bay Marina Visitation 2014-2018.

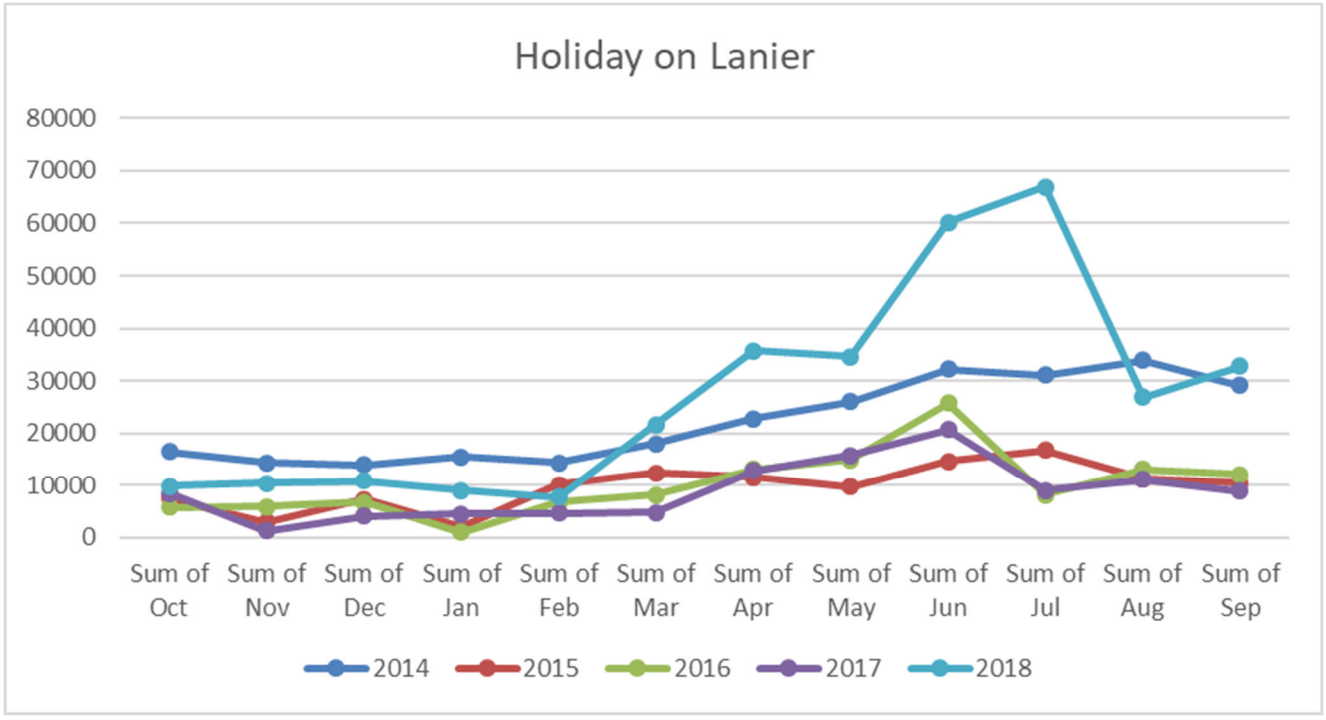

Figure C-32: Holiday on Lanier Visitation 2014-2018.

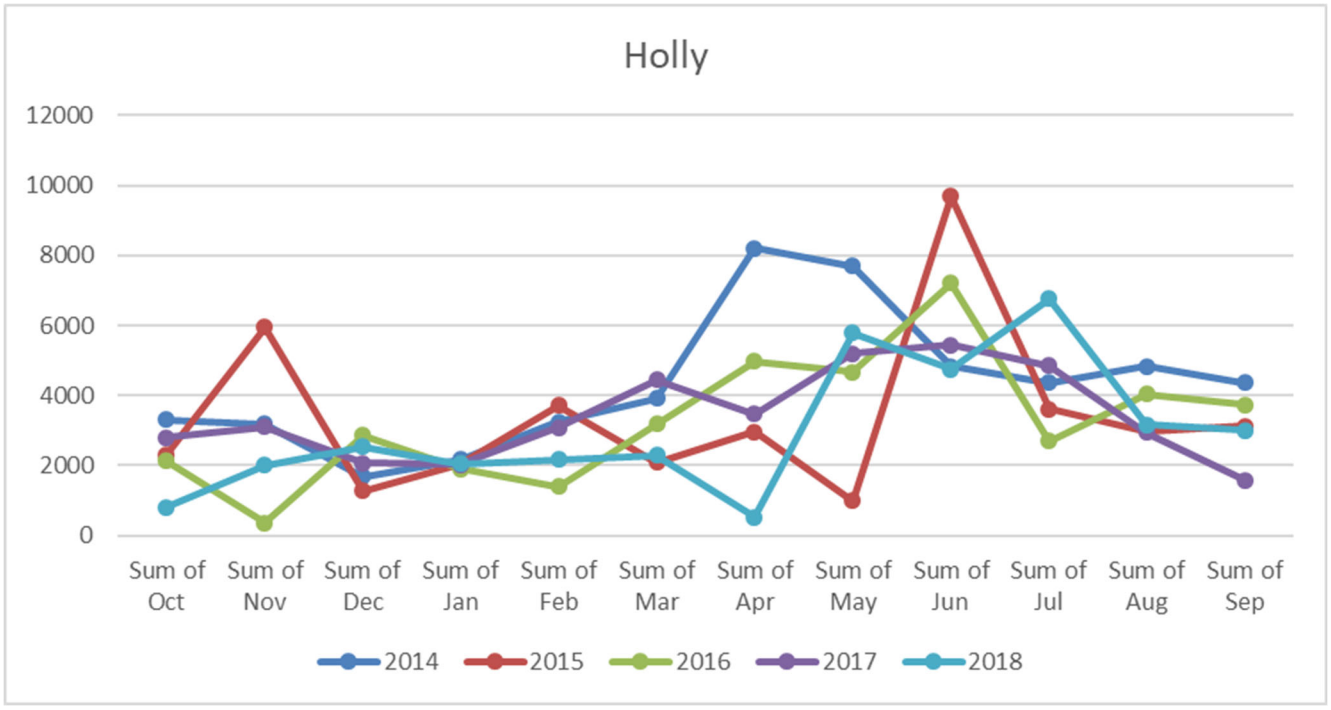

Figure C-33: Holly Visitation 2014-2018.

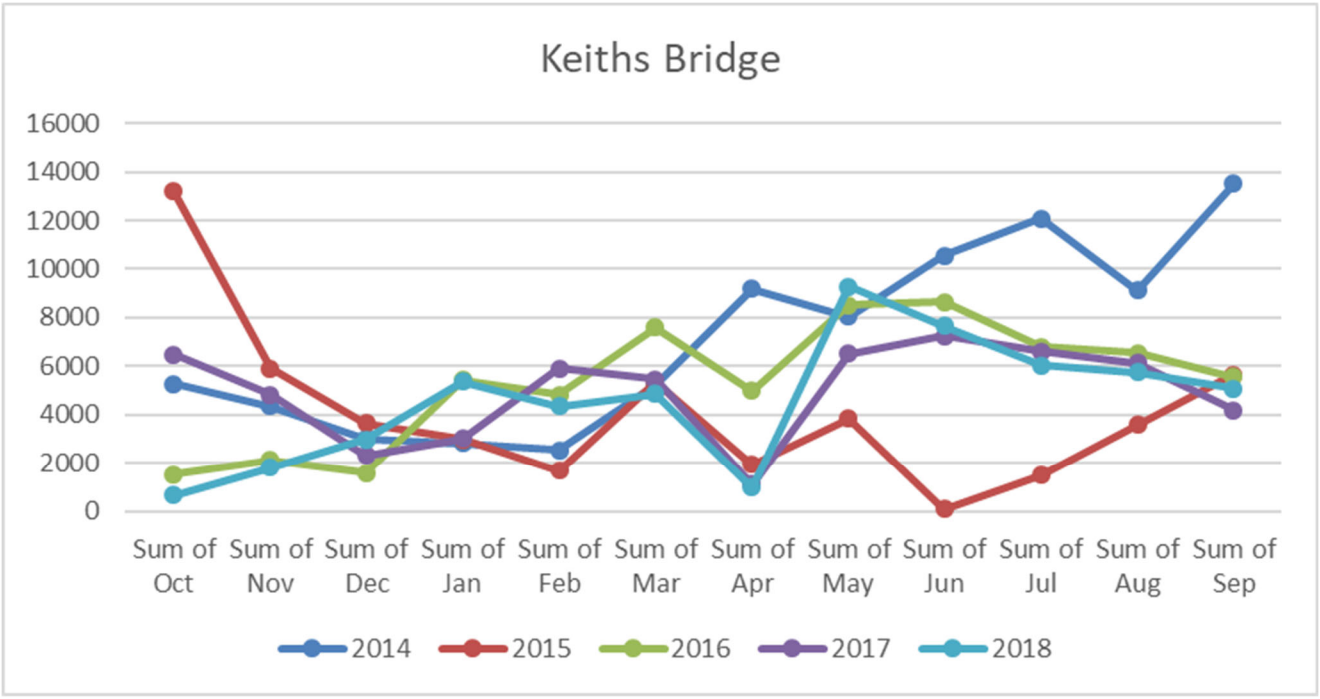

Figure C-34: Keiths Bridge Visitation 2014-2018.

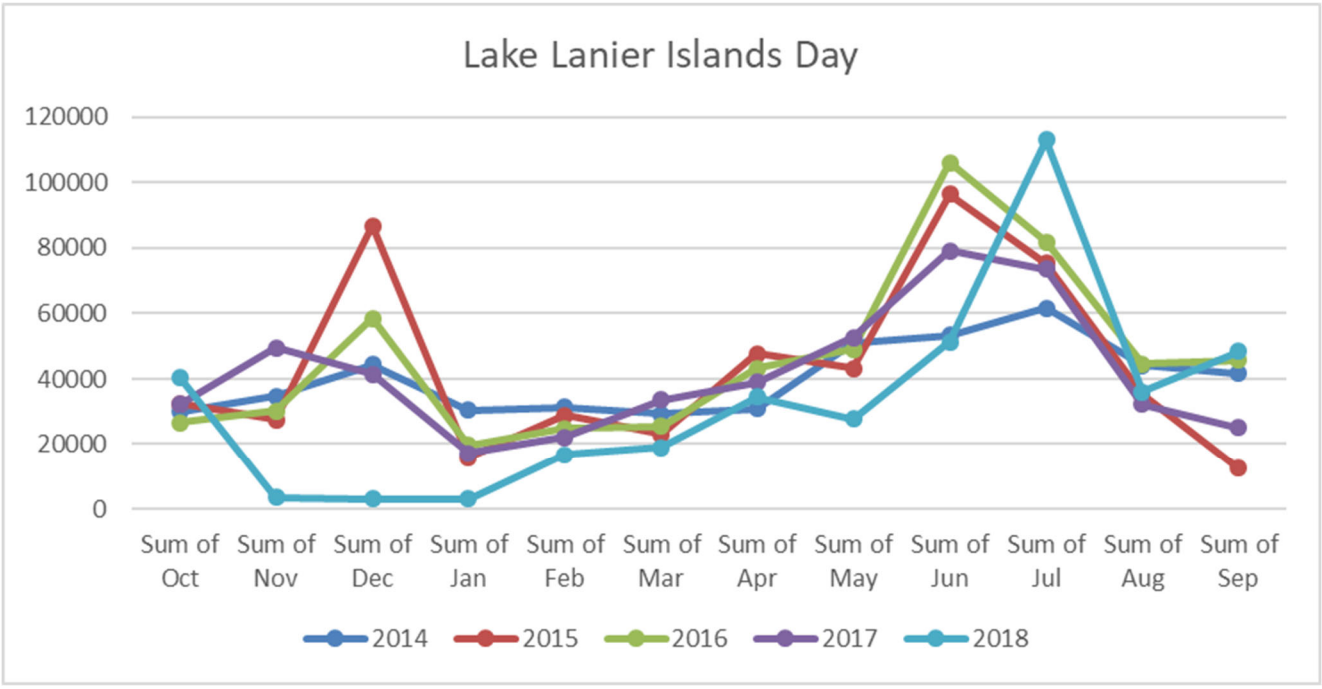

Figure C-35: Lake Lanier Islands (Day) Visitation 2014-2018.

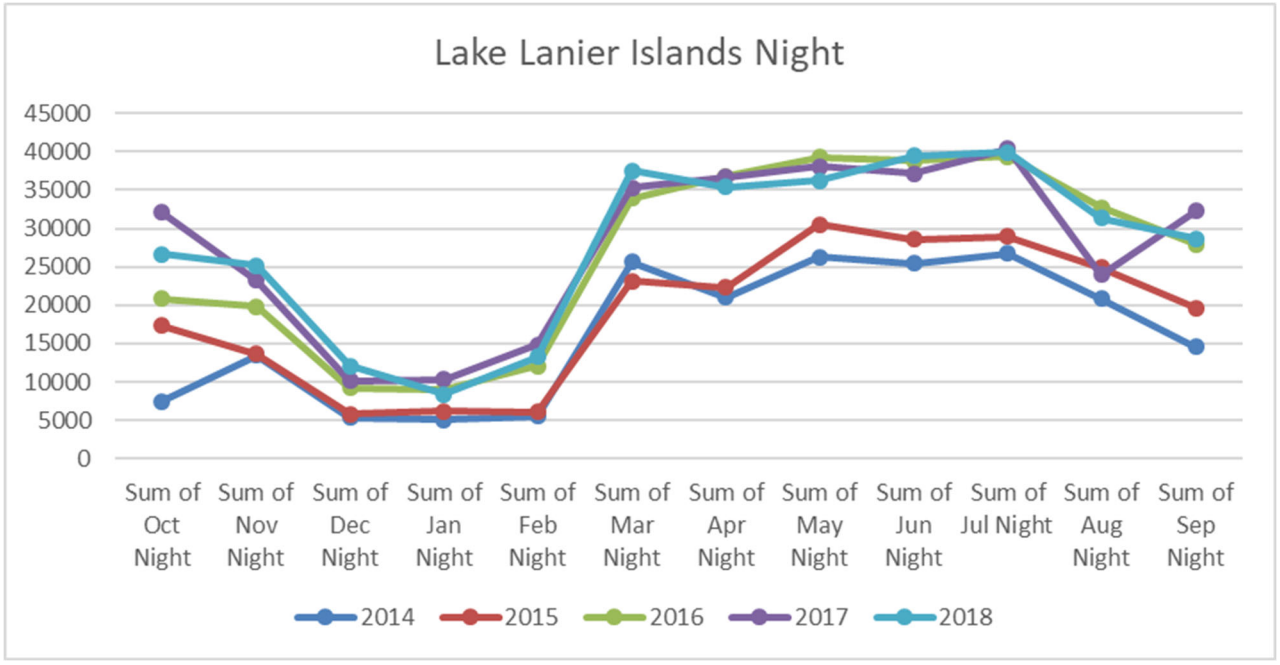

Figure C-36: Lake Lanier Islands (Night) Visitation 2014-2018.

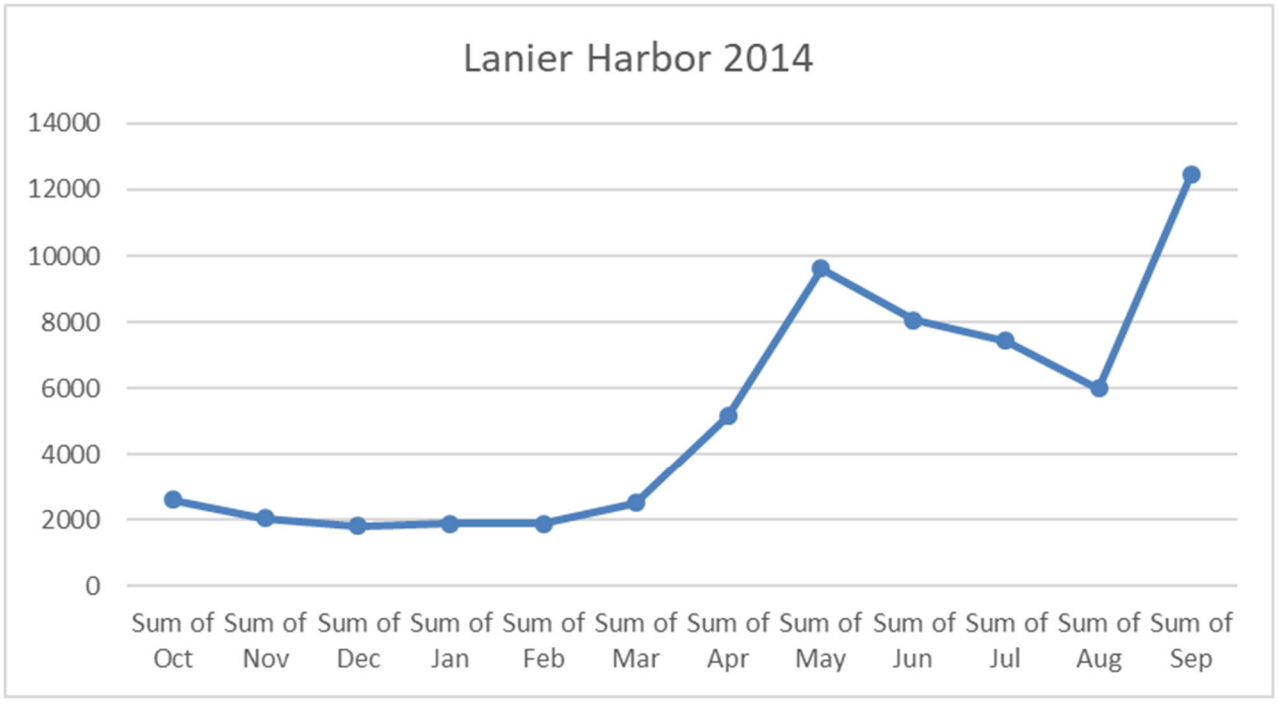

Figure C-37: Lanier Harbor Visitation 2014.
(Data not available for 2015-2018.)

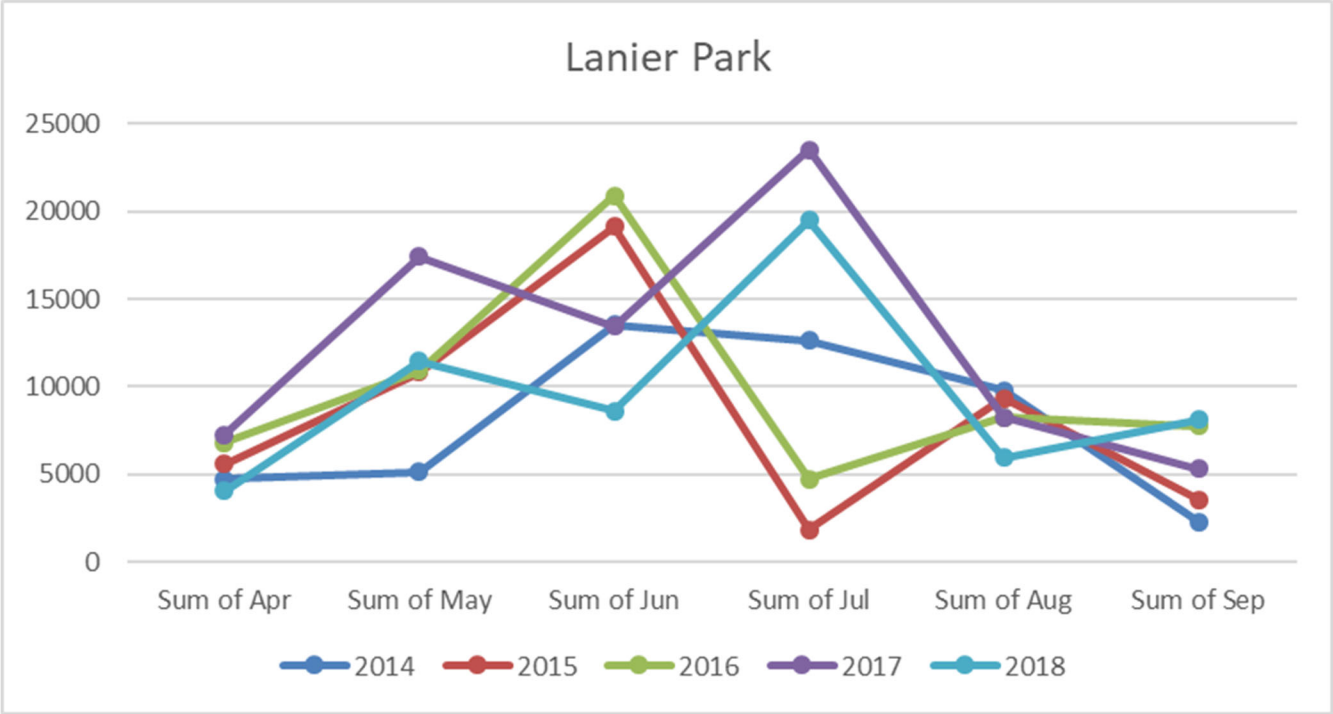

Figure C-38: Lanier Park Visitation 2014-2018.

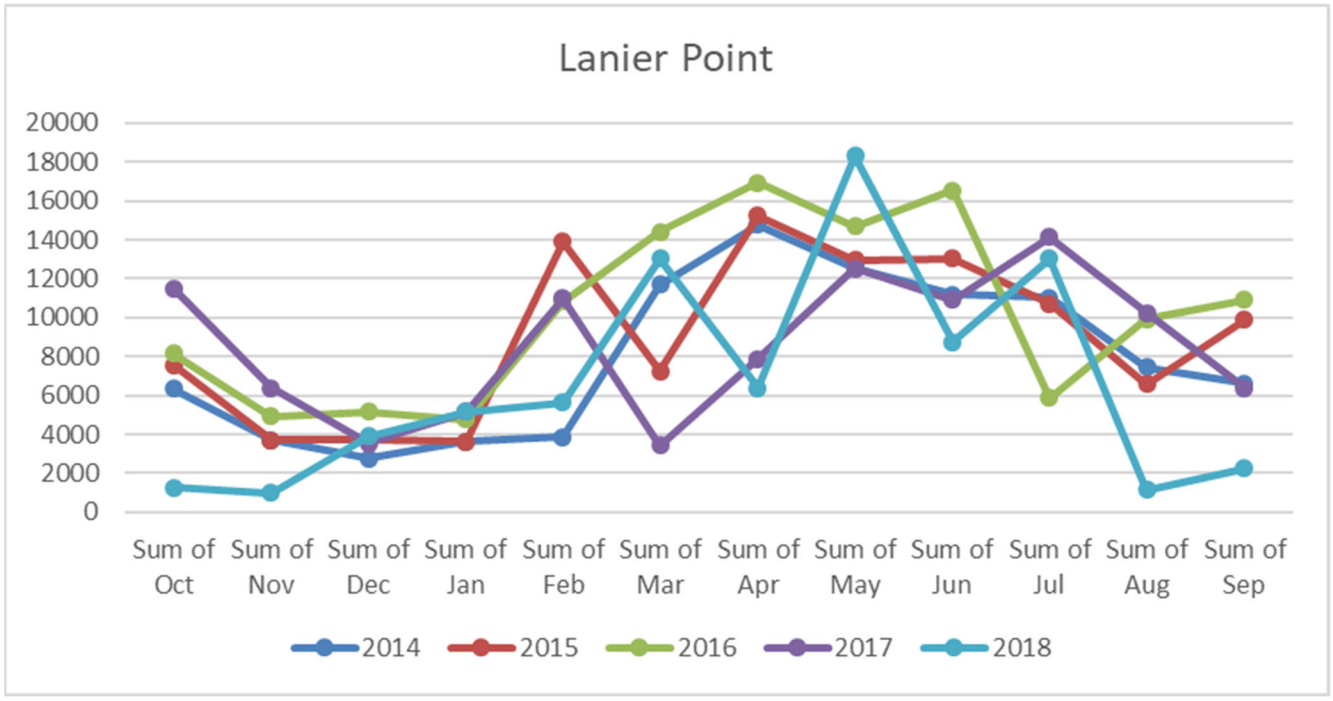

Figure C-39: Lanier Point Visitation 2014-2018.

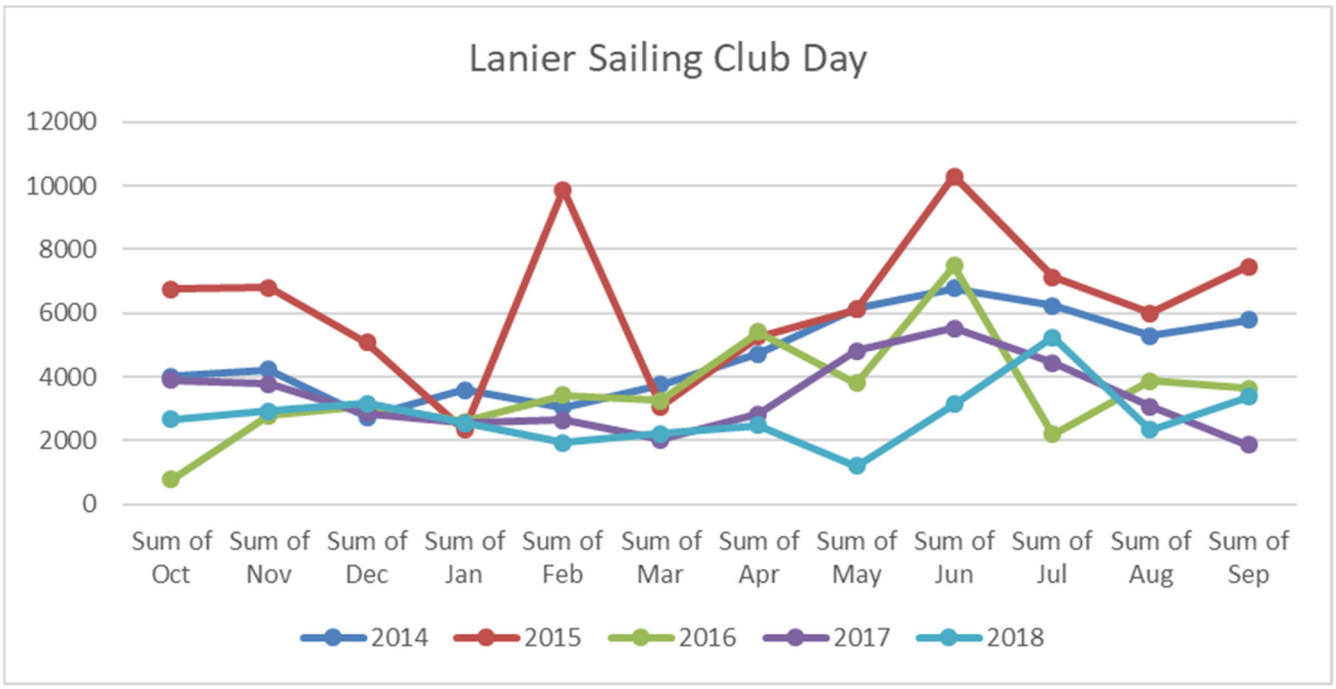

Figure C-40: Lanier Sailing Club (Day) Visitation 2014-2018.

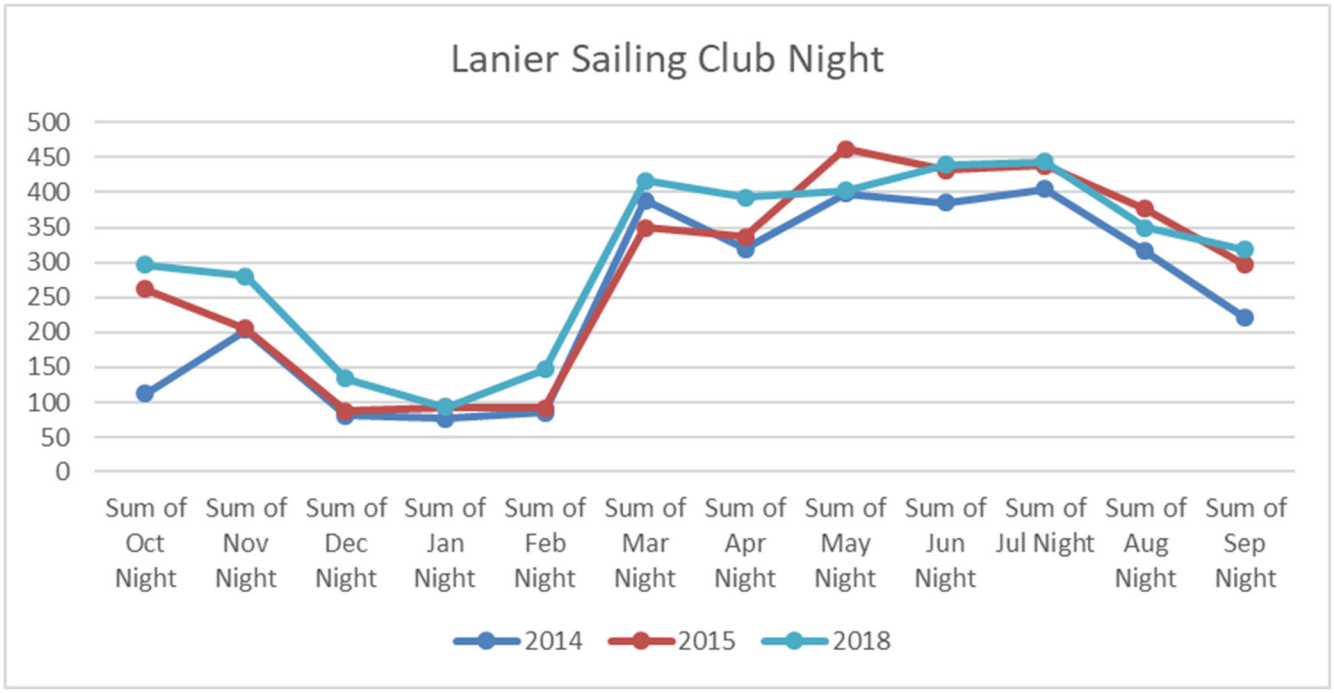

Figure C-41: Lanier Sailing Club (Night) Visitation 2014-2015, and 2018.
(Data not available for 2016-2017.)

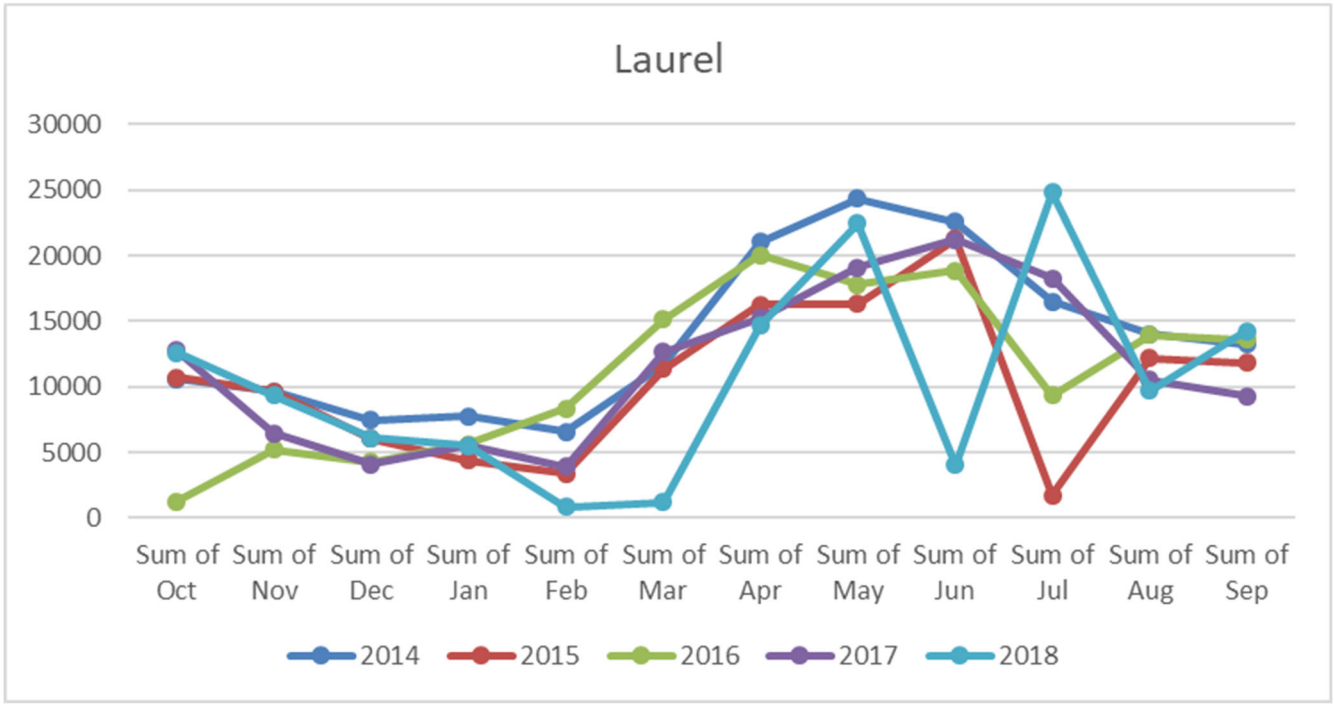

Figure C-42: Laurel Visitation 2014-2018.

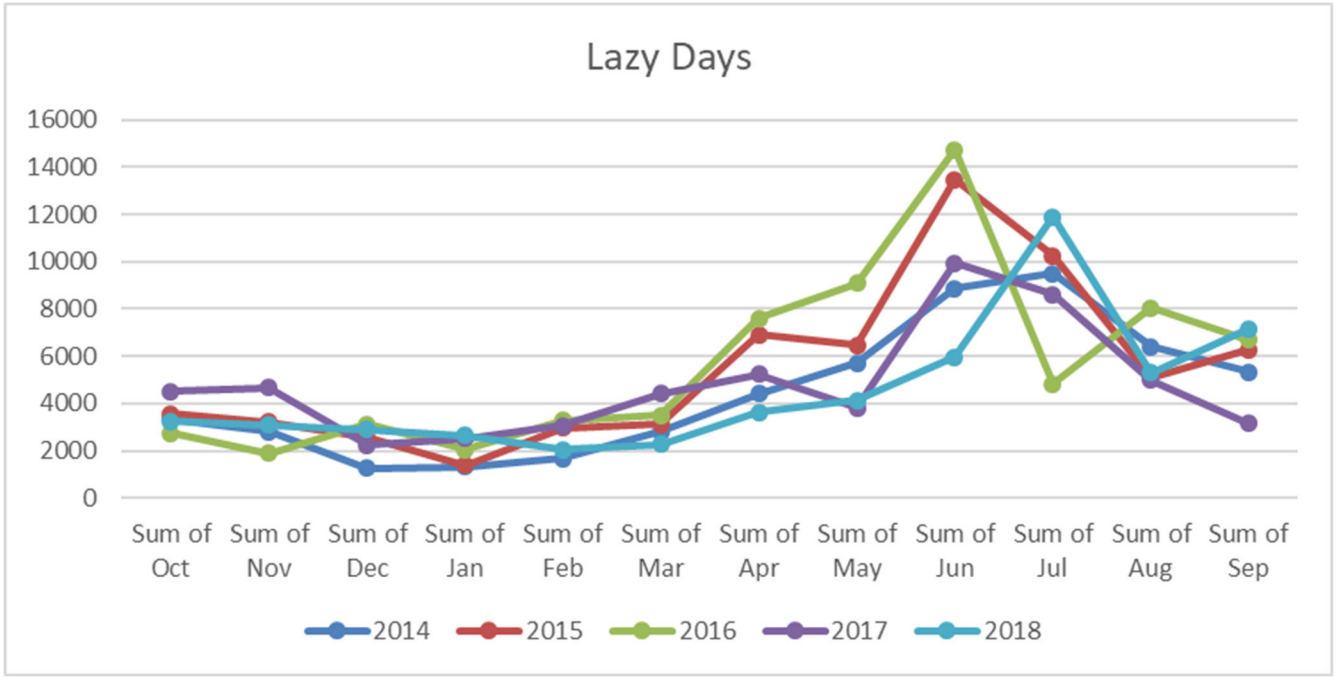

Figure C-43: Lazy Days Visitation 2014-2018.

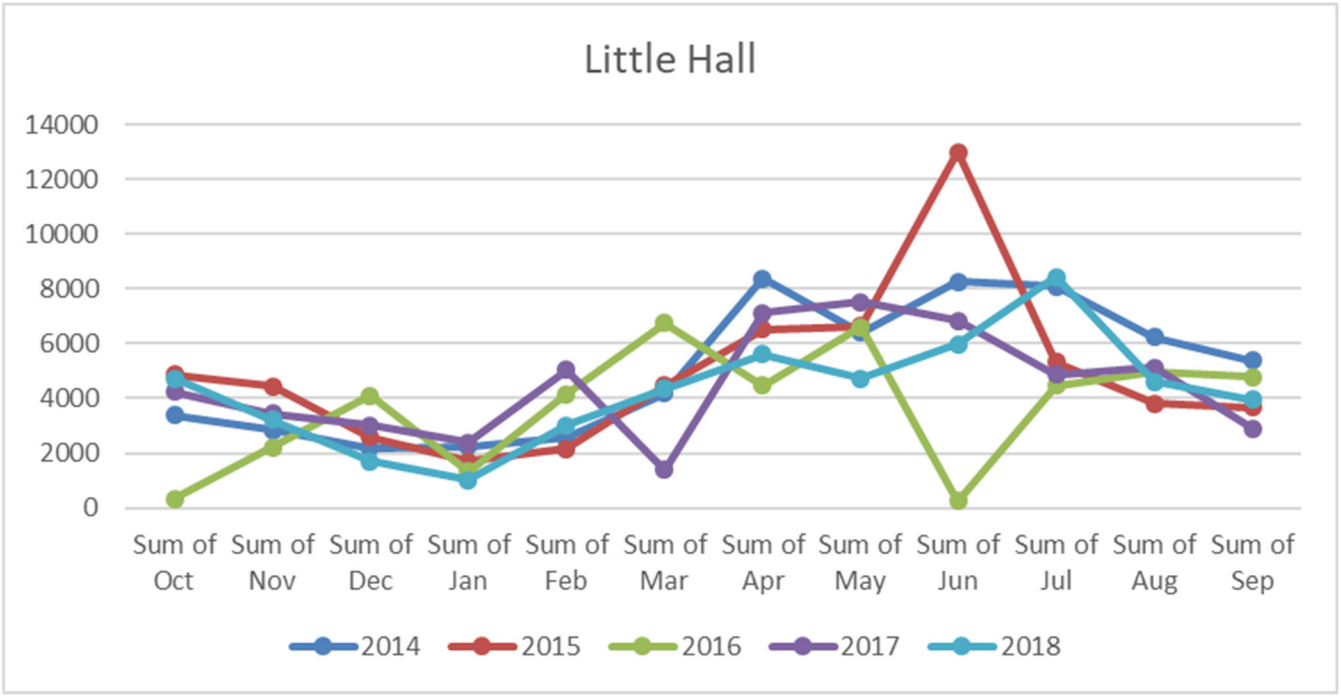

Figure C-44: Little Hall Visitation 2014-2018.

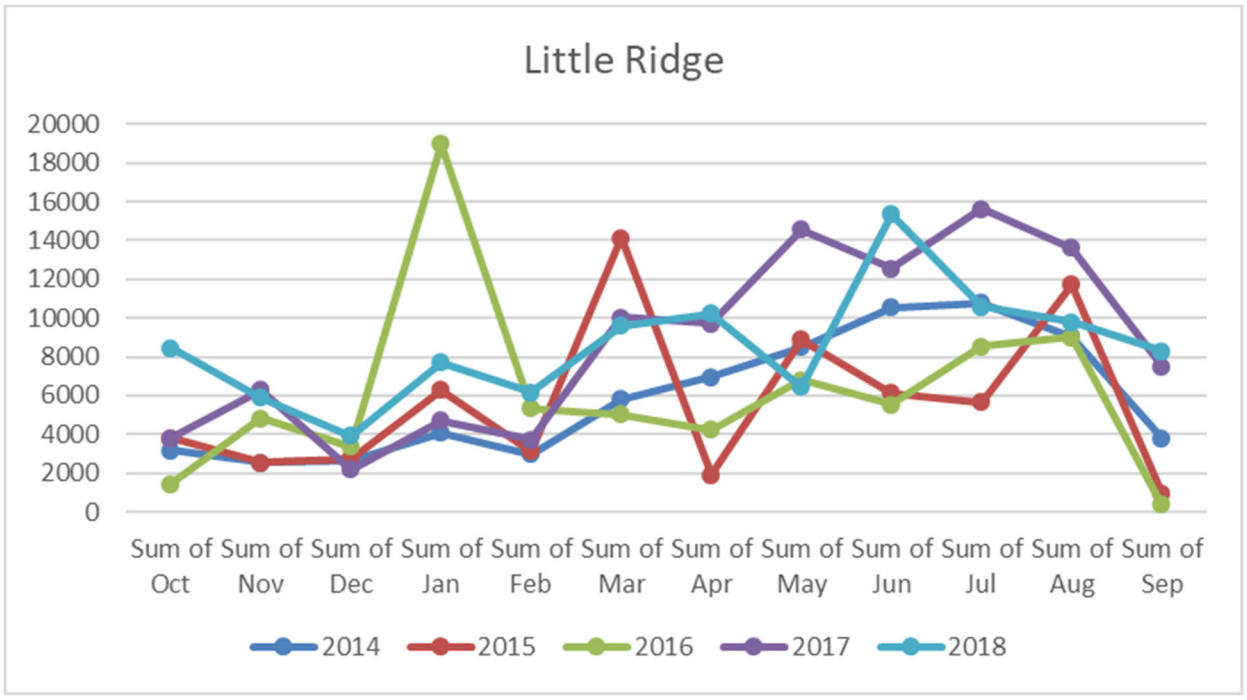

Figure C-45: Little Ridge Visitation 2014-2018.

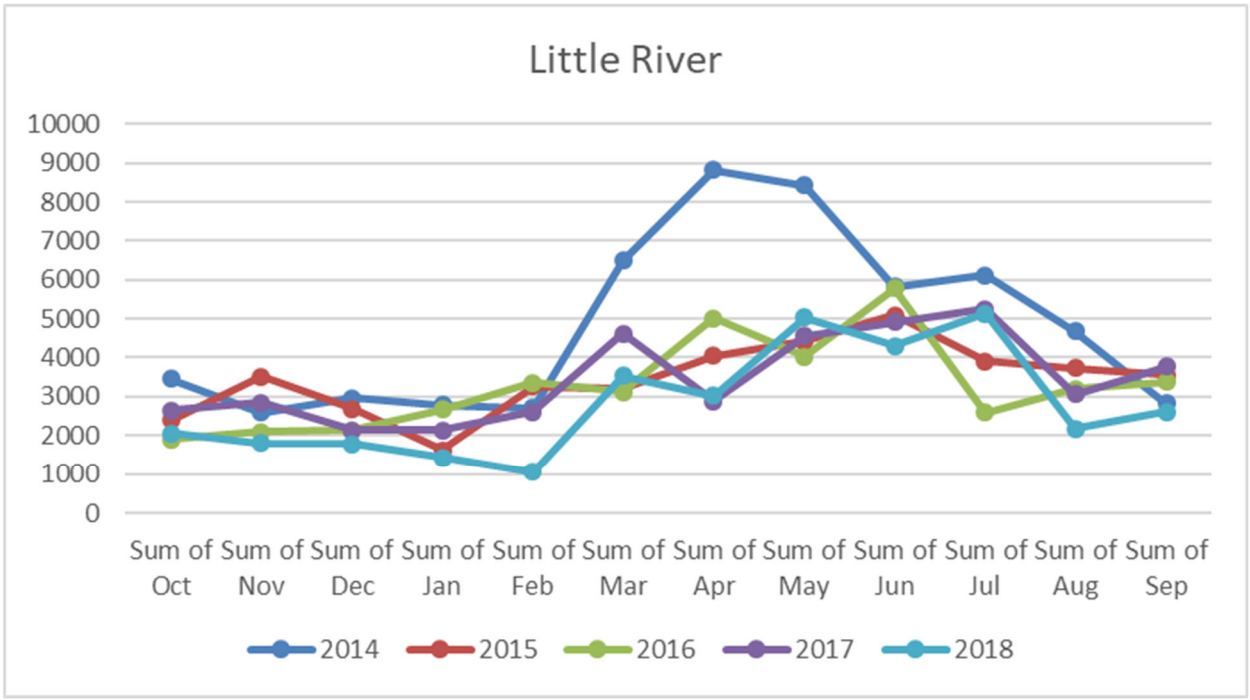

Figure C-46: Little River Visitation 2014-2018.

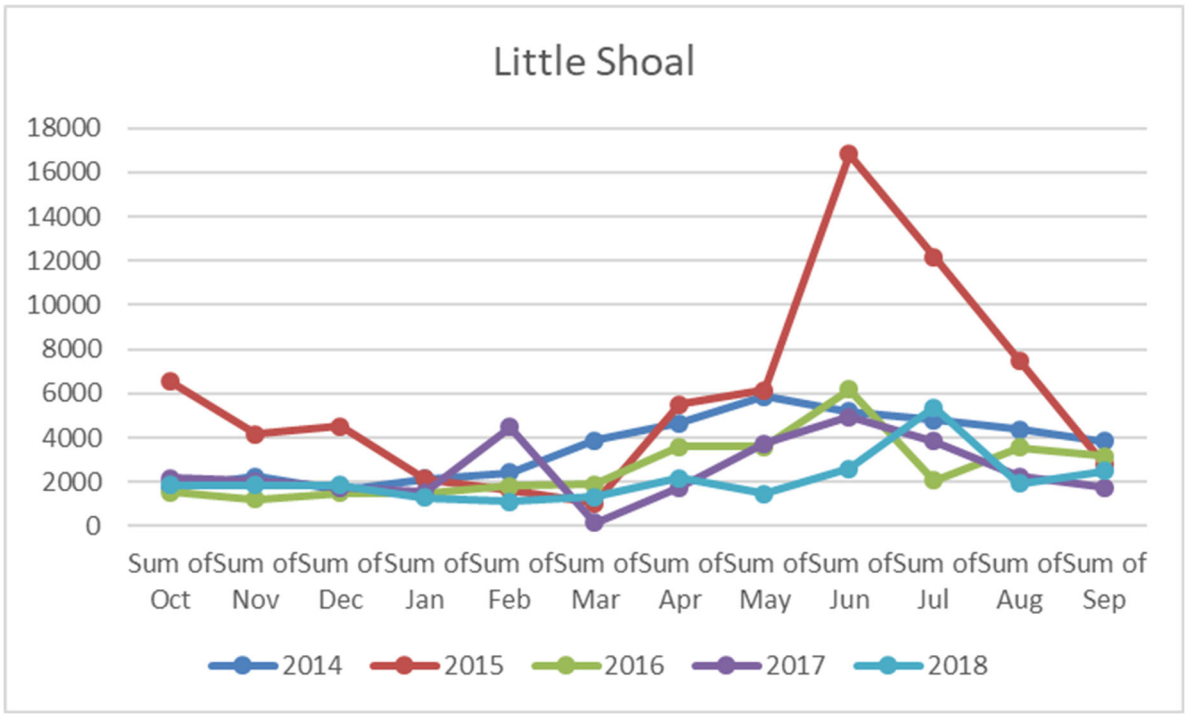

Figure C-47: Little Shoal Visitation 2014-2018.

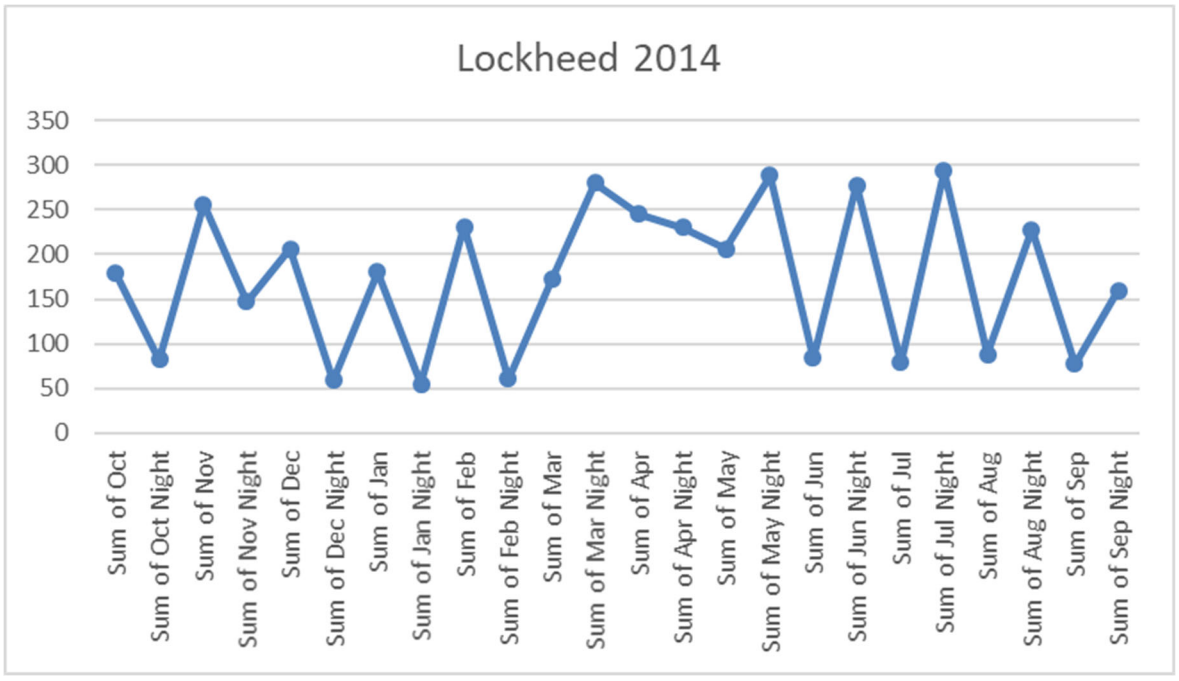

Figure C-48: Lockheed Visitation 2014.
(Data not available for 2015-2018.)

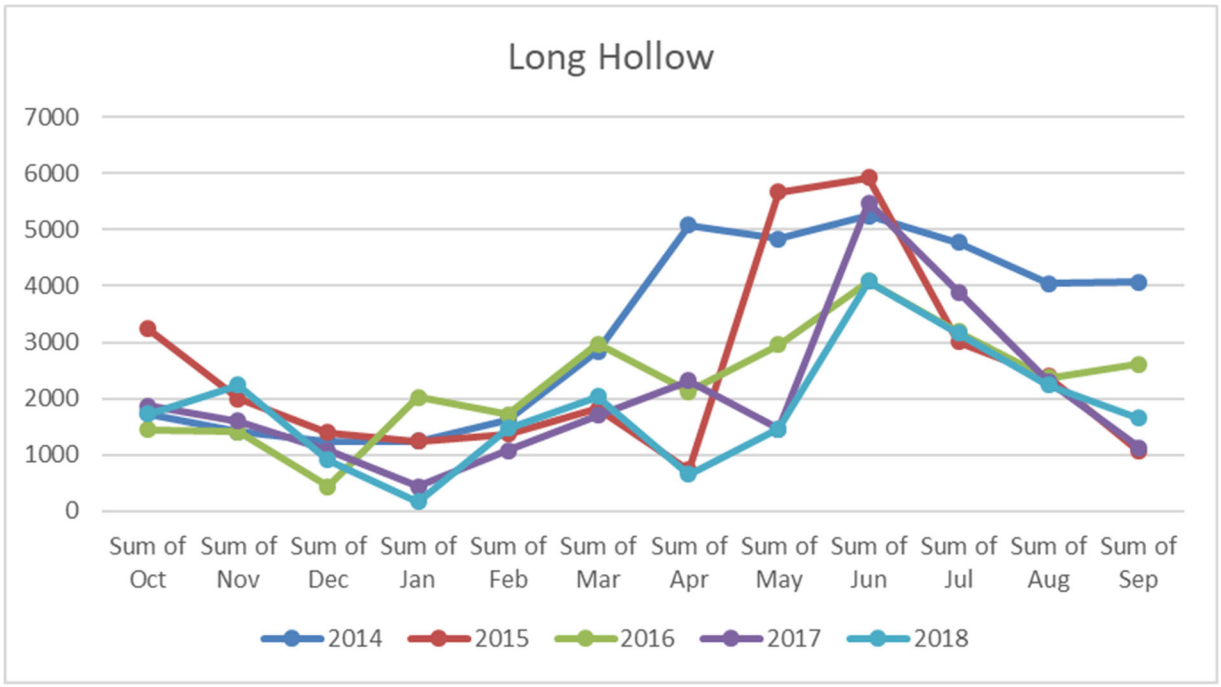

Figure C-49: Long Hollow Visitation 2014-2018.

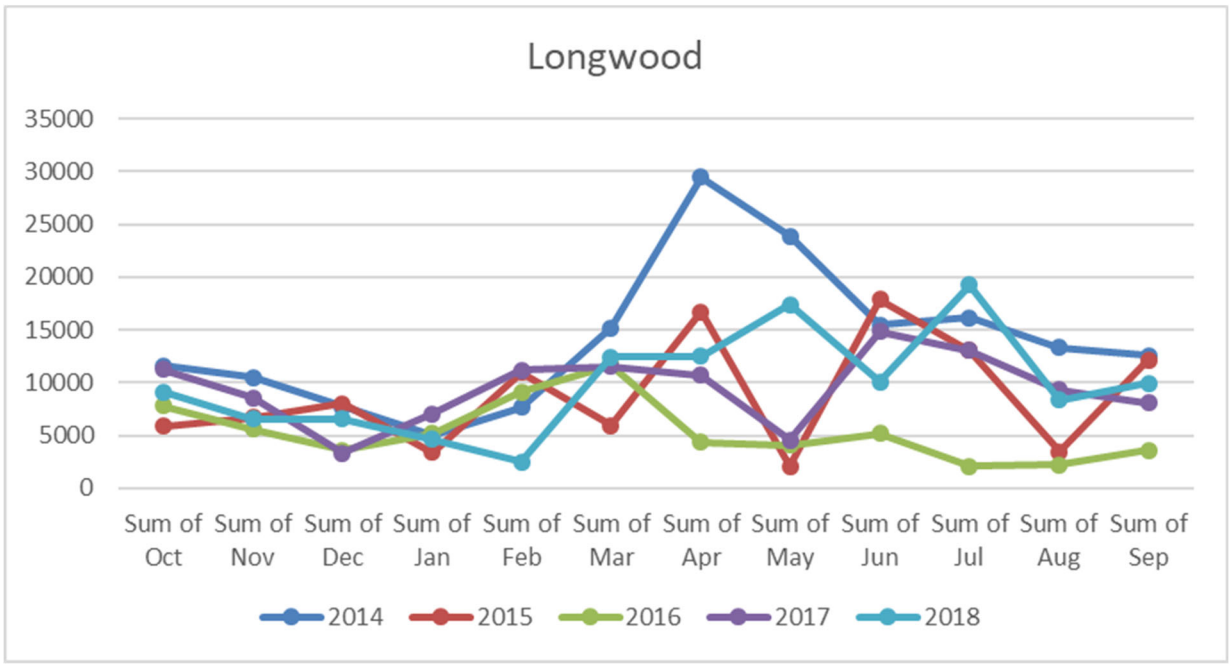

Figure C-50: Longwood Visitation 2014-2018.

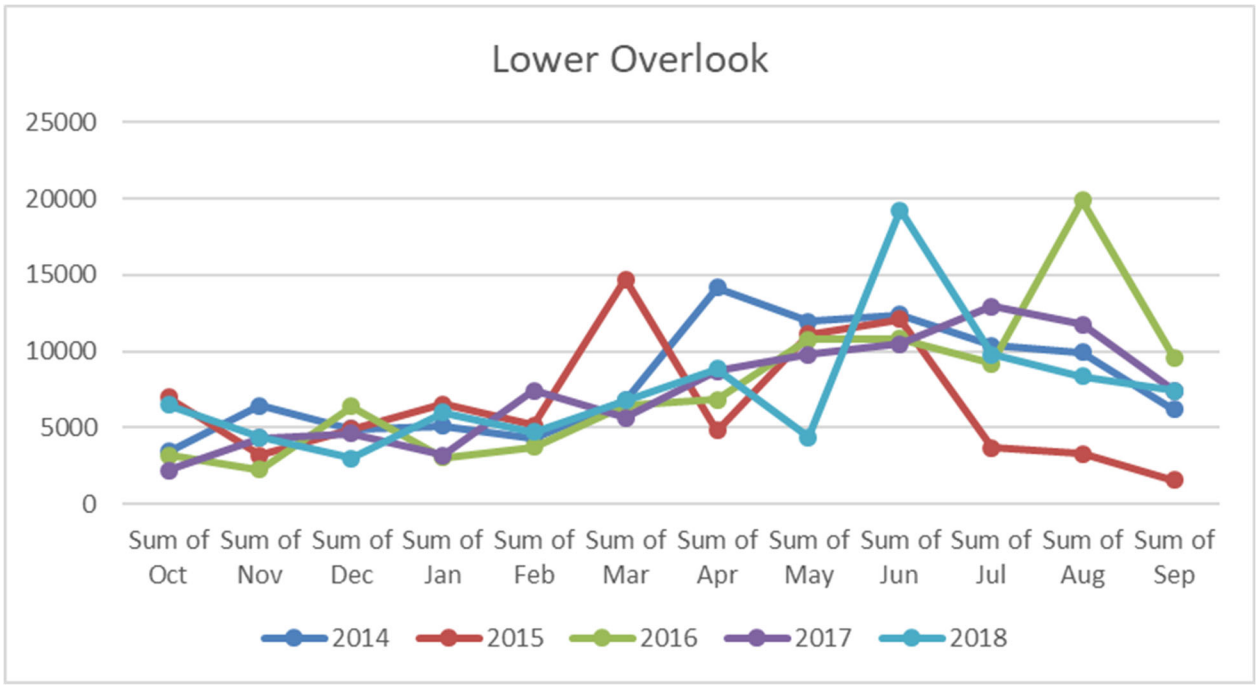

Figure C-51: Lower Overlook Visitation 2014-2018.

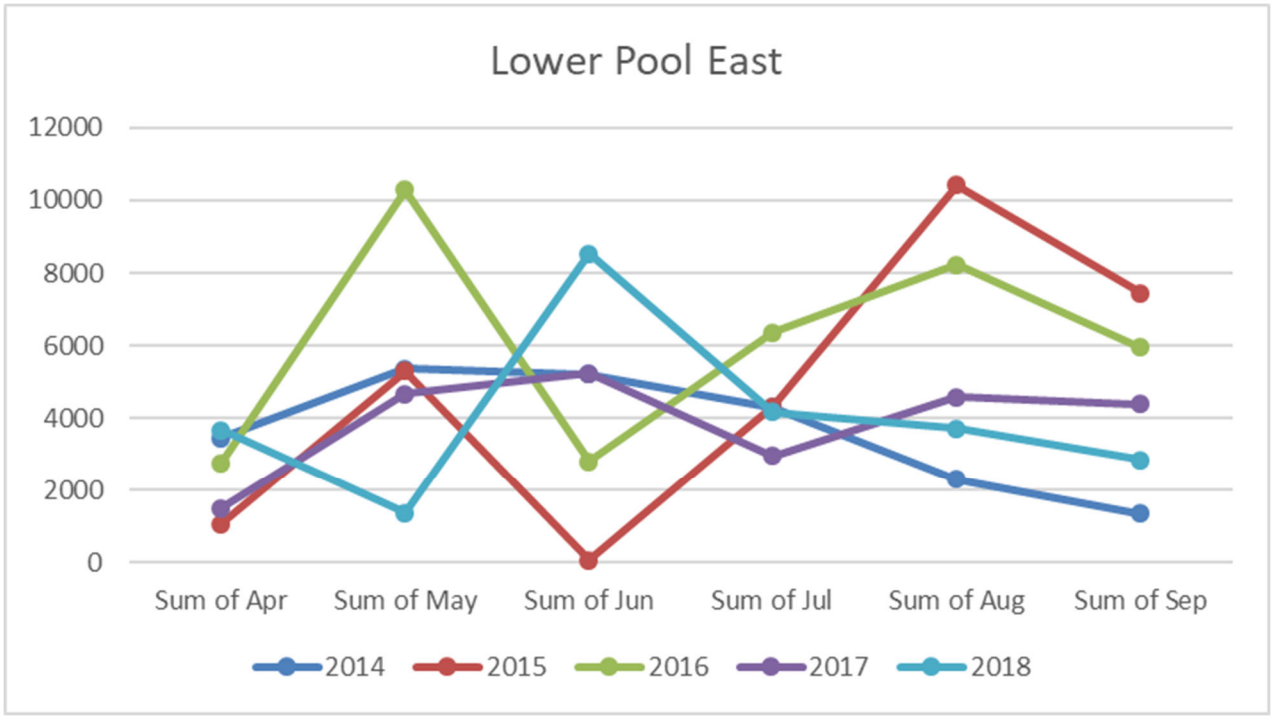

Figure C-52: Lower Pool East Visitation 2014-2018.

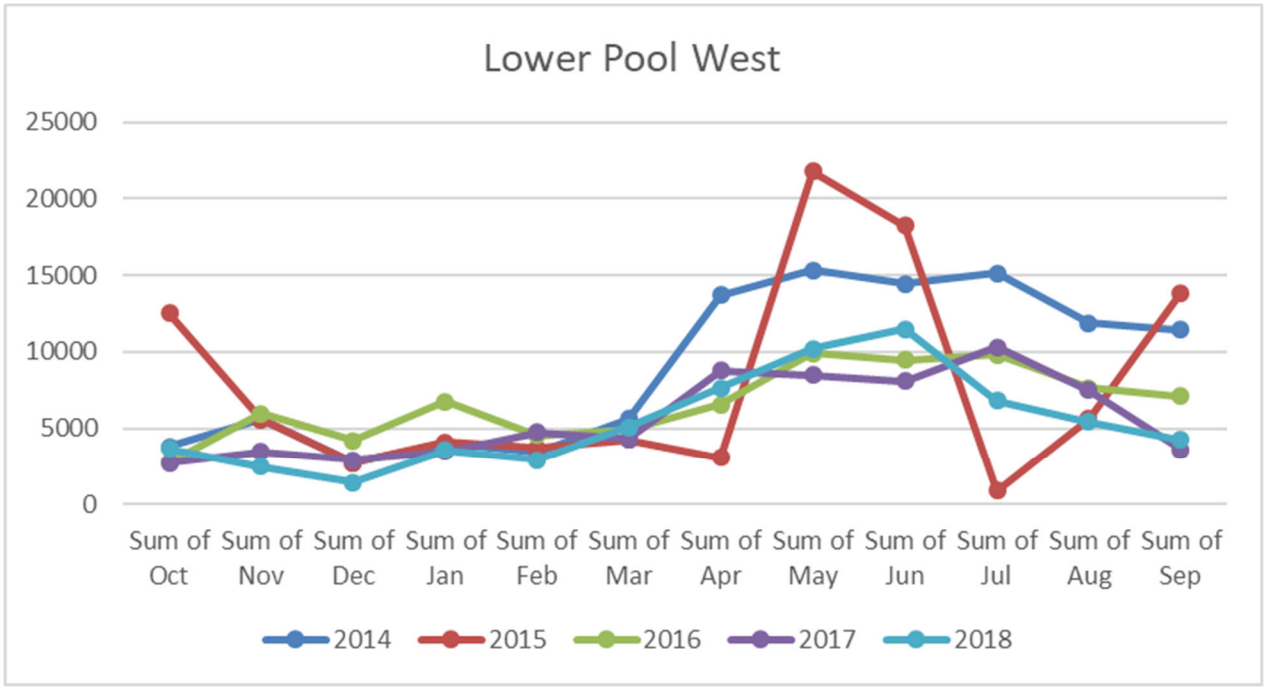

Figure C-53: Lower Pool West Visitation 2014-2018.

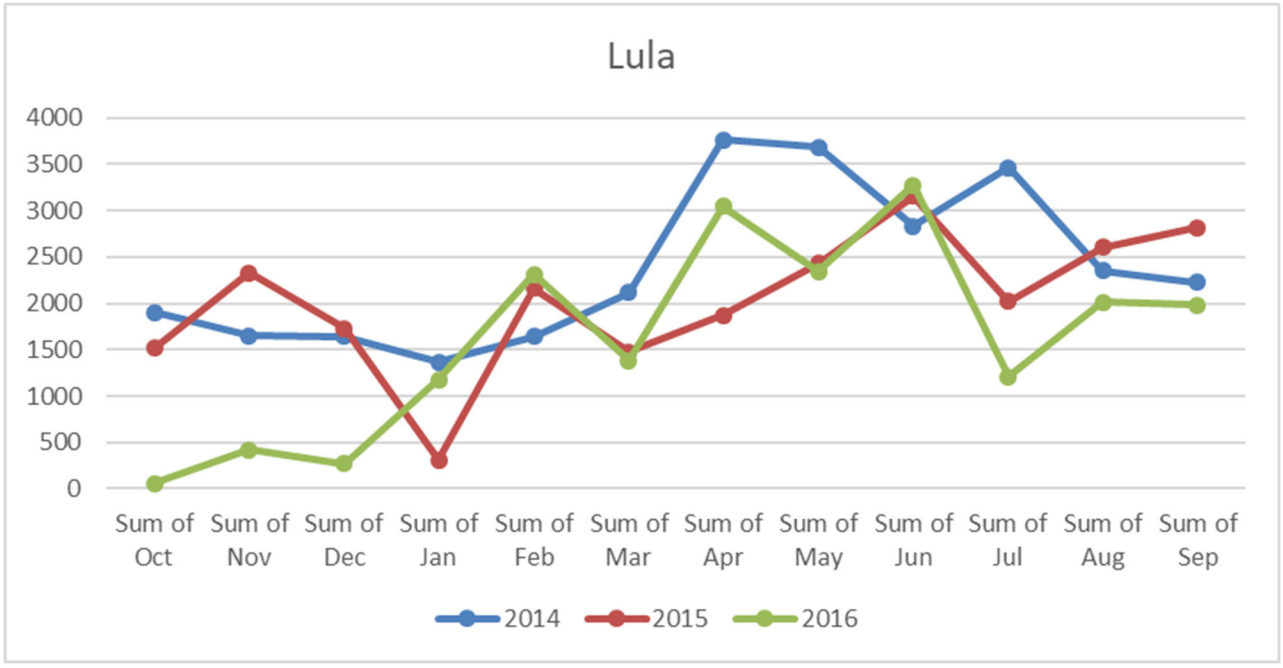

Figure C-54: Lula Visitation 2014-2016.
(Data not available for 2017-2018.)

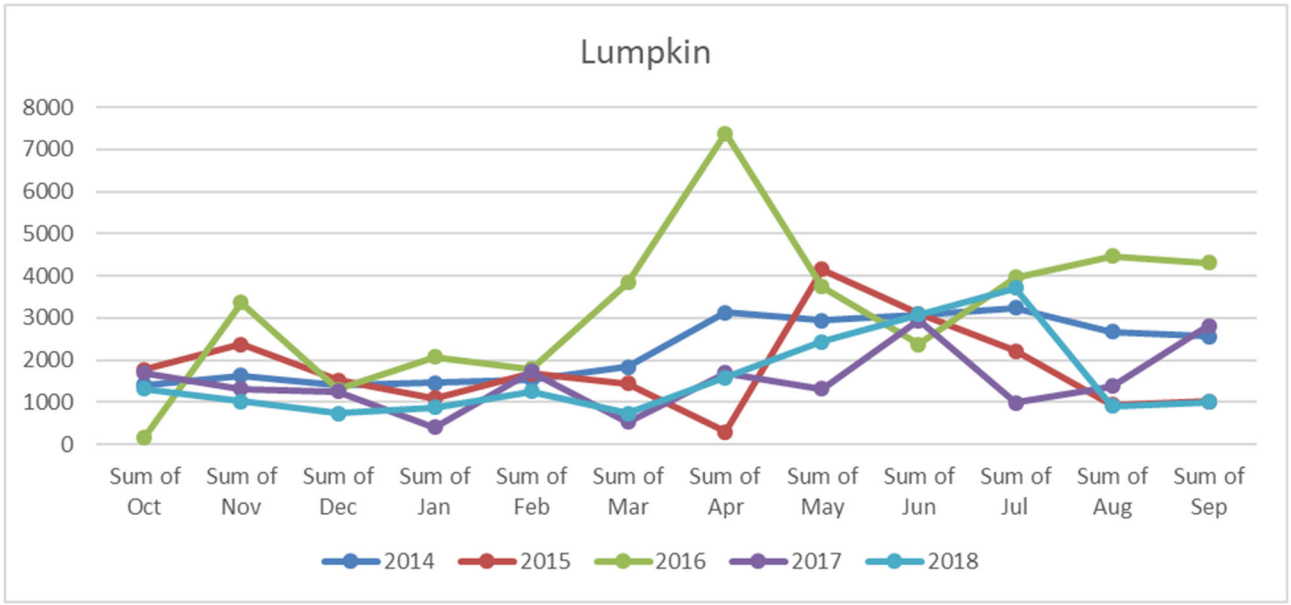

Figure C-55: Lumpkin Visitation 2014-2018.

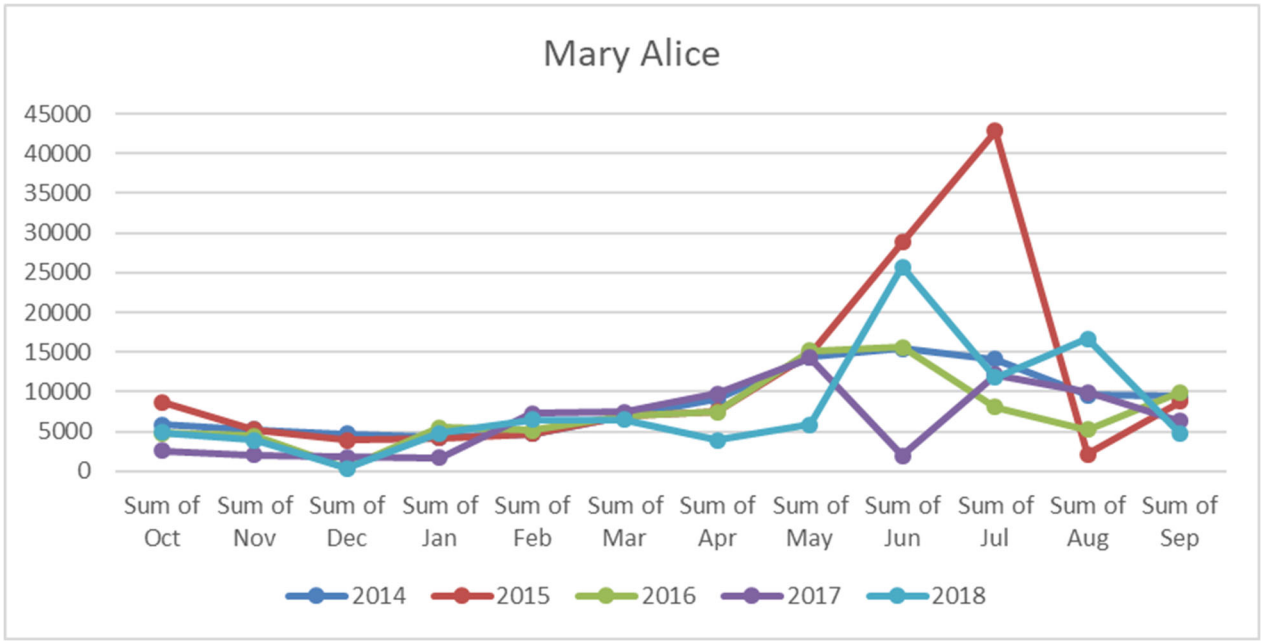

Figure C-56: Mary Alice Visitation 2014-2018.

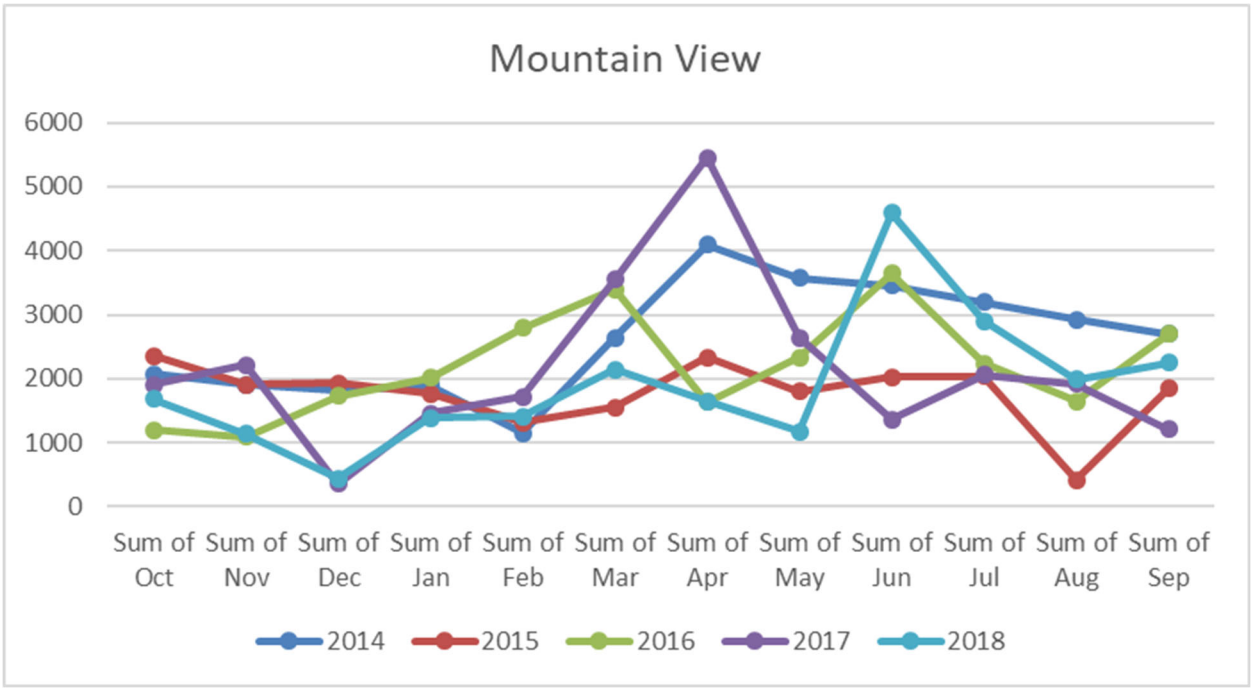

Figure C-57: Mountain View Visitation 2014-2018.

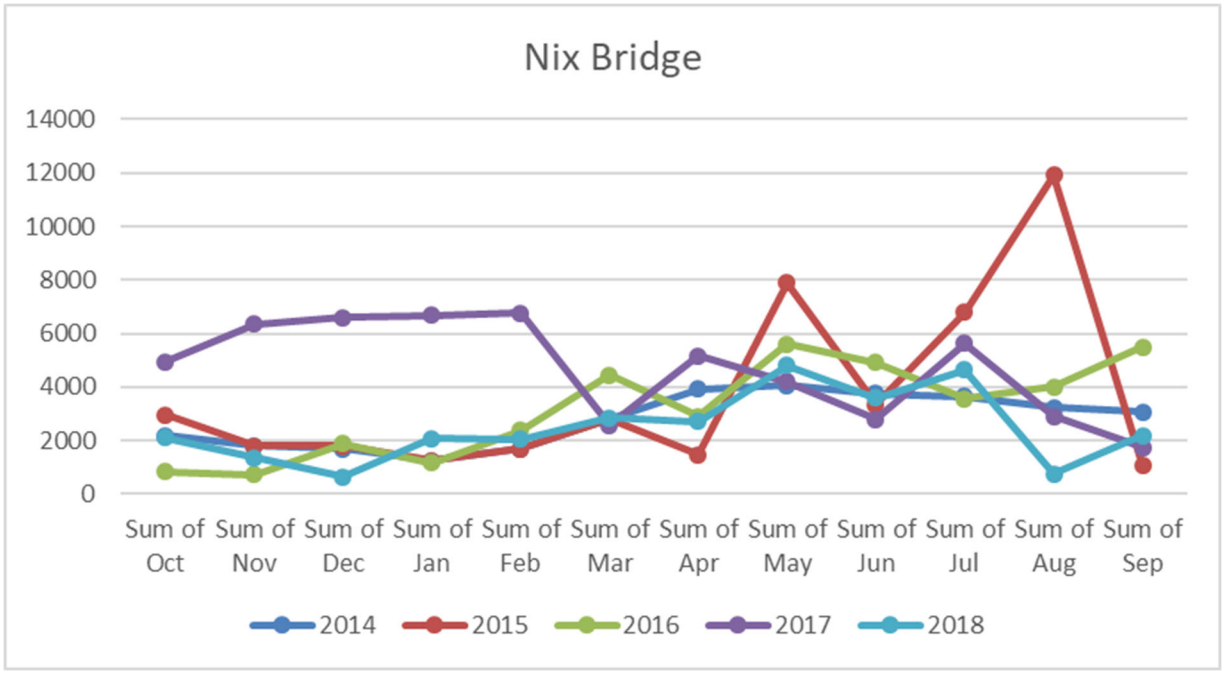

Figure C-58: Nix Bridge Visitation 2014-2018.

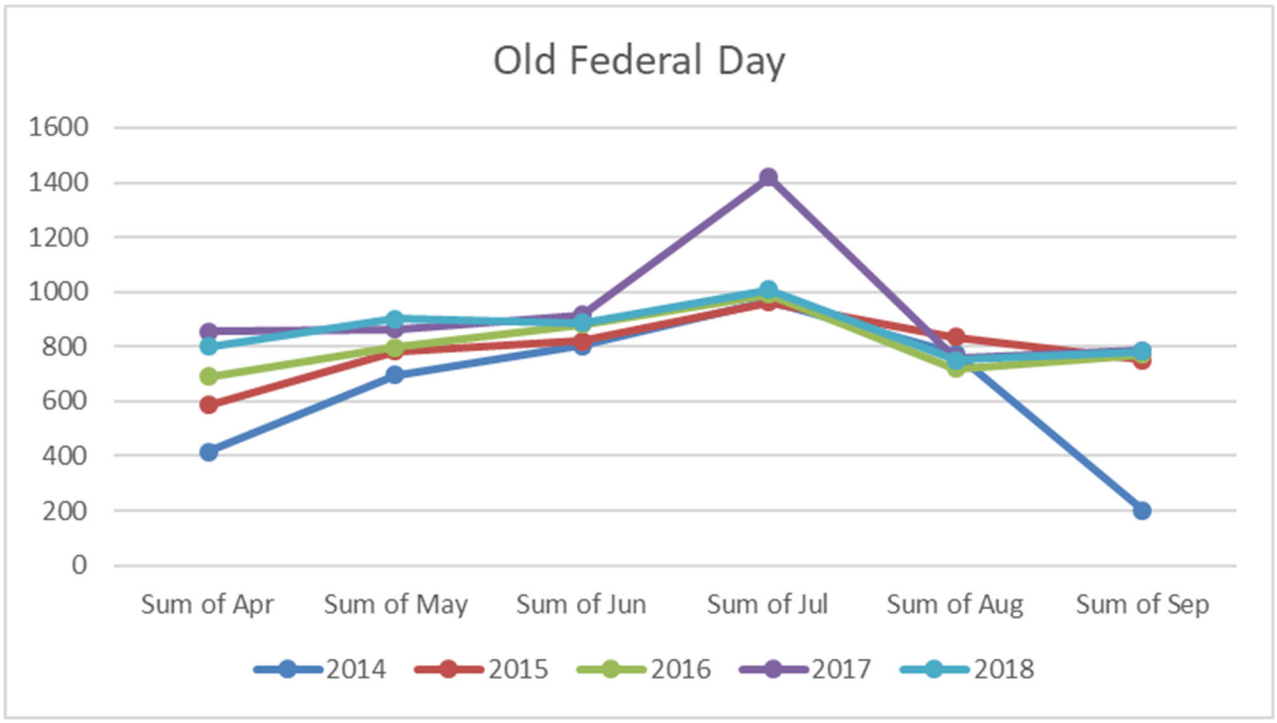

Figure C-59: Old Federal (Day) Visitation 2014-2018.

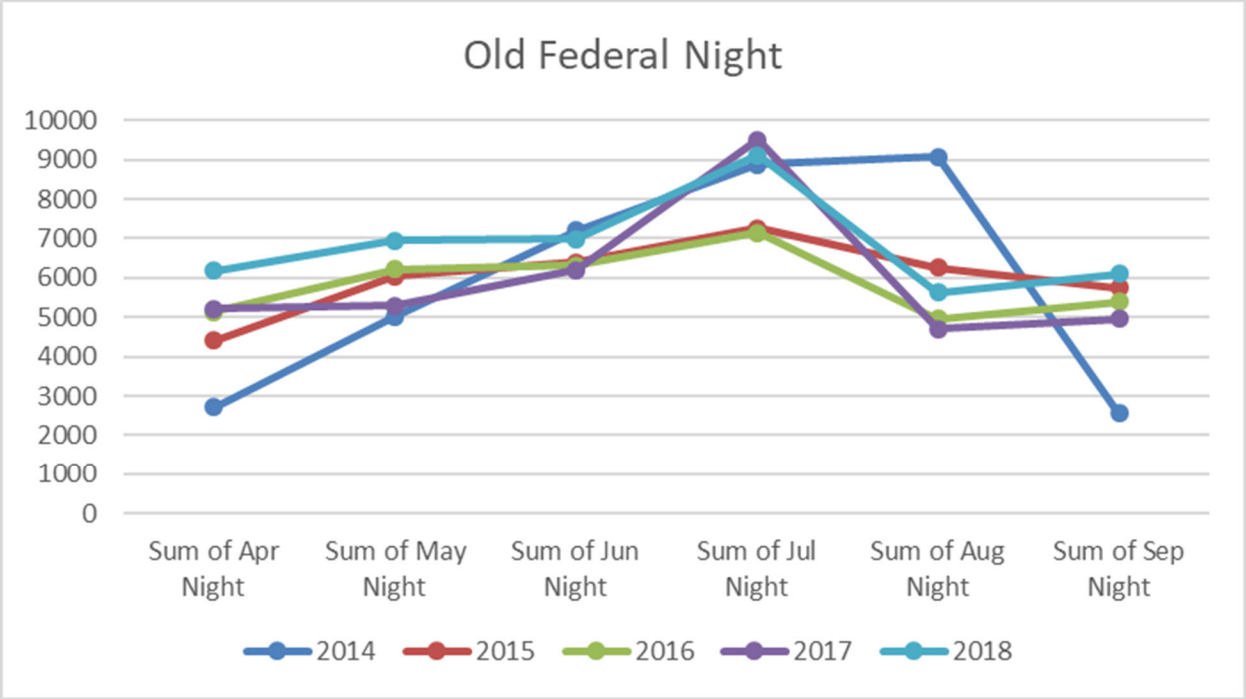

Figure C-60: Old Federal (Night) Visitation 2014-2018.

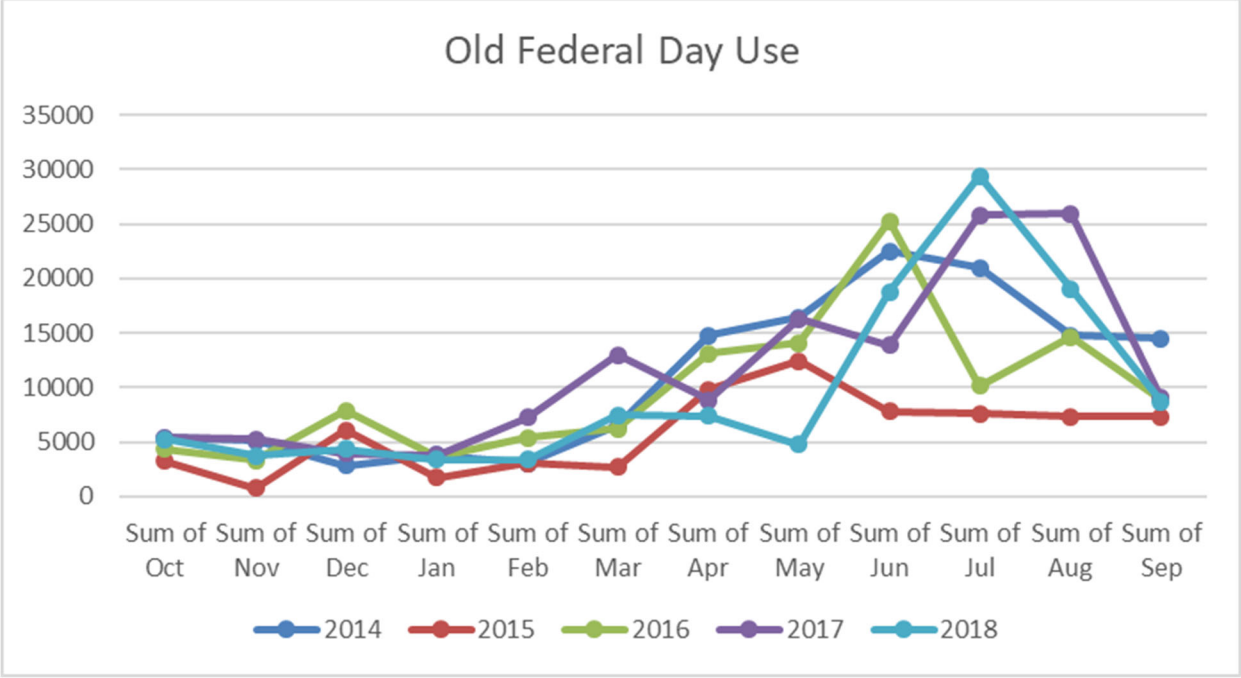

Figure C-61: Old Federal Day Use Visitation 2014-2018.

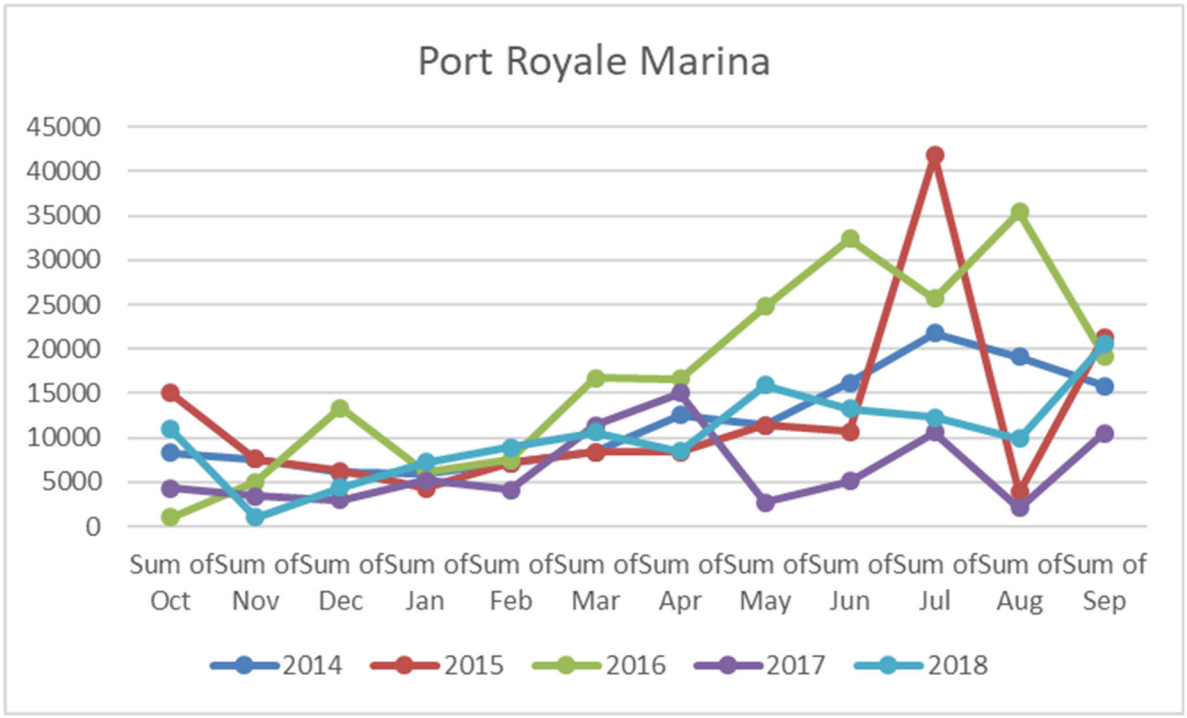

Figure C-62: Port Royale Marina Visitation 2014-2018.

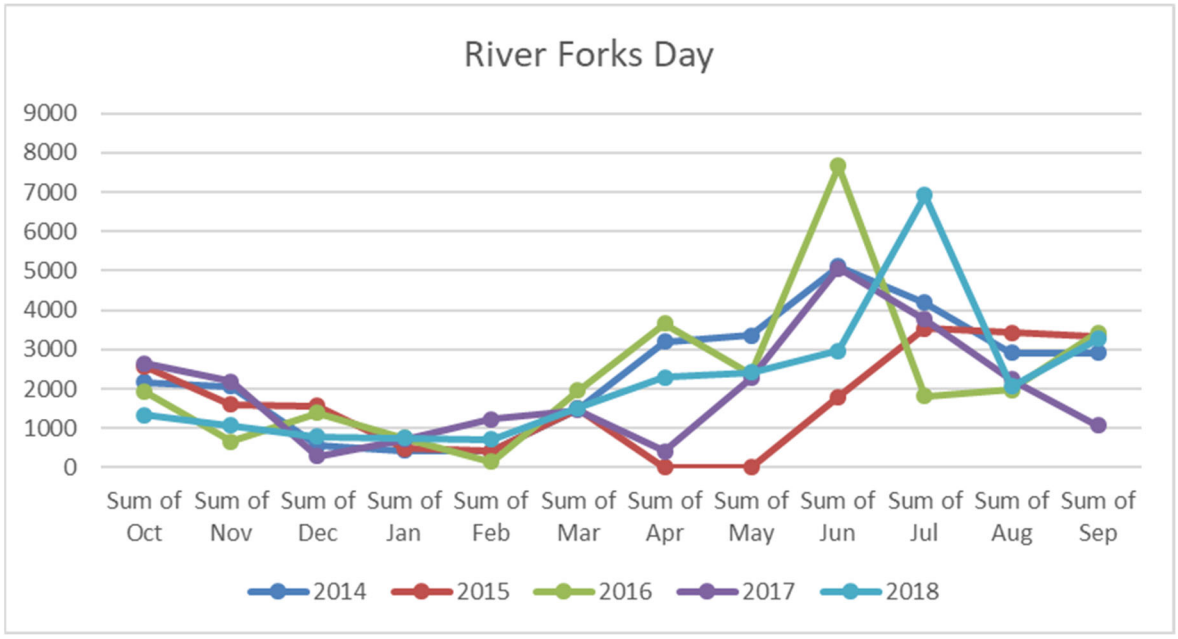

Figure C-63: River Forks (Day) Visitation 2014-2018.

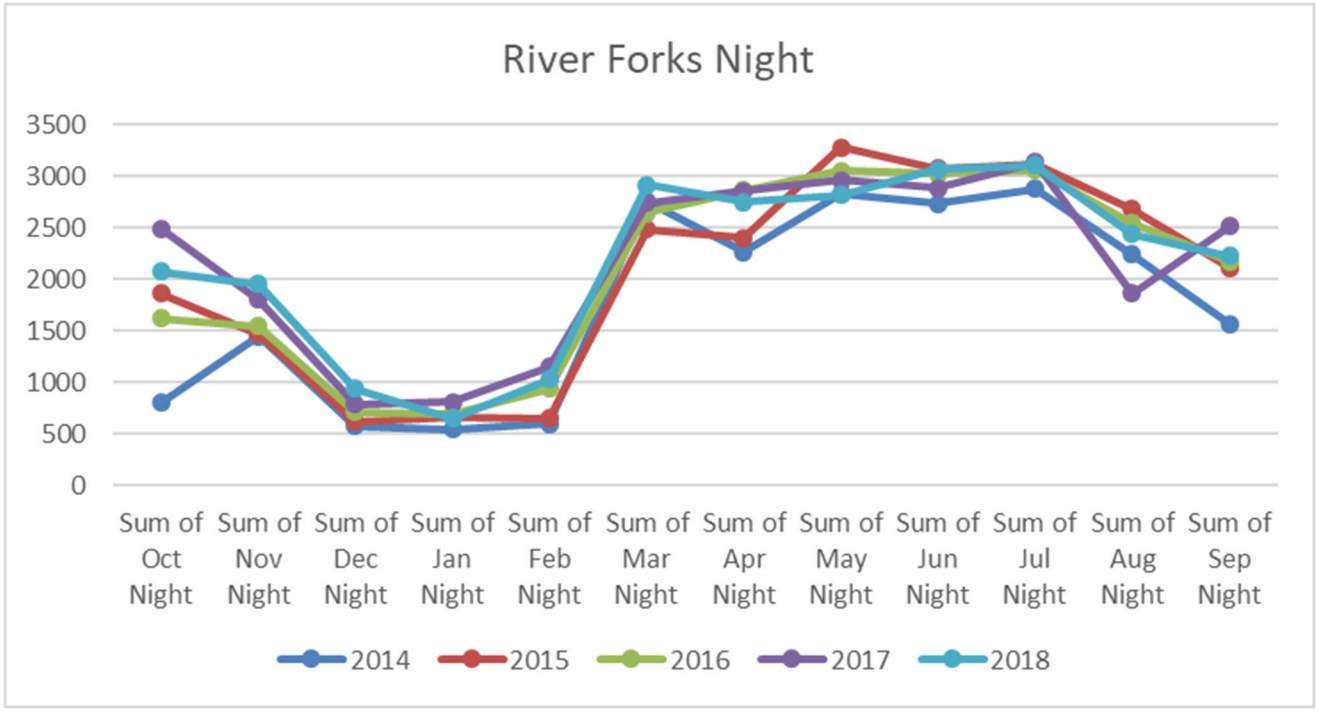

Figure C-64: River Forks (Night) Visitation 2014-2018.

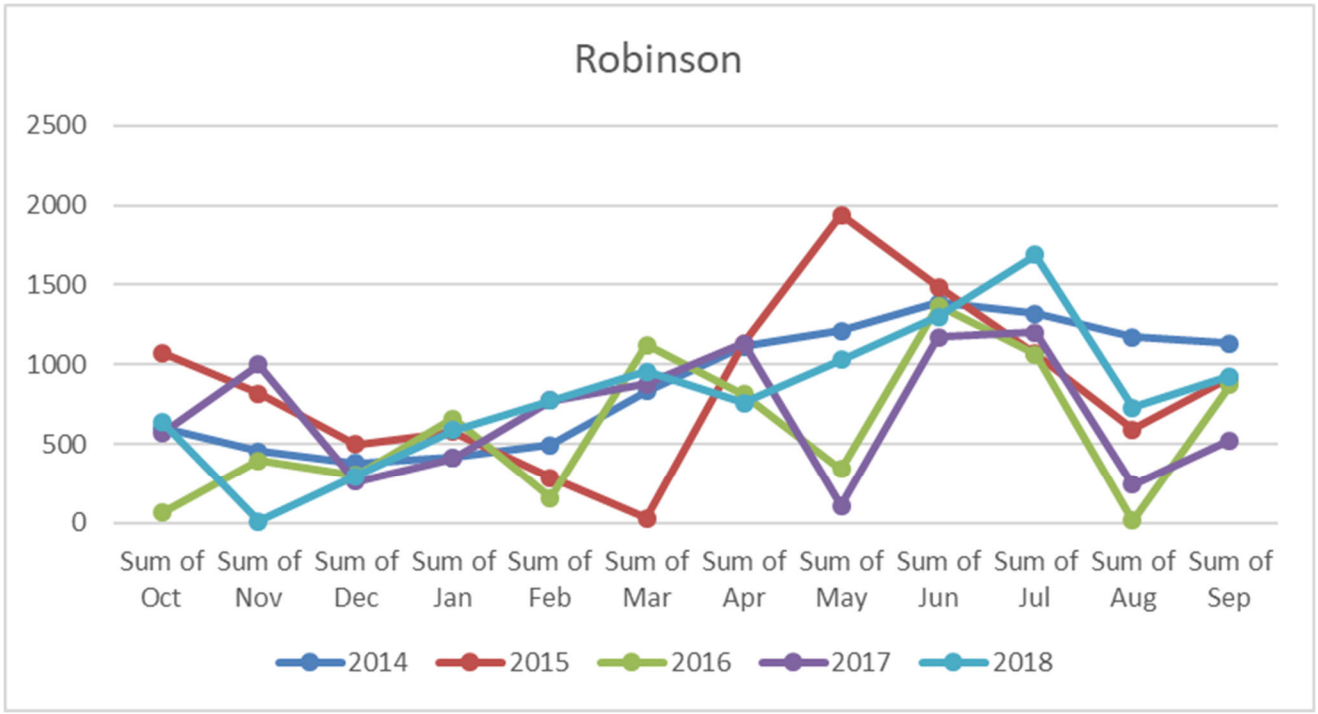

Figure C-65: Robinson Visitation 2014-2018.

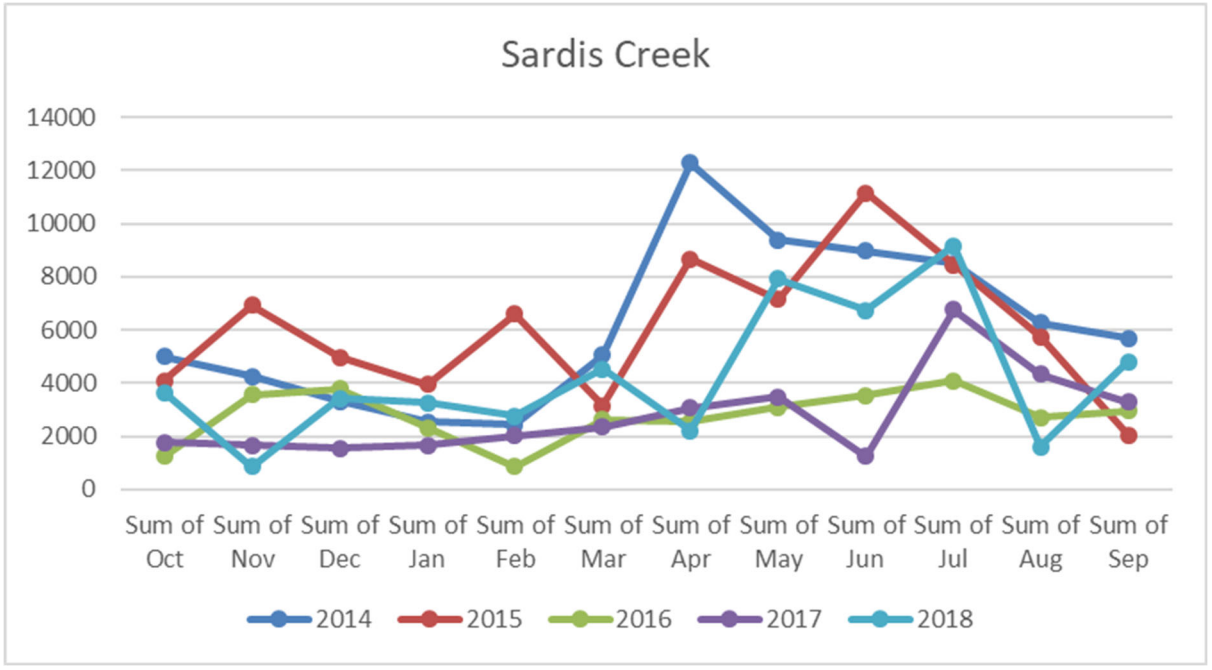

Figure C-66: Sardis Creek Visitation 2014-2018.

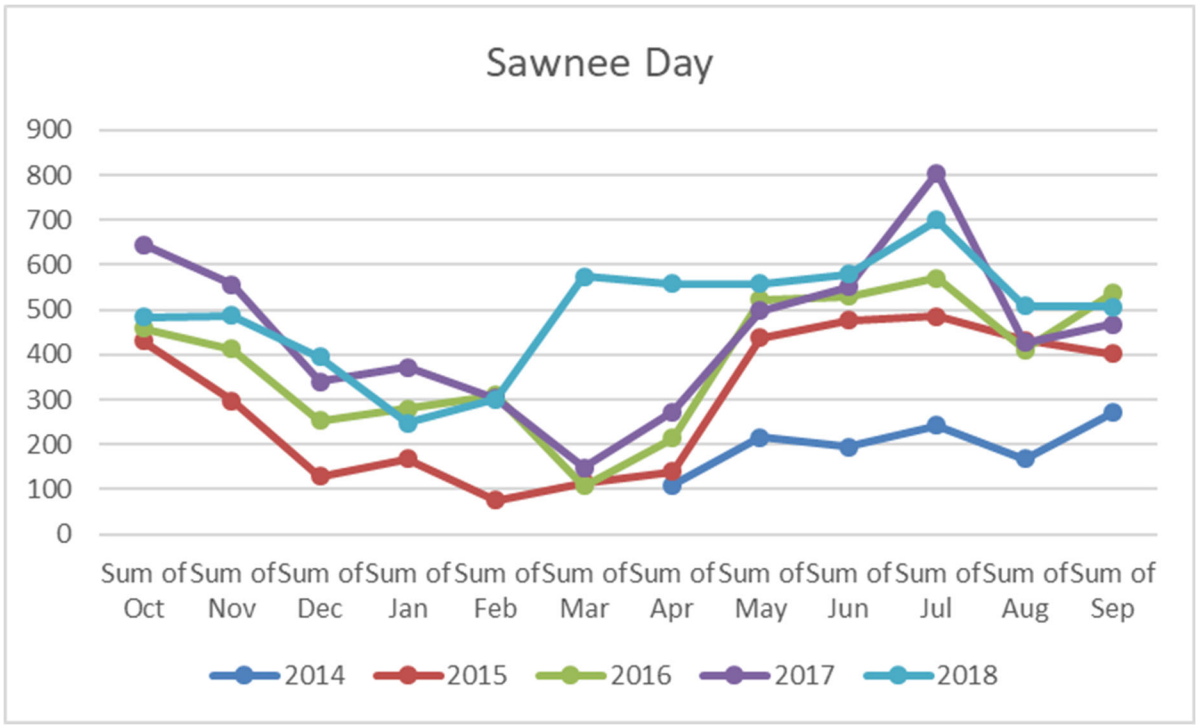

Figure C-67: Sawnee (Day) Visitation 2014-2018.

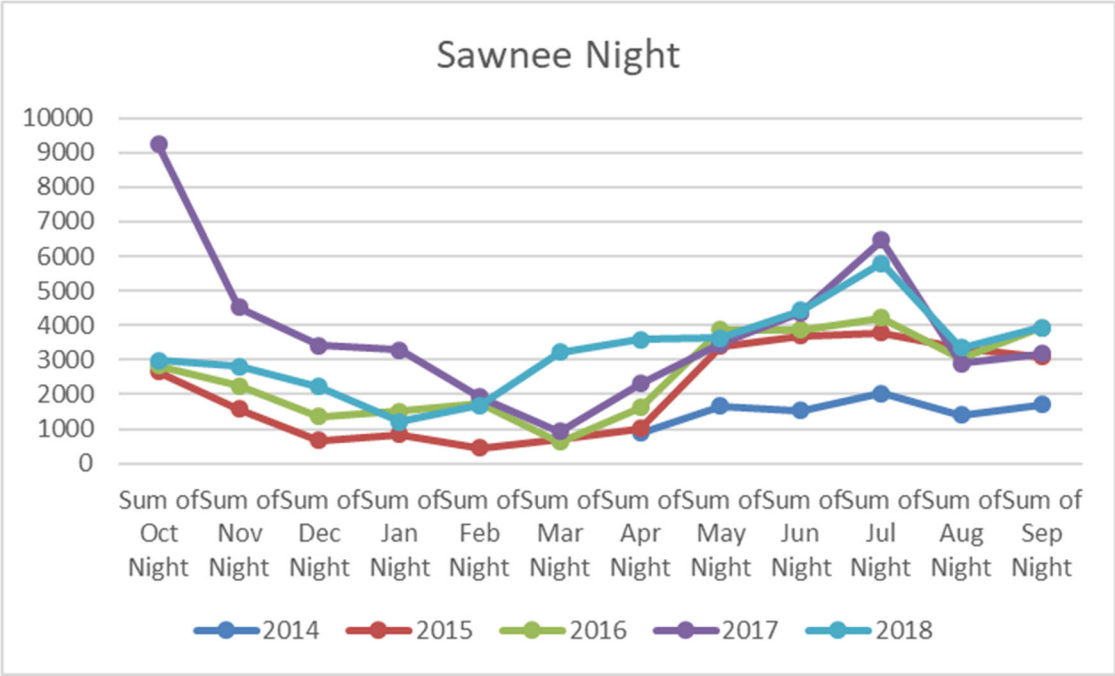

Figure C-68: Sawnee (Night) Visitation 2014-2018.

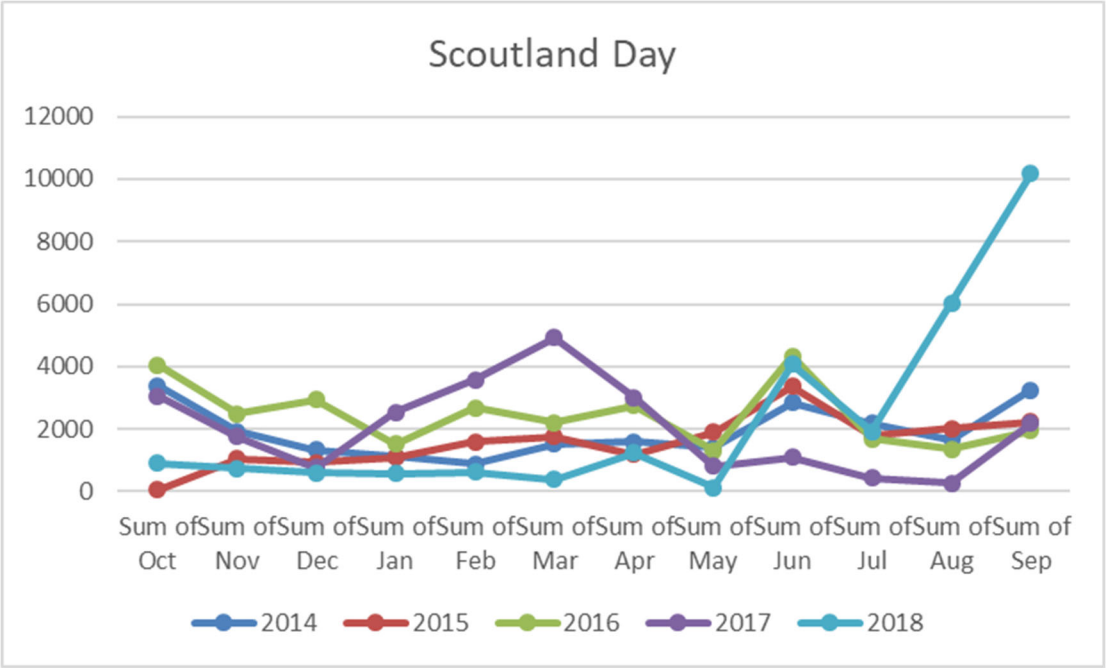

Figure C-69: Scoutland (Day) Visitation 2014-2018.

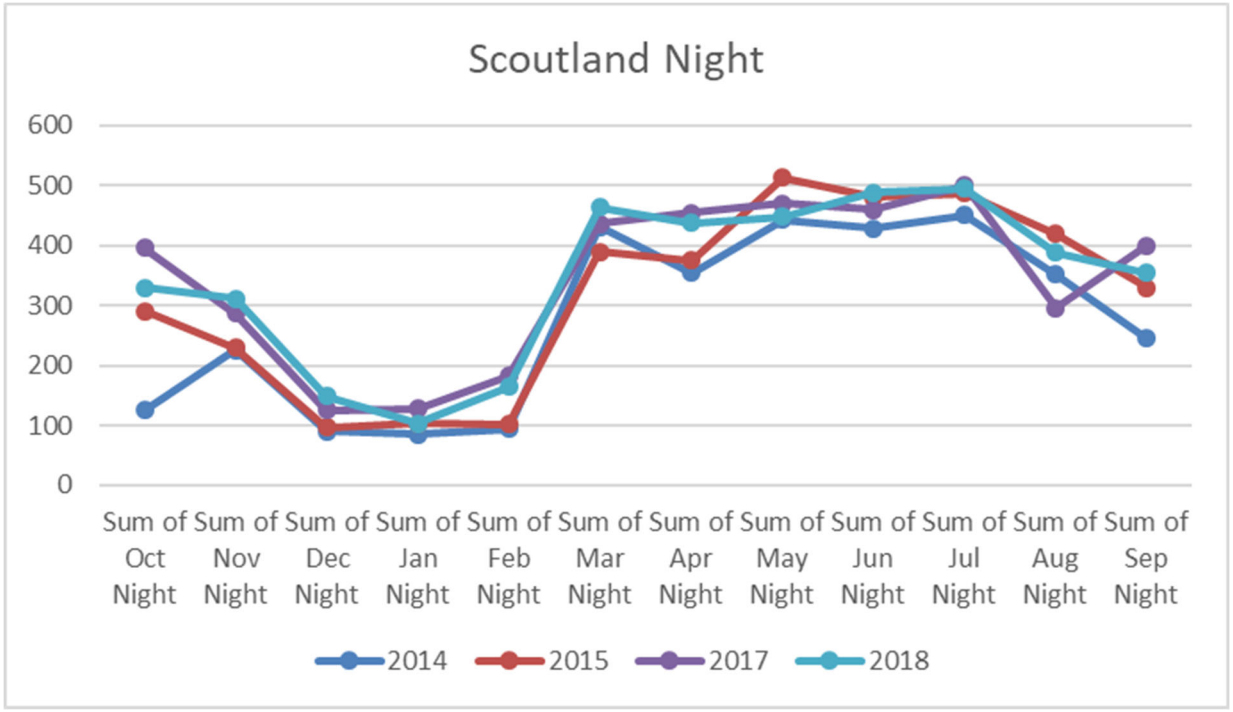

Figure C-70: Scoutland (Night) Visitation 2014-2018.

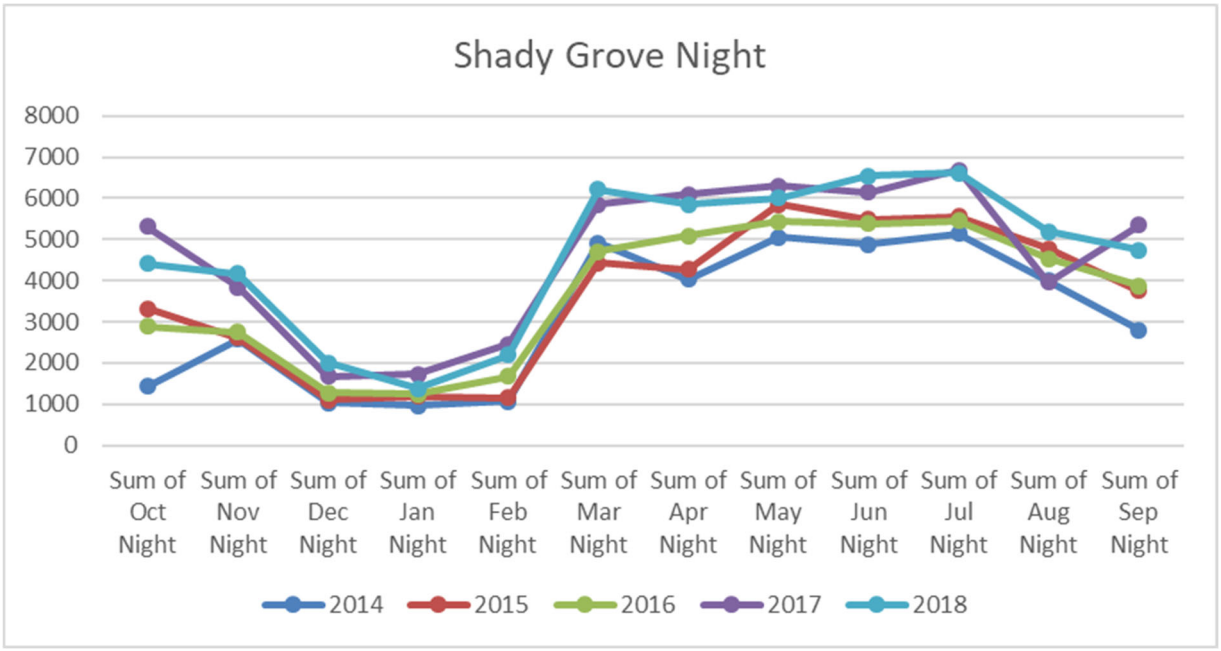

Figure C-71: Shady Grove (Night) Visitation 2014-2018.

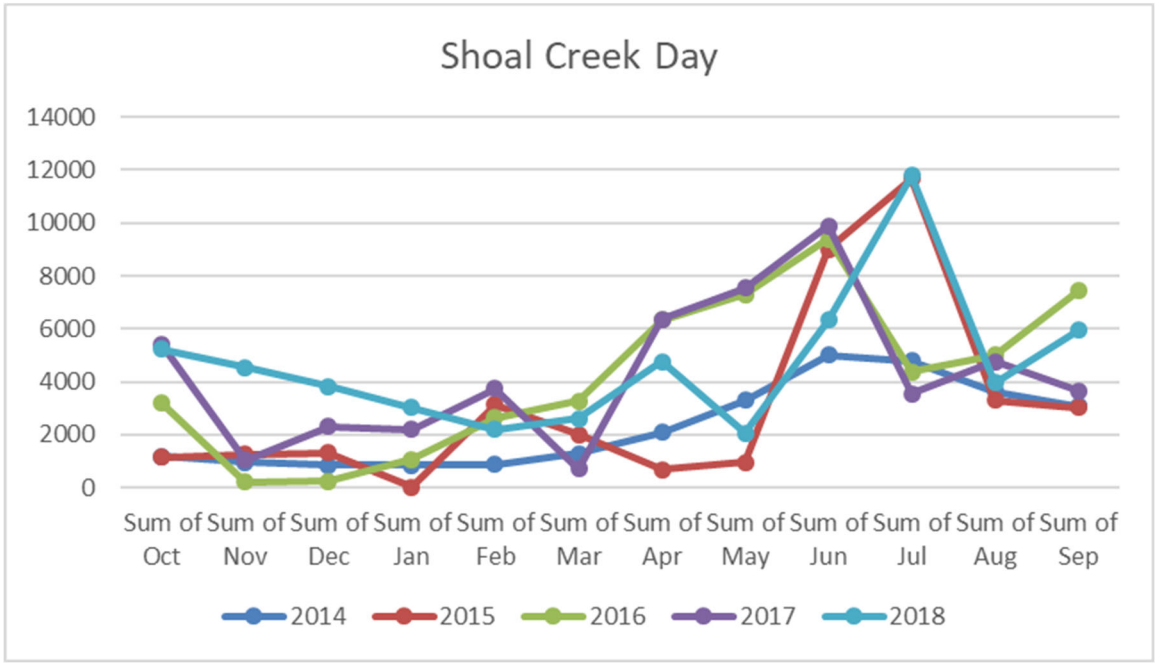

Figure C-72: Shoal Creek (Day) Visitation 2014-2018.

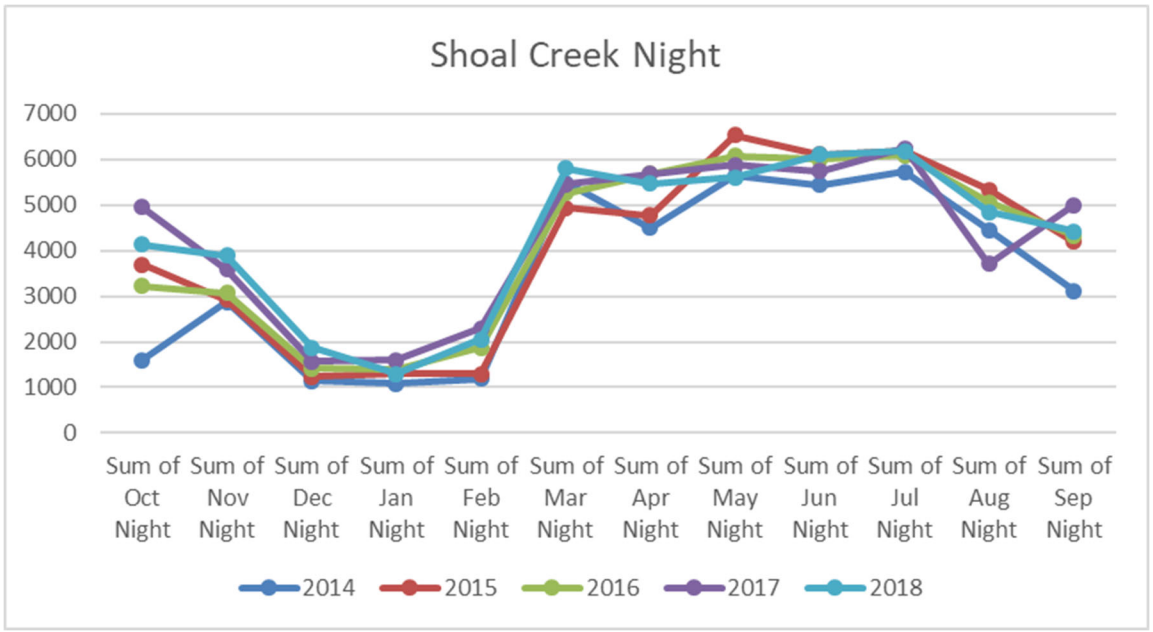

Figure C-73: Shoal Creek (Night) Visitation 2014-2018.

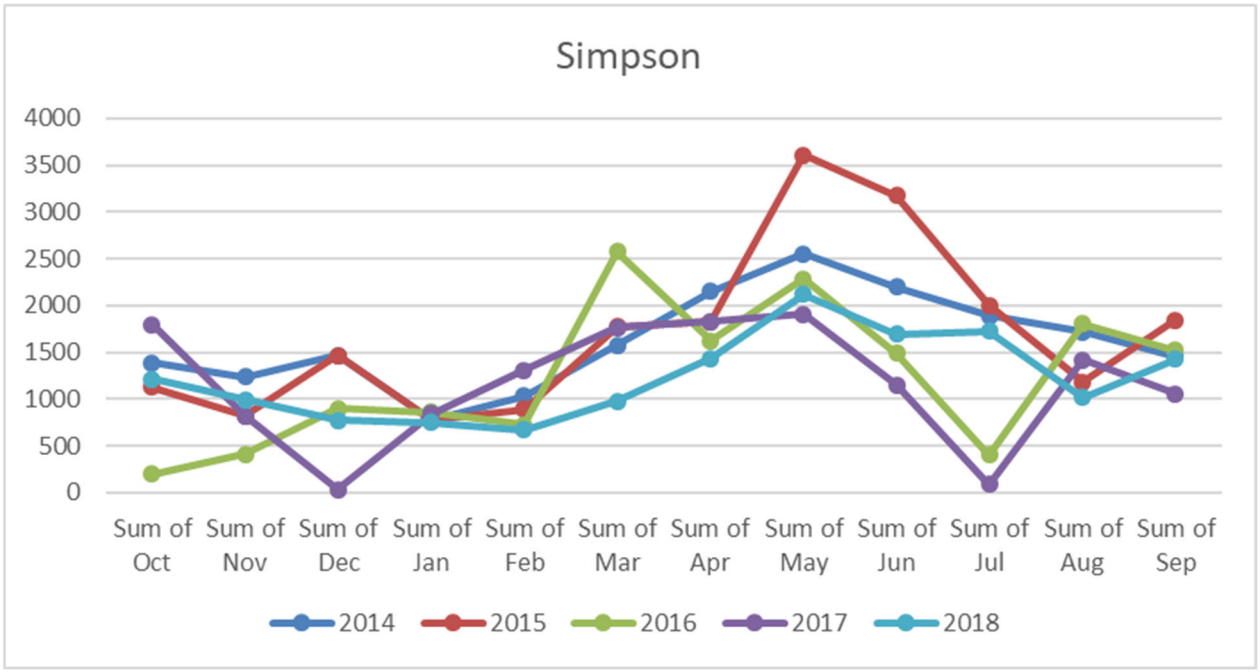

Figure C-74: Simpson Visitation 2014-2018.

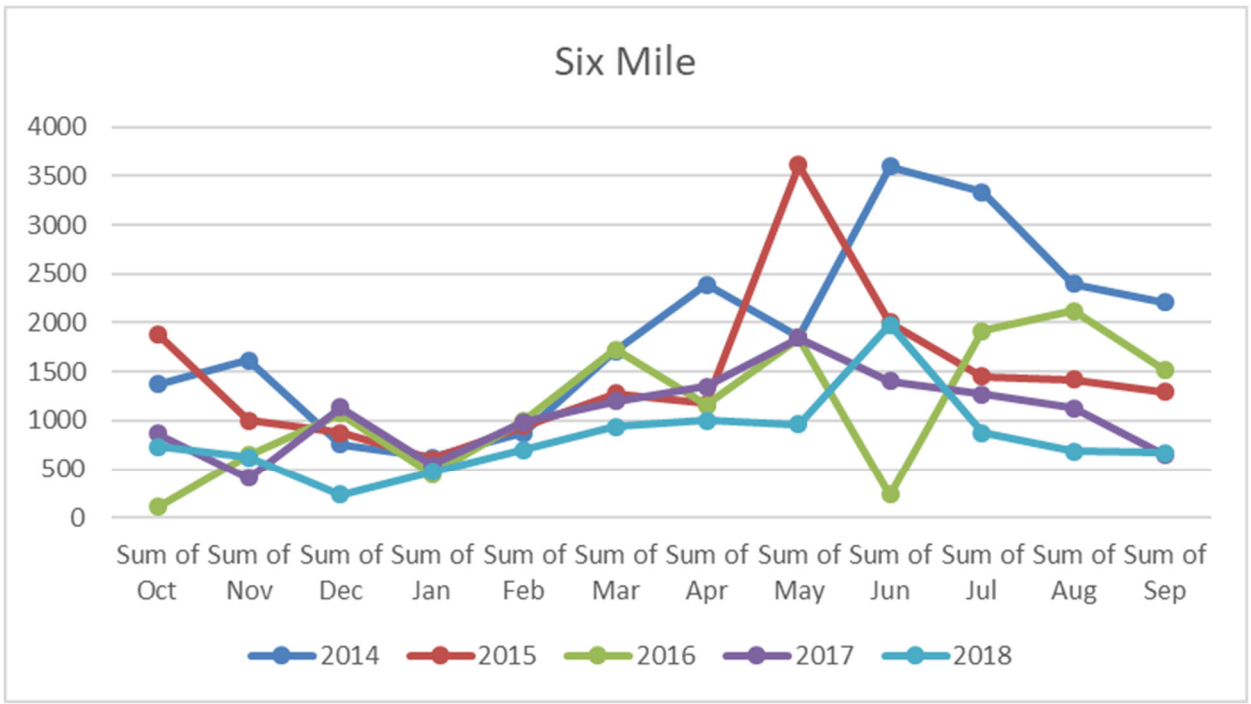

Figure C-75: Six Mile Visitation 2014-2018.

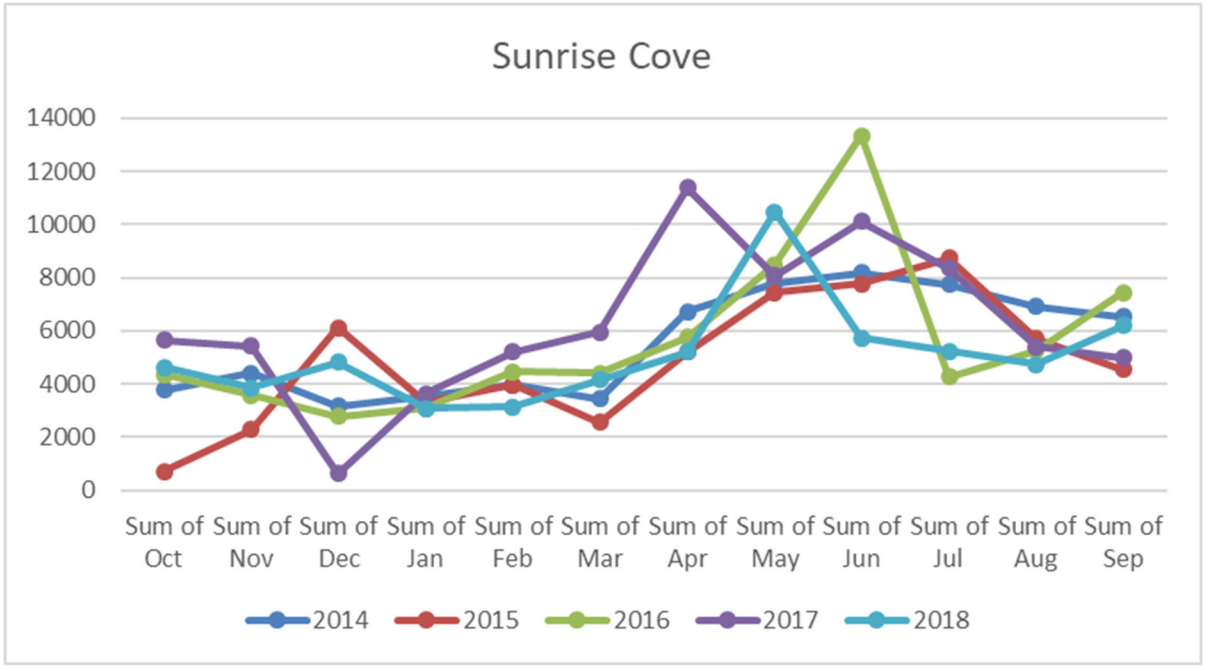

Figure C-76: Sunrise Cove Visitation 2014-2018.

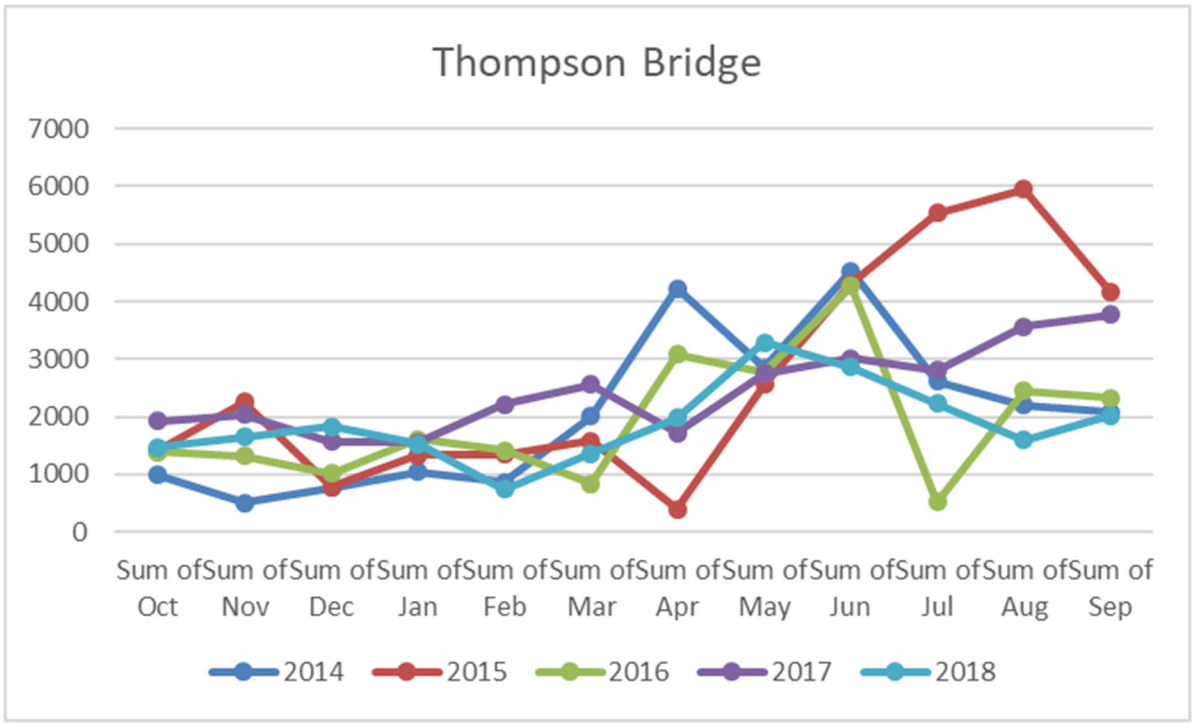

Figure C-77: Thompson Bridge Visitation 2014-2018.

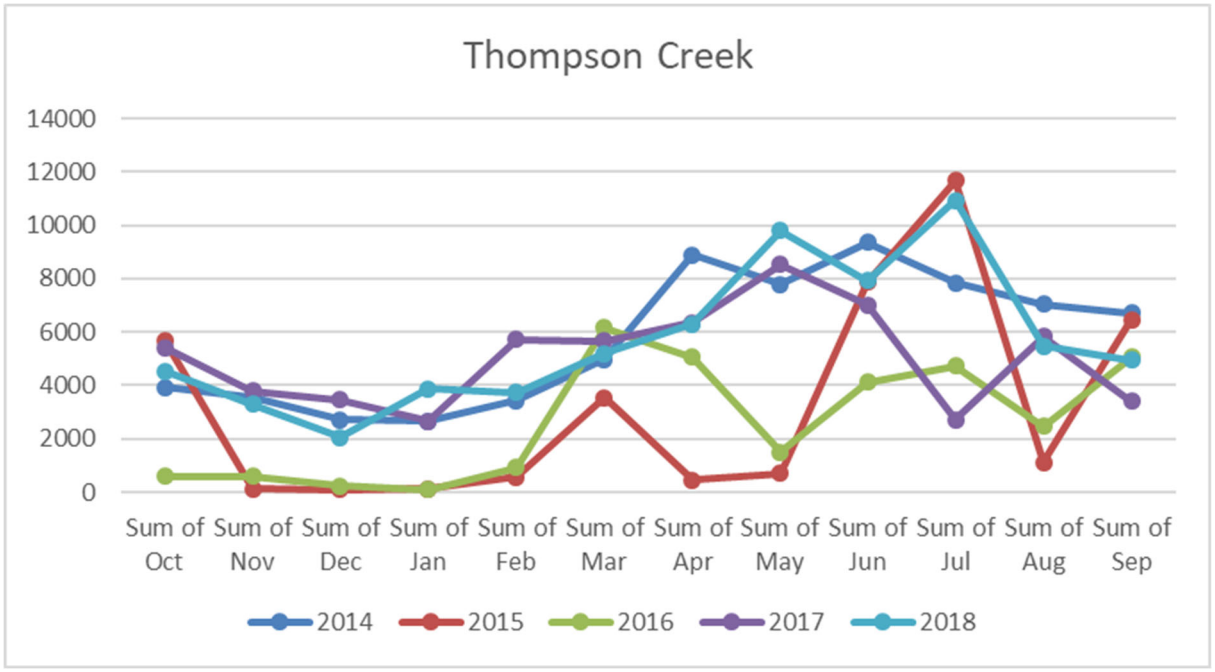

Figure C-78: Thompson Creek Visitation 2014-2018.

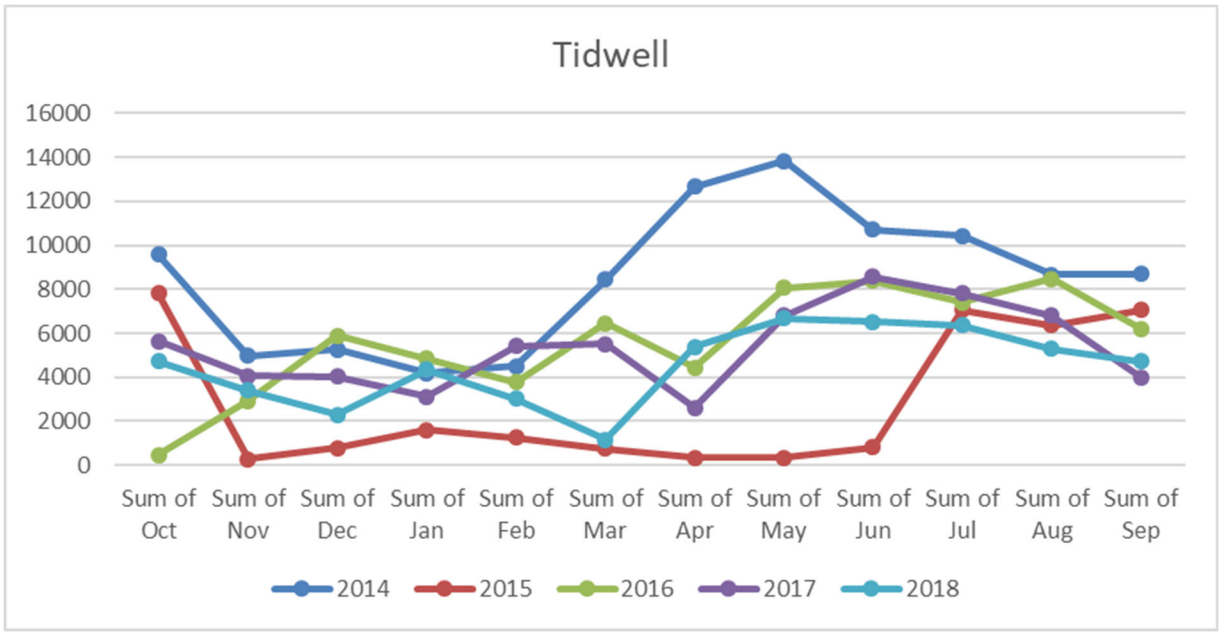

Figure C-79: Tidwell Visitation 2014-2018.

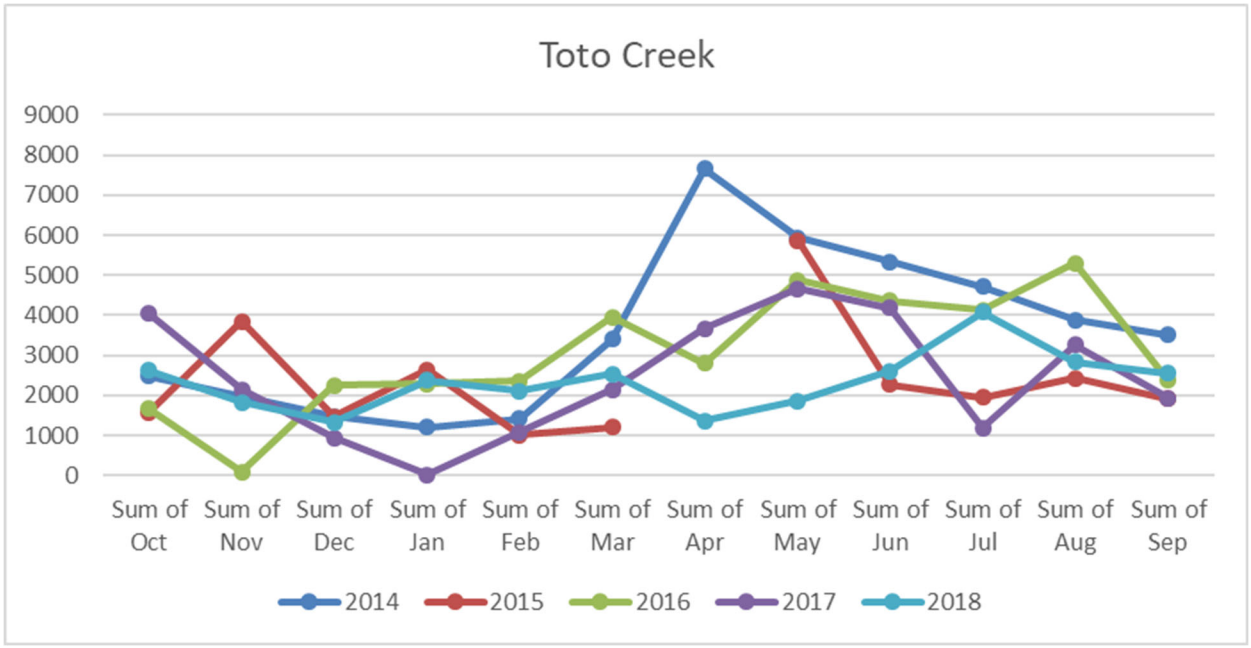

Figure C-80: Toto Creek Visitation 2014-2018.

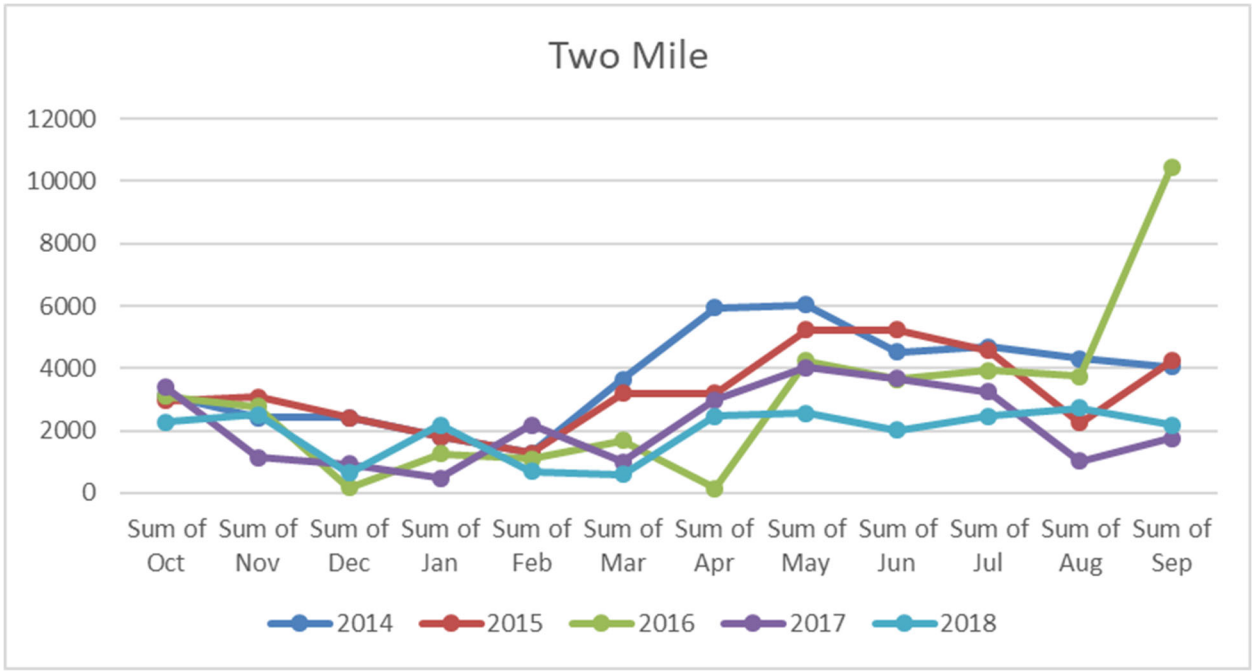

Figure C-81: Two Mile Visitation 2014-2018.

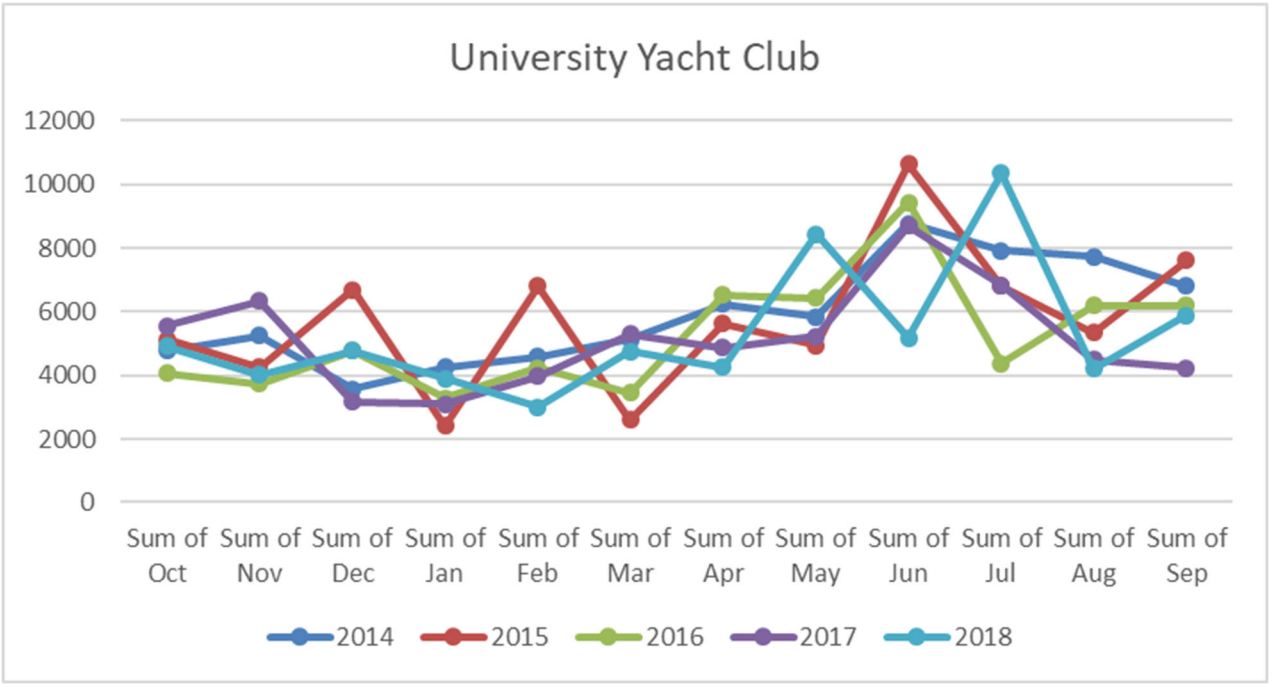

Figure C-82: University Yacht Club Visitation 2014-2018.

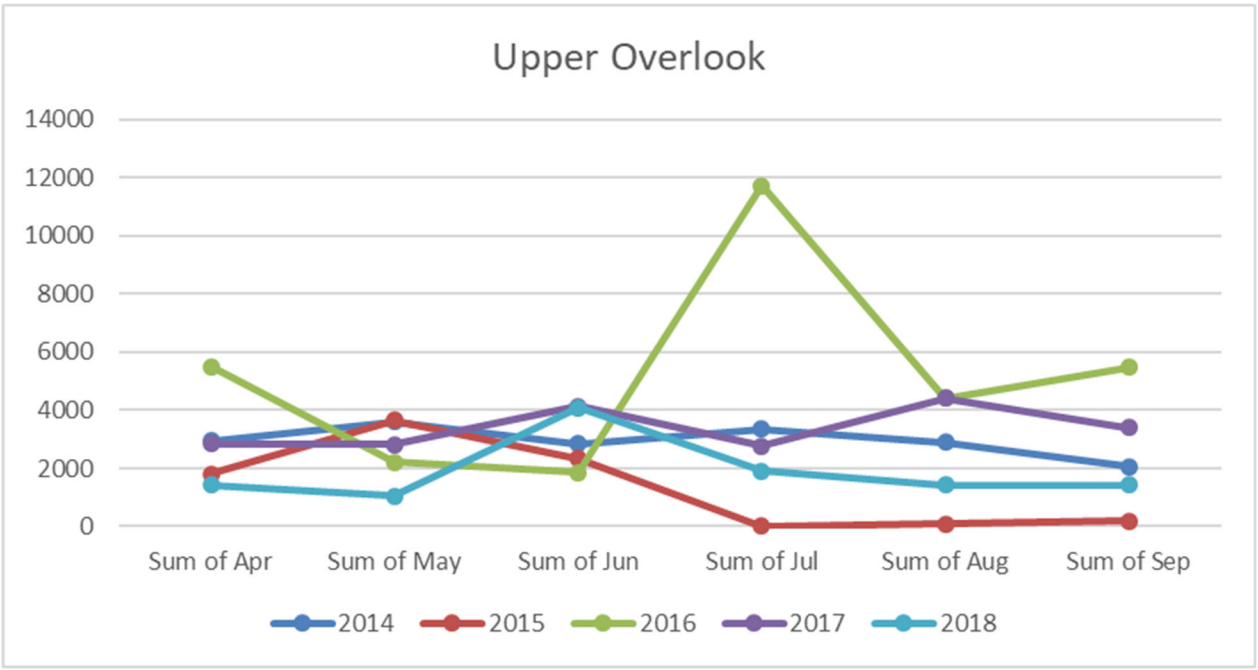

Figure C-83: Upper Overlook Visitation 2014-2018.

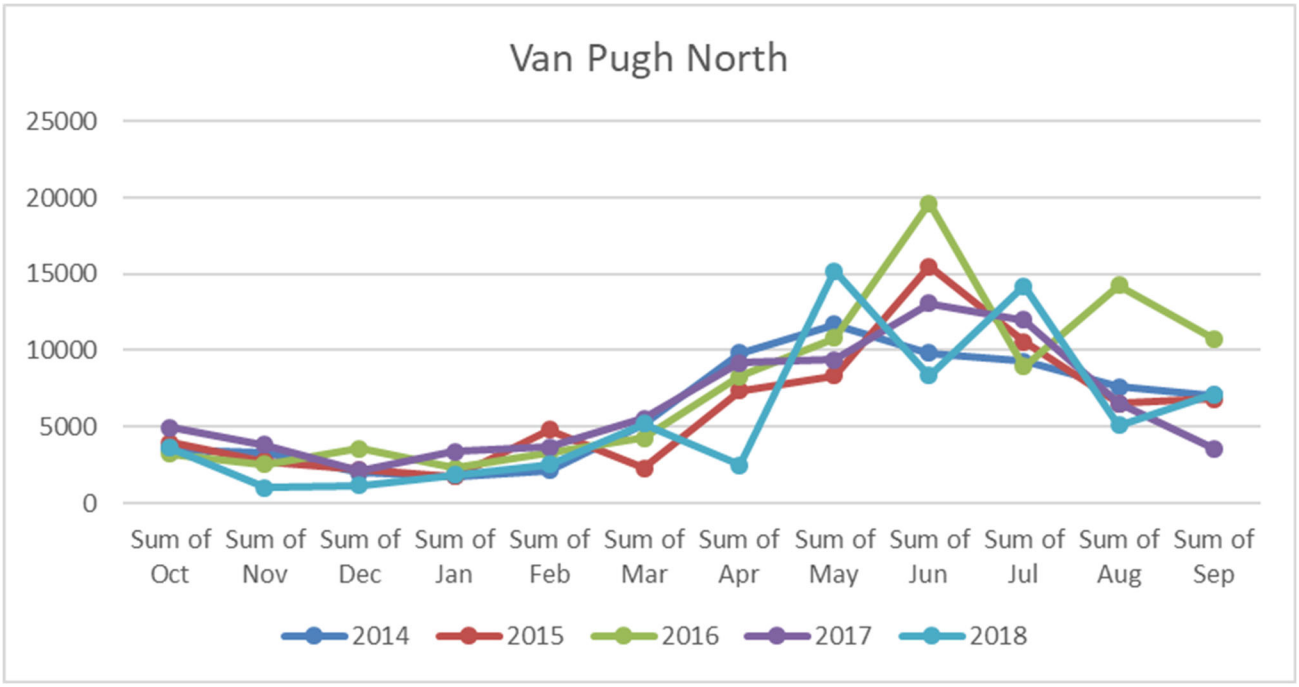

Figure C-84: Van Pugh North Visitation 2014-2018.

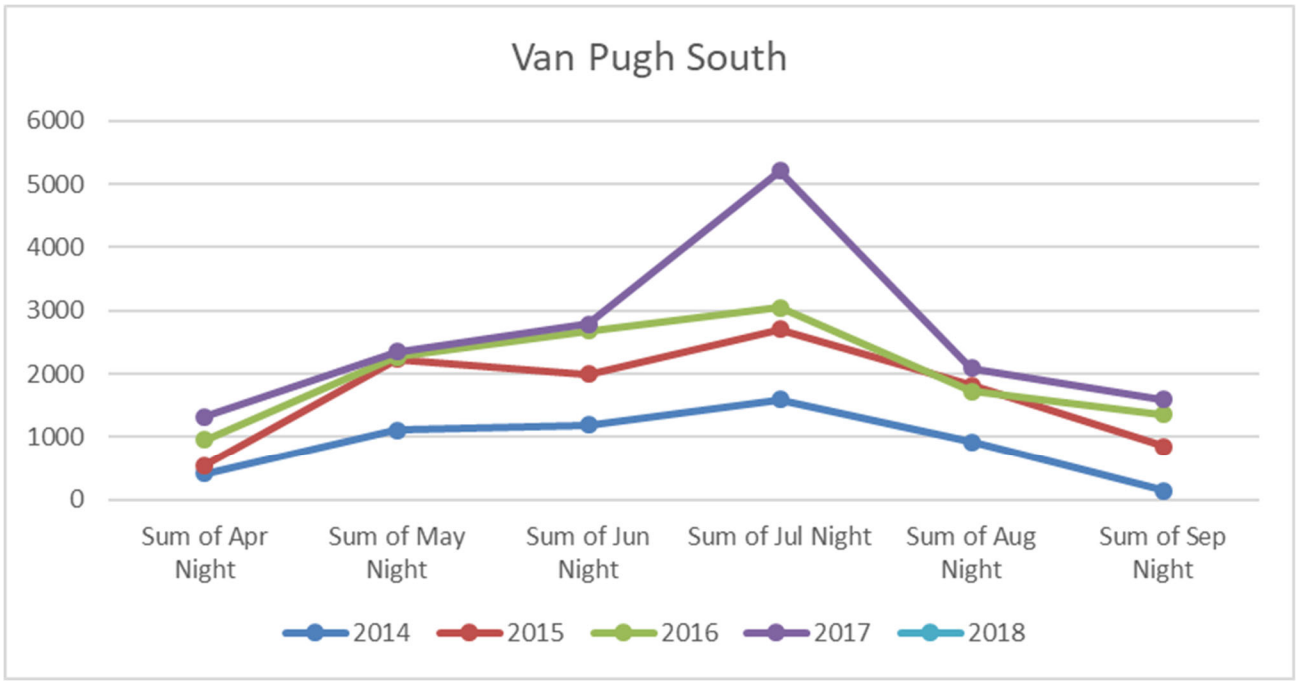

Figure C-85: Van Pugh South Visitation 2014-2018.
(Only April–September night data is available.)

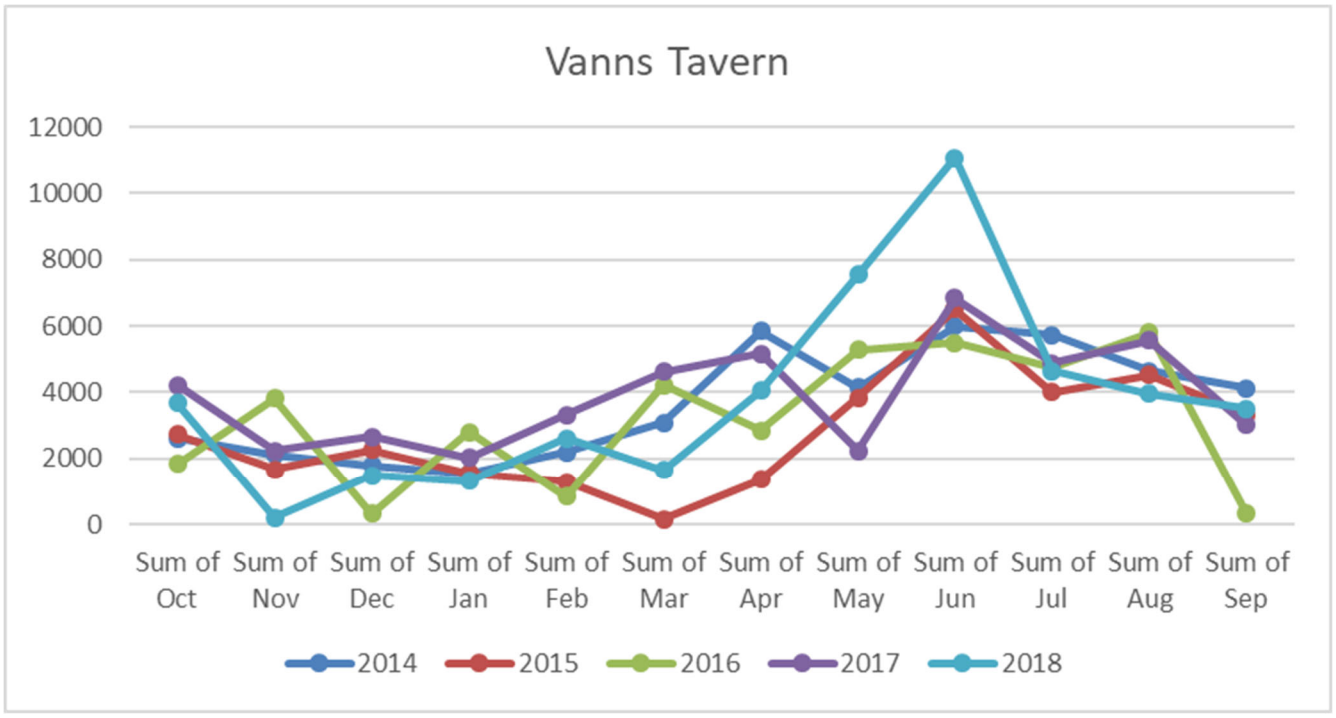

Figure C-86: Vanns Tavern Visitation 2014-2018.

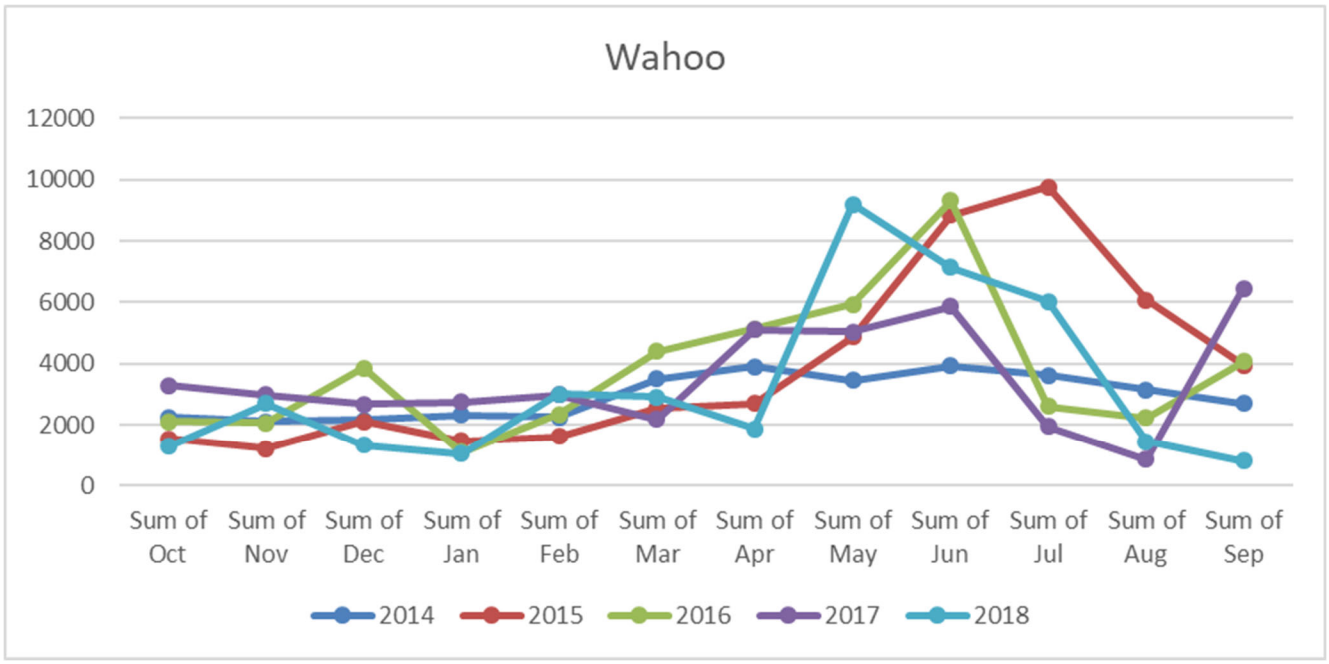

Figure C-87: Wahoo Visitation 2014-2018.

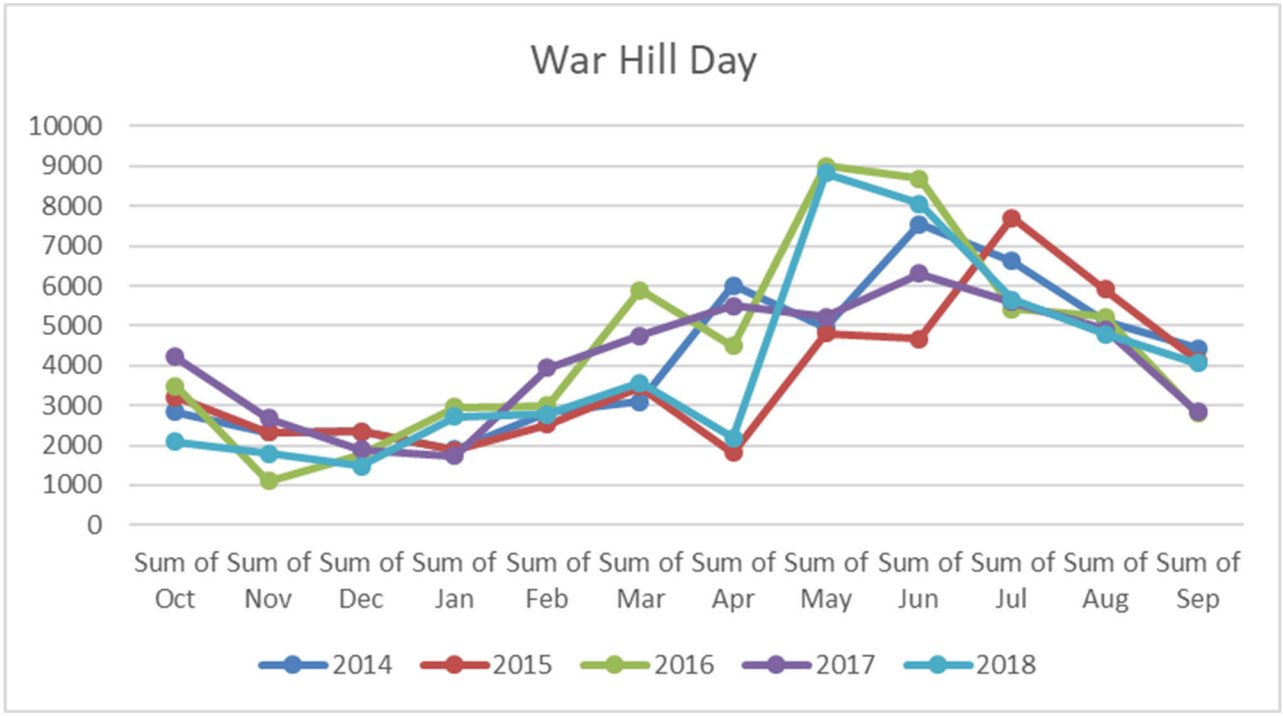

Figure C-88: War Hill (Day) Visitation 2014-2018.

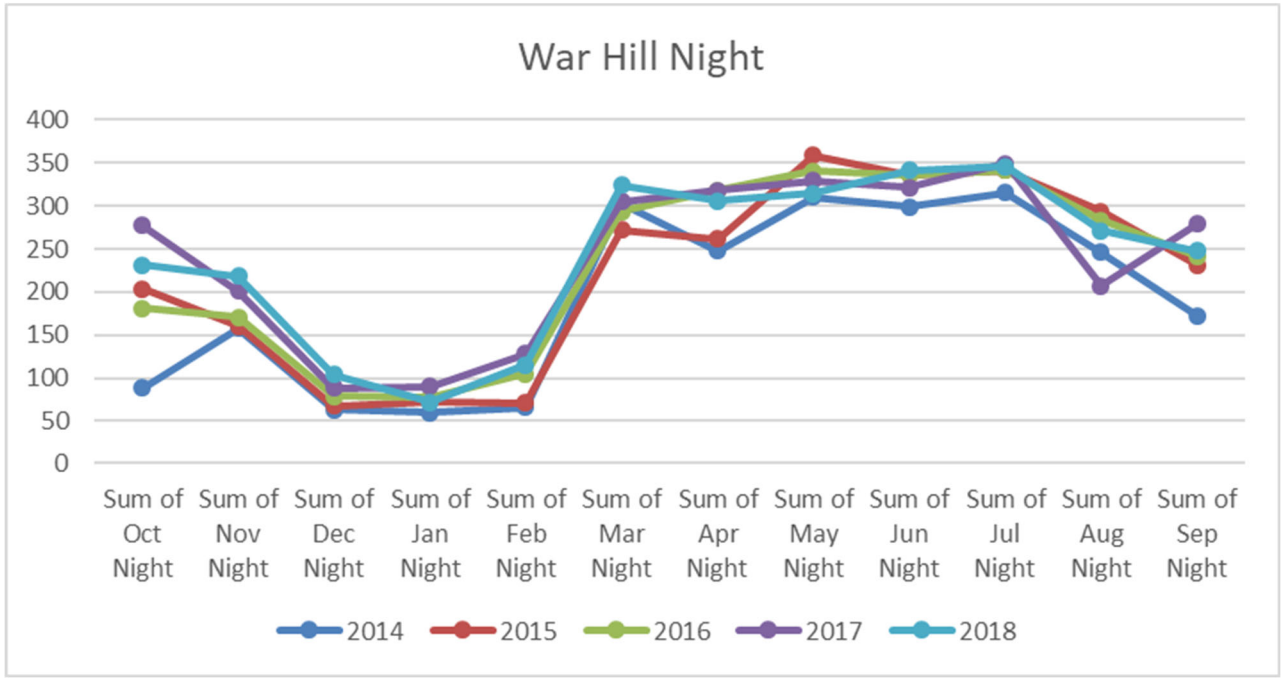

Figure C-89: War Hill (Night) Visitation 2014-2018.

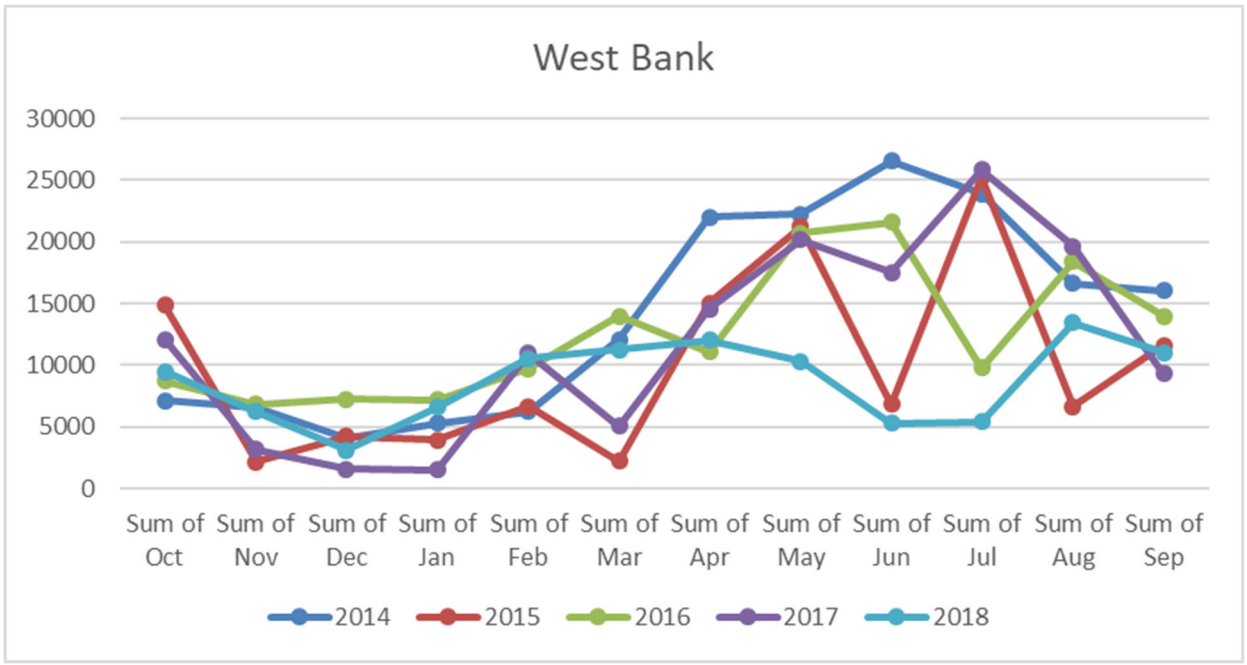

Figure C-90: West Bank Visitation 2014-2018.

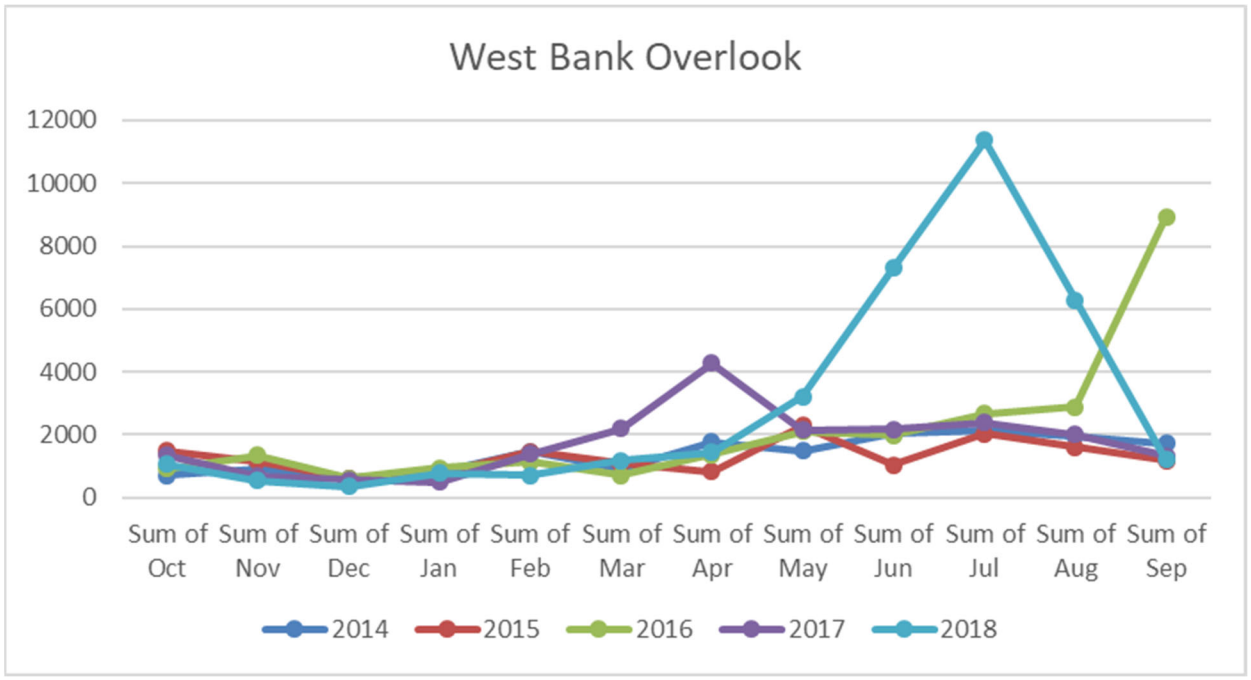

Figure C-91: West Bank Overlook Visitation 2014-2018.

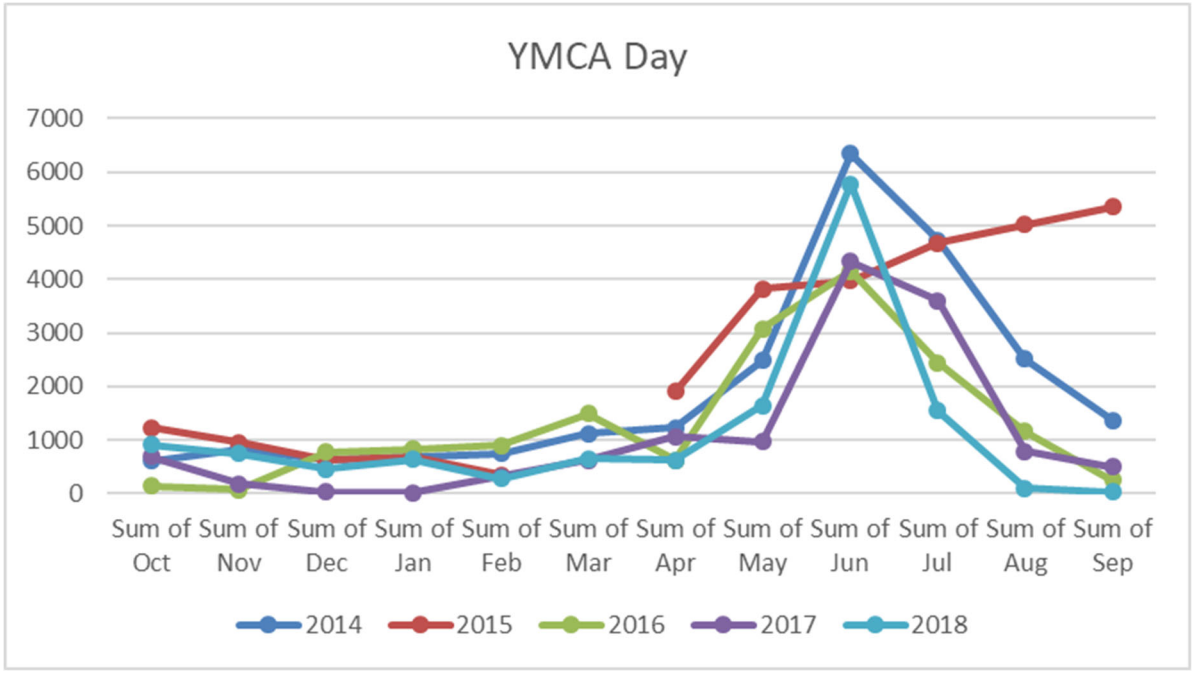

Figure C-92: YMCA (Day) Visitation 2014-2018.

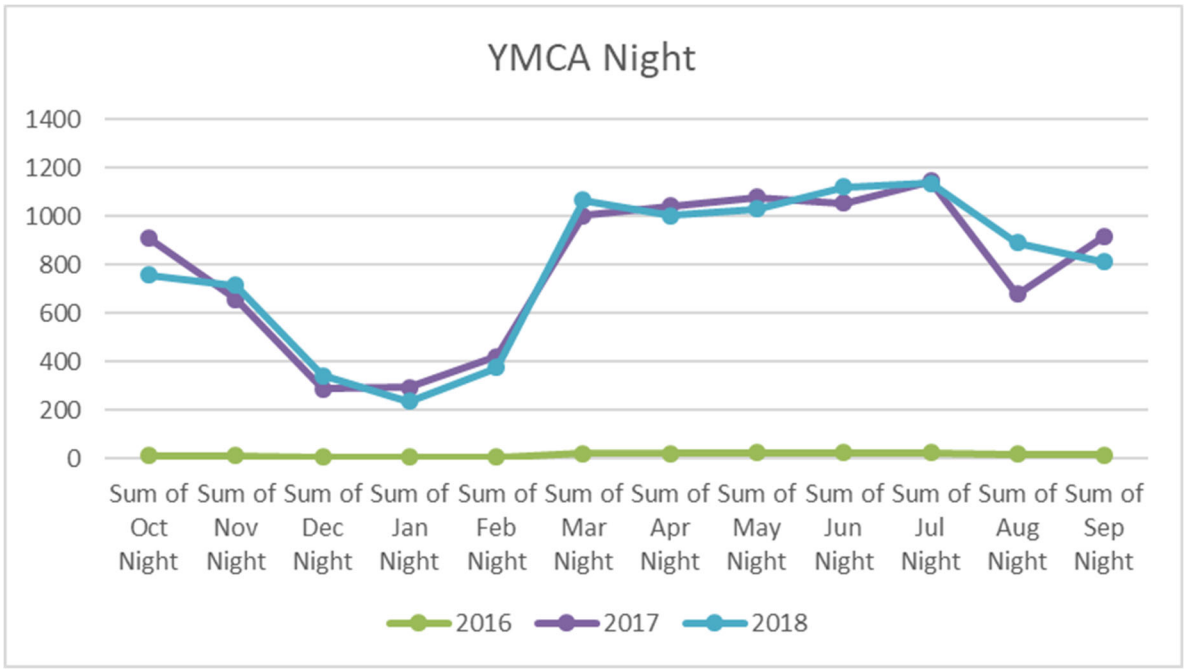

Figure C-93: YMCA (Night) Visitation 2014-2018.
(Data not available for 2014–2015; only night data available for 2016-2018.)

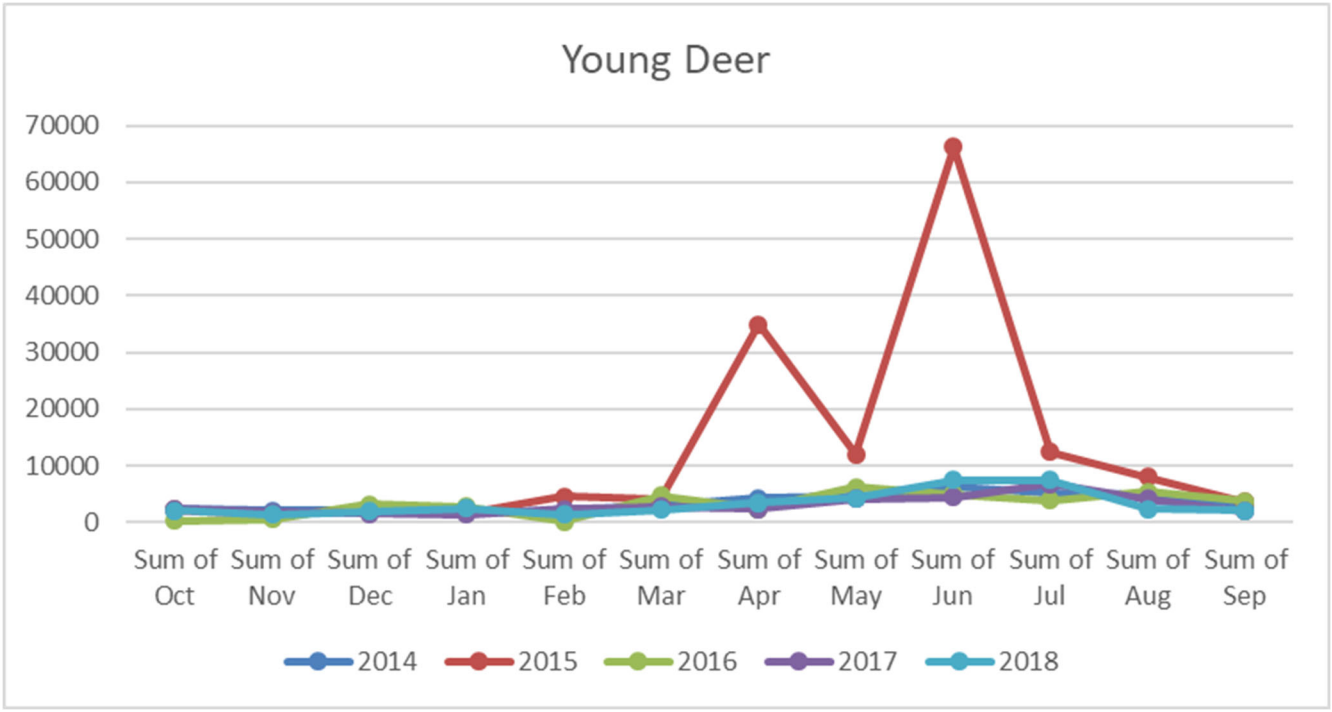

Figure C-94: Young Deer Visitation 2014-2018.

D. RECREATION CARRYING CAPACITY

It is important to establish the carrying capacity of a project so that there are appropriate parking and facilities and so that the quality of the recreation experience is maintained. Recreation carrying capacity can be analyzed in several ways. For this analysis, the parking spaces and general visitation data were used to establish general recreation carrying capacity. To determine peak season weekend day visitation, 2014-2018 visitation data for May through September is summed to determine the average base values. Design load is calculated using the following equation:

$$\frac{\text{Number of Peak Season Visits x Percent of Visitation Occurring on Weekends}}{\text{Number of Peak Season Weekend Days}}$$

High-usage PSAs selected for analysis were calculated with a turnover rate of 2 and 2 visitors per vehicle. The only exception is Buford Dam Park, which was calculated with a turnover rate of 1 and 1 visitor per vehicle.

The project decided on these numbers using its knowledge because it was a better representation of Lake Lanier's visitor usage of the recreation areas than the broad analysis applied to all capacity studies. In normal-usage PSAs, the values for Day Use Hours and Visitors per Vehicle were determined with project data specific to each individual survey type/PSA. The tables below show the values of each PSA's design load and parking demand.

PSAs shown in the above figures that do not have enough consistent data to calculate the design load were omitted from these tables.

There is some uncertainty in the analysis related to multiple factors including population projections, individual PSA turnover rates and variance in per capita use rate from year to year. The net difference in parking capacity, therefore, can vary from what is displayed below.

The campground formula is different from the typical PSAs that were explained above; therefore, a different formula was used. Turnover became 36 hours, which is represented by the number 1 in the formula, because campers stay the whole weekend when they camp. Maximum people per campsite was given the placeholder of 8 in the formula because of the maximum number of visitors who can be at a campsite. Maximum Campground Occupancy is determined by using the maximum number of visitors multiplied by the number of campsites. Maximum Campground Occupancy is then subtracted by the design load to get the net difference. The net differences are then divided by the maximum number of people per campsite (8), which then determines the Campsite Forecast.

Table C-4: American Legion Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	20500	36171	11271594	0.32%	56.68%	22	75%	44	349.43182
2015	16377	36565	11152173	0.33%	44.79%	22	75%	44	279.15341
2016	10176	17912	12256543	0.15%	56.81%	22	75%	44	173.45455
2017	7948	17305	11517491	0.15%	45.93%	22	75%	44	135.47727
2018	10075	17223	11731178	0.15%	58.50%	22	75%	44	171.73295
2019	13368	25444	11650303	0.22%	52.54%	22	75%	44	227.86364
2020	13964	26577	12168993	0.22%	52.54%	22	75%	44	238.02273
2025	14962	28478	13039395	0.22%	52.54%	22	75%	44	255.03409
2030	15961	30379	13909798	0.22%	52.54%	22	75%	44	272.0625
2035	16959	32279	14780200	0.22%	52.54%	22	75%	44	289.07386
2040	17958	34180	15650603	0.22%	52.54%	22	75%	44	306.10227
2045	18957	36081	16521005	0.22%	52.54%	22	75%	44	323.13068
2050	19956	37982	17391407	0.22%	52.54%	22	75%	44	340.15909

Table C-5: American Legion Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	349	2.5	4.80	2.1	35	100	65
2015	279	2.5	4.80	2.1	28	100	72
2016	173	2.5	4.80	2.1	17	100	83
2017	135	2.5	4.80	2.1	13	100	87
2018	172	2.5	4.80	2.1	17	100	83
2019	228	2.5	4.80	2.1	23	100	77
2020	238	2.5	4.80	2.1	24	100	76
2025	255	2.5	4.80	2.1	25	100	75
2030	272	2.5	4.80	2.1	27	100	73
2035	289	2.5	4.80	2.1	29	100	71
2040	306	2.5	4.80	2.1	30	100	70
2045	323	2.5	4.80	2.1	32	100	68
2050	340	2.5	4.80	2.1	34	100	66

Table C-6: Aqualand Marina Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	100647	177940	11271594	1.58%	56.56%	22	75%	44	1715.5739
2015	150018	216713	11152173	1.94%	69.22%	22	75%	44	2557.125
2016	132938	264812	12256543	2.16%	50.20%	22	75%	44	2265.9886
2017	152734	214657	11517491	1.86%	71.15%	22	75%	44	2603.4205
2018	156816	232876	11731178	1.99%	67.34%	22	75%	44	2673
2019	139683	222086	11650303	1.91%	62.90%	22	75%	44	2380.9602
2020	145901	231973	12168993	1.91%	62.90%	22	75%	44	2486.9489
2025	156337	248565	13039395	1.91%	62.90%	22	75%	44	2664.8352
2030	166773	265158	13909798	1.91%	62.90%	22	75%	44	2842.7216
2035	177209	281750	14780200	1.91%	62.90%	22	75%	44	3020.608
2040	187645	298342	15650603	1.91%	62.90%	22	75%	44	3198.4943
2045	198080	314934	16521005	1.91%	62.90%	22	75%	44	3376.3636
2050	208516	331526	17391407	1.91%	62.90%	22	75%	44	3554.25

Table C-7: Aqualand Marina Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1716	2.5	4.80	2.1	170	429	259
2015	2557	2.5	4.80	2.1	254	429	175
2016	2266	2.5	4.80	2.1	225	429	204
2017	2603	2.5	4.80	2.1	258	429	171
2018	2673	2.5	4.80	2.1	265	429	164
2019	2381	2.5	4.80	2.1	236	429	193
2020	2487	2.5	4.80	2.1	247	429	182
2025	2665	2.5	4.80	2.1	264	429	165
2030	2843	2.5	4.80	2.1	282	429	147
2035	3021	2.5	4.80	2.1	300	429	129
2040	3198	2.5	4.80	2.1	317	429	112
2045	3376	2.5	4.80	2.1	335	429	94
2050	3554	2.5	4.80	2.1	353	429	76

Table C-8: Athens Boat Club Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	42588	86881	11271594	0.77%	49.02%	22	75%	44	725.93182
2015	43657	130834	11152173	1.17%	33.37%	22	75%	44	744.15341
2016	46588	82998	12256543	0.68%	56.13%	22	75%	44	794.11364
2017	45015	102585	11517491	0.89%	43.88%	22	75%	44	767.30114
2018	43962	97015	11731178	0.83%	45.31%	22	75%	44	749.35227
2019	46042	101097	11650303	0.87%	45.54%	22	75%	44	784.80682
2020	48092	105598	12168993	0.87%	45.54%	22	75%	44	819.75
2025	51532	113151	13039395	0.87%	45.54%	22	75%	44	878.38636
2030	54972	120704	13909798	0.87%	45.54%	22	75%	44	937.02273
2035	58412	128257	14780200	0.87%	45.54%	22	75%	44	995.65909
2040	61852	135810	15650603	0.87%	45.54%	22	75%	44	1054.2955
2045	65291	143363	16521005	0.87%	45.54%	22	75%	44	1112.9148
2050	68731	150916	17391407	0.87%	45.54%	22	75%	44	1171.5511

Table C-9: Athens Boat Club Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	726	3.1	3.87	2.6	72	31	-41
2015	744	3.1	3.87	2.6	74	31	-43
2016	794	3.1	3.87	2.6	79	31	-48
2017	767	3.1	3.87	2.6	76	31	-45
2018	749	3.1	3.87	2.6	74	31	-43
2019	785	3.1	3.87	2.6	78	31	-47
2020	820	3.1	3.87	2.6	81	31	-50
2025	878	3.1	3.87	2.6	87	31	-56
2030	937	3.1	3.87	2.6	93	31	-62
2035	996	3.1	3.87	2.6	99	31	-68
2040	1054	3.1	3.87	2.6	105	31	-74
2045	1113	3.1	3.87	2.6	111	31	-80
2050	1172	3.1	3.87	2.6	116	31	-85

Table C-10: Auraria Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	11138	20472	11271594	0.18%	54.41%	22	75%	44	189.85227
2015	16737	43710	11152173	0.39%	38.29%	22	75%	44	285.28977
2016	15461	23248	12256543	0.19%	66.50%	22	75%	44	263.53977
2017	23206	23283	11517491	0.20%	99.67%	22	75%	44	395.55682
2018	14755	22796	11731178	0.19%	64.73%	22	75%	44	251.50568
2019	17488	27022	11650303	0.23%	64.72%	22	75%	44	298.09091
2020	18267	28225	12168993	0.23%	64.72%	22	75%	44	311.36932
2025	19574	30244	13039395	0.23%	64.72%	22	75%	44	333.64773
2030	20880	32263	13909798	0.23%	64.72%	22	75%	44	355.90909
2035	22187	34282	14780200	0.23%	64.72%	22	75%	44	378.1875
2040	23494	36301	15650603	0.23%	64.72%	22	75%	44	400.46591
2045	24800	38319	16521005	0.23%	64.72%	22	75%	44	422.72727
2050	26107	40338	17391407	0.23%	64.72%	22	75%	44	445.00568

Table C-11: Auraria Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	190	1	12.00	1.7	9	28	19
2015	285	1	12.00	1.7	14	28	14
2016	264	1	12.00	1.7	13	28	15
2017	396	1	12.00	1.7	19	28	9
2018	252	1	12.00	1.7	12	28	16
2019	298	1	12.00	1.7	15	28	13
2020	311	1	12.00	1.7	15	28	13
2025	334	1	12.00	1.7	16	28	12
2030	356	1	12.00	1.7	17	28	11
2035	378	1	12.00	1.7	19	28	9
2040	400	1	12.00	1.7	20	28	8
2045	423	1	12.00	1.7	21	28	7
2050	445	1	12.00	1.7	22	28	6

Table C-12: Bald Ridge Creek Campground Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	3325	30967	11271594	0.27%	10.74%	22	75%	44	56.676136
2015	3877	34880	11152173	0.31%	11.12%	22	75%	44	66.085227
2016	3917	36635	12256543	0.30%	10.69%	22	75%	44	66.767045
2017	4461	49996	11517491	0.43%	8.92%	22	75%	44	76.039773
2018	4347	43578	11731178	0.37%	9.98%	22	75%	44	74.096591
2019	4056	39424	11650303	0.34%	10.29%	22	75%	44	69.136364
2020	4237	41179	12168993	0.34%	10.29%	22	75%	44	72.221591
2025	4540	44124	13039395	0.34%	10.29%	22	75%	44	77.386364
2030	4843	47070	13909798	0.34%	10.29%	22	75%	44	82.551136
2035	5146	50015	14780200	0.34%	10.29%	22	75%	44	87.715909
2040	5449	52960	15650603	0.34%	10.29%	22	75%	44	92.880682
2045	5752	55906	16521005	0.34%	10.29%	22	75%	44	98.045455
2050	6055	58851	17391407	0.34%	10.29%	22	75%	44	103.21023

Table C-13: Bald Ridge Creek Campground Parking Demand.

Year	Design Load	Turnover (36/Day Use Hours per Visitor)	Maximum People Per Campsite	Campsites	Maximum Campground Occupancy	Net Differences	Campsite Forecast
2014	57	1	8	82	656	599	75
2015	66	1	8	82	656	590	74
2016	67	1	8	82	656	589	74
2017	76	1	8	82	656	580	73
2018	74	1	8	82	656	582	73
2019	69	1	8	82	656	587	73
2020	72	1	8	82	656	584	73
2025	77	1	8	82	656	579	72
2030	83	1	8	82	656	573	72
2035	88	1	8	82	656	568	71
2040	93	1	8	82	656	563	70
2045	98	1	8	82	656	558	70
2050	103	1	8	82	656	553	69

Table C-14: Bald Ridge Creek Marina Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	90820	153578	11271594	1.36%	59.14%	22	75%	44	1548.0682
2015	77538	139073	11152173	1.25%	55.75%	22	75%	44	1321.6705
2016	251545	314320	12256543	2.56%	80.03%	22	75%	44	4287.6989
2017	66409	114815	11517491	1.00%	57.84%	22	75%	44	1131.9716
2018	80885	129879	11731178	1.11%	62.28%	22	75%	44	1378.7216
2019	106850	169584	11650303	1.46%	63.01%	22	75%	44	1821.3068
2020	111607	177134	12168993	1.46%	63.01%	22	75%	44	1902.392
2025	119590	189804	13039395	1.46%	63.01%	22	75%	44	2038.4659
2030	127572	202473	13909798	1.46%	63.01%	22	75%	44	2174.5227
2035	135555	215143	14780200	1.46%	63.01%	22	75%	44	2310.5966
2040	143538	227813	15650603	1.46%	63.01%	22	75%	44	2446.6705
2045	151521	240482	16521005	1.46%	63.01%	22	75%	44	2582.7443
2050	159504	253152	17391407	1.46%	63.01%	22	75%	44	2718.8182

Table C-15: Bald Ridge Creek Marina Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1548	2.5	4.80	2.1	154	428	274
2015	1322	2.5	4.80	2.1	131	428	297
2016	4288	2.5	4.80	2.1	425	428	3
2017	1132	2.5	4.80	2.1	112	428	316
2018	1379	2.5	4.80	2.1	137	428	291
2019	1821	2.5	4.80	2.1	181	428	247
2020	1902	2.5	4.80	2.1	189	428	239
2025	2038	2.5	4.80	2.1	202	428	226
2030	2175	2.5	4.80	2.1	216	428	212
2035	2311	2.5	4.80	2.1	229	428	199
2040	2447	2.5	4.80	2.1	243	428	185
2045	2583	2.5	4.80	2.1	256	428	172
2050	2719	2.5	4.80	2.1	270	428	158

Table C-16: Balus Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	42424	87388	11271594	0.78%	48.55%	22	75%	44	723.14
2015	39963	72978	11152173	0.65%	54.76%	22	75%	44	681.19
2016	40152	79896	12256543	0.65%	50.26%	22	75%	44	684.41
2017	33797	72242	11517491	0.63%	46.78%	22	75%	44	576.09
2018	37492	70768	11731178	0.60%	52.98%	22	75%	44	639.07
2019	39099	77172	11650303	0.66%	50.66%	22	75%	44	666.46
2020	40840	80608	12168993	0.66%	50.66%	22	75%	44	696.14
2025	43761	86374	13039395	0.66%	50.66%	22	75%	44	745.93
2030	46682	92139	13909798	0.66%	50.66%	22	75%	44	795.72
2035	49603	97905	14780200	0.66%	50.66%	22	75%	44	845.51
2040	52524	103670	15650603	0.66%	50.66%	22	75%	44	895.30
2045	55446	109436	16521005	0.66%	50.66%	22	75%	44	945.10
2050	58367	115202	17391407	0.66%	50.66%	22	75%	44	994.89

Table C-17: Balus Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	723	3.25	3.69	2.15	91	127	36
2015	681	3.25	3.69	2.15	86	127	41
2016	684	3.25	3.69	2.15	86	127	41
2017	576	3.25	3.69	2.15	73	127	54
2018	639	3.25	3.69	2.15	81	127	46
2019	666	3.25	3.69	2.15	84	127	43
2020	696	3.25	3.69	2.15	88	127	39
2025	746	3.25	3.69	2.15	94	127	33
2030	796	3.25	3.69	2.15	100	127	27
2035	846	3.25	3.69	2.15	107	127	20
2040	895	3.25	3.69	2.15	113	127	14
2045	945	3.25	3.69	2.15	119	127	8
2050	995	3.25	3.69	2.15	125	127	2

Table C-18: Belton Bridge Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	53250	114767	11271594	1.02%	46.40%	22	75%	44	907.67045
2015	9633	56117	11152173	0.50%	17.17%	22	75%	44	164.19886
2016	15883	33439	12256543	0.27%	47.50%	22	75%	44	270.73295
2017	9729	19417	11517491	0.17%	50.11%	22	75%	44	165.83523
2018	10283	17706	11731178	0.15%	58.08%	22	75%	44	175.27841
2019	21596	49251	11650303	0.42%	43.85%	22	75%	44	368.11364
2020	22558	51444	12168993	0.42%	43.85%	22	75%	44	384.51136
2025	24171	55124	13039395	0.42%	43.85%	22	75%	44	412.00568
2030	25784	58803	13909798	0.42%	43.85%	22	75%	44	439.5
2035	27398	62483	14780200	0.42%	43.85%	22	75%	44	467.01136
2040	29011	66162	15650603	0.42%	43.85%	22	75%	44	494.50568
2045	30625	69842	16521005	0.42%	43.85%	22	75%	44	522.01705
2050	32239	73522	17391407	0.42%	43.85%	22	75%	44	549.52841

Table C-19: Belton Bridge Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	908	3.25	3.69	2.15	114	25	-89
2015	164	3.25	3.69	2.15	21	25	4
2016	271	3.25	3.69	2.15	34	25	-9
2017	166	3.25	3.69	2.15	21	25	4
2018	175	3.25	3.69	2.15	22	25	3
2019	368	3.25	3.69	2.15	46	25	-21
2020	385	3.25	3.69	2.15	49	25	-24
2025	412	3.25	3.69	2.15	52	25	-27
2030	440	3.25	3.69	2.15	55	25	-30
2035	467	3.25	3.69	2.15	59	25	-34
2040	495	3.25	3.69	2.15	62	25	-37
2045	522	3.25	3.69	2.15	66	25	-41
2050	550	3.25	3.69	2.15	69	25	-44

Table C-20: Bethel Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	7387	14190	11271594	0.13%	52.06%	22	75%	44	125.91477
2015	10800	21347	11152173	0.19%	50.59%	22	75%	44	184.09091
2016	12031	23487	12256543	0.19%	51.22%	22	75%	44	205.07386
2017	10881	23276	11517491	0.20%	46.75%	22	75%	44	185.47159
2018	9300	16420	11731178	0.14%	56.64%	22	75%	44	158.52273
2019	10202	19829	11650303	0.17%	51.45%	22	75%	44	173.89773
2020	10657	20712	12168993	0.17%	51.45%	22	75%	44	181.65341
2025	11419	22193	13039395	0.17%	51.45%	22	75%	44	194.64205
2030	12181	23674	13909798	0.17%	51.45%	22	75%	44	207.63068
2035	12943	25156	14780200	0.17%	51.45%	22	75%	44	220.61932
2040	13705	26637	15650603	0.17%	51.45%	22	75%	44	233.60795
2045	14468	28119	16521005	0.17%	51.45%	22	75%	44	246.61364
2050	15230	29600	17391407	0.17%	51.45%	22	75%	44	259.60227

Table C-21: Bethel Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	126	3.25	3.69	2.15	16	24	8
2015	184	3.25	3.69	2.15	23	24	1
2016	205	3.25	3.69	2.15	26	24	-2
2017	185	3.25	3.69	2.15	23	24	1
2018	159	3.25	3.69	2.15	20	24	4
2019	174	3.25	3.69	2.15	22	24	2
2020	182	3.25	3.69	2.15	23	24	1
2025	195	3.25	3.69	2.15	25	24	-1
2030	208	3.25	3.69	2.15	26	24	-2
2035	221	3.25	3.69	2.15	28	24	-4
2040	234	3.25	3.69	2.15	29	24	-5
2045	247	3.25	3.69	2.15	31	24	-7
2050	260	3.25	3.69	2.15	33	24	-9

Table C-22: Big Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	31309	52699	11271594	0.47%	59.41%	22	75%	44	533.676136
2015	32265	54730	11152173	0.49%	58.95%	22	75%	44	549.971591
2016	27690	51474	12256543	0.42%	53.79%	22	75%	44	471.988636
2017	31678	53710	11517491	0.47%	58.98%	22	75%	44	539.965909
2018	25039	48114	11731178	0.41%	52.04%	22	75%	44	426.801136
2019	29755	52537	11650303	0.45%	56.64%	22	75%	44	507.1875
2020	31079	54876	12168993	0.45%	56.64%	22	75%	44	529.755682
2025	33302	58801	13039395	0.45%	56.64%	22	75%	44	567.647727
2030	35525	62726	13909798	0.45%	56.64%	22	75%	44	605.539773
2035	37748	66651	14780200	0.45%	56.64%	22	75%	44	643.431818
2040	39971	70576	15650603	0.45%	56.64%	22	75%	44	681.323864
2045	42194	74501	16521005	0.45%	56.64%	22	75%	44	719.215909
2050	44417	78426	17391407	0.45%	56.64%	22	75%	44	757.107955

Table C-23: Big Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	534	3.25	3.69	2.15	67	70	3
2015	550	3.25	3.69	2.15	69	70	1
2016	472	3.25	3.69	2.15	59	70	11
2017	540	3.25	3.69	2.15	68	70	2
2018	427	3.25	3.69	2.15	54	70	16
2019	507	3.25	3.69	2.15	64	70	6
2020	530	3.25	3.69	2.15	67	70	3
2025	568	3.25	3.69	2.15	72	70	-2
2030	606	3.25	3.69	2.15	76	70	-6
2035	643	3.25	3.69	2.15	81	70	-11
2040	681	3.25	3.69	2.15	86	70	-16
2045	719	3.25	3.69	2.15	91	70	-21
2050	757	3.25	3.69	2.15	95	70	-25

Table C-24: Bolding Mill Day Use Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	18578	24501	11271594	0.22%	75.83%	22	75%	44	316.67045
2015	19766	36897	11152173	0.33%	53.57%	22	75%	44	336.92045
2016	22653	41356	12256543	0.34%	54.78%	22	75%	44	386.13068
2017	31207	56104	11517491	0.49%	55.62%	22	75%	44	531.9375
2018	35041	65608	11731178	0.56%	53.41%	22	75%	44	597.28977
2019	26398	45017	11650303	0.39%	58.64%	22	75%	44	449.96591
2020	27574	47022	12168993	0.39%	58.64%	22	75%	44	470.01136
2025	29546	50385	13039395	0.39%	58.64%	22	75%	44	503.625
2030	31518	53748	13909798	0.39%	58.64%	22	75%	44	537.23864
2035	33490	57111	14780200	0.39%	58.64%	22	75%	44	570.85227
2040	35463	60475	15650603	0.39%	58.64%	22	75%	44	604.48295
2045	37435	63838	16521005	0.39%	58.64%	22	75%	44	638.09659
2050	39407	67201	17391407	0.39%	58.64%	22	75%	44	671.71023

Table C-25: Bolding Mill Day Use Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	317	2.5	4.8	2.1	31	335	304
2015	337	2.5	4.8	2.1	33	335	302
2016	386	2.5	4.8	2.1	38	335	297
2017	532	2.5	4.8	2.1	53	335	282
2018	597	2.5	4.8	2.1	59	335	276
2019	450	2.5	4.8	2.1	45	335	290
2020	470	2.5	4.8	2.1	47	335	288
2025	504	2.5	4.8	2.1	50	335	285
2030	537	2.5	4.8	2.1	53	335	282
2035	571	2.5	4.8	2.1	57	335	278
2040	604	2.5	4.8	2.1	60	335	275
2045	638	2.5	4.8	2.1	63	335	272
2050	672	2.5	4.8	2.1	67	335	268

Table C-26: Bolding Mill Night/Campground Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	15914	17001	11271594	0.15%	93.61%	22	75%	44	271.26136
2015	21556	33947	11152173	0.30%	63.50%	22	75%	44	367.43182
2016	29545	63464	12256543	0.52%	46.55%	22	75%	44	503.60795
2017	29300	54481	11517491	0.47%	53.78%	22	75%	44	499.43182
2018	27744	50355	11731178	0.43%	55.10%	22	75%	44	472.90909
2019	27313	43696	11650303	0.38%	62.51%	22	75%	44	465.5625
2020	28529	45641	12168993	0.38%	62.51%	22	75%	44	486.28977
2025	30569	48905	13039395	0.38%	62.51%	22	75%	44	521.0625
2030	32610	52170	13909798	0.38%	62.51%	22	75%	44	555.85227
2035	34650	55434	14780200	0.38%	62.51%	22	75%	44	590.625
2040	36691	58699	15650603	0.38%	62.51%	22	75%	44	625.41477
2045	38732	61964	16521005	0.38%	62.51%	22	75%	44	660.20455
2050	40772	65228	17391407	0.38%	62.51%	22	75%	44	694.97727

Table C-27: Bolding Mill Night/Campground Camping Demand

Year	Design Load	Turnover (36/Day Use Hours per Visitor)	Maximum People Per Campsite	Campsites	Maximum Campground Occupancy	Net Differences	Campsite Forecast
2014	271	1	8	97	776	505	63
2015	367	1	8	97	776	409	51
2016	504	1	8	97	776	272	34
2017	499	1	8	97	776	277	35
2018	473	1	8	97	776	303	38
2019	466	1	8	97	776	310	39
2020	486	1	8	97	776	290	36
2025	521	1	8	97	776	255	32
2030	556	1	8	97	776	220	28
2035	591	1	8	97	776	185	23
2040	625	1	8	97	776	151	19
2045	660	1	8	97	776	116	15
2050	695	1	8	97	776	81	10

Table C-28: Buford Dam Park Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	63486	83251	11271594	0.74%	76.26%	22	75%	44	1082.148
2015	48786	56914	11152173	0.51%	85.72%	22	75%	44	831.5795
2016	42349	65051	12256543	0.53%	65.10%	22	75%	44	721.858
2017	51693	61065	11517491	0.53%	84.65%	22	75%	44	881.1307
2018	43699	47642	11731178	0.41%	91.72%	22	75%	44	744.8693
2019	51064	63284	11650303	0.54%	80.69%	22	75%	44	870.4091
2020	53338	66102	12168993	0.54%	80.69%	22	75%	44	909.1705
2025	57153	70830	13039395	0.54%	80.69%	22	75%	44	974.1989
2030	60968	75558	13909798	0.54%	80.69%	22	75%	44	1039.227
2035	64784	80286	14780200	0.54%	80.69%	22	75%	44	1104.273
2040	68599	85014	15650603	0.54%	80.69%	22	75%	44	1169.301
2045	72414	89742	16521005	0.54%	80.69%	22	75%	44	1234.33
2050	76229	94470	17391407	0.54%	80.69%	22	75%	44	1299.358

Table C-29: Buford Dam Park Parking Demand.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	63486	83251	11271594	0.74%	76.26%	22	75%	44	1082.148
2015	48786	56914	11152173	0.51%	85.72%	22	75%	44	831.5795
2016	42349	65051	12256543	0.53%	65.10%	22	75%	44	721.858
2017	51693	61065	11517491	0.53%	84.65%	22	75%	44	881.1307
2018	43699	47642	11731178	0.41%	91.72%	22	75%	44	744.8693
2019	51064	63284	11650303	0.54%	80.69%	22	75%	44	870.4091
2020	53338	66102	12168993	0.54%	80.69%	22	75%	44	909.1705
2025	57153	70830	13039395	0.54%	80.69%	22	75%	44	974.1989
2030	60968	75558	13909798	0.54%	80.69%	22	75%	44	1039.227
2035	64784	80286	14780200	0.54%	80.69%	22	75%	44	1104.273
2040	68599	85014	15650603	0.54%	80.69%	22	75%	44	1169.301
2045	72414	89742	16521005	0.54%	80.69%	22	75%	44	1234.33
2050	76229	94470	17391407	0.54%	80.69%	22	75%	44	1299.358

Table C-30: Burton Mill Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	27255	38869	11271594	0.34%	70.12%	22	75%	44	464.57386
2015	33890	51000	11152173	0.46%	66.45%	22	75%	44	577.67045
2016	27641	40909	12256543	0.33%	67.57%	22	75%	44	471.15341
2017	36485	56123	11517491	0.49%	65.01%	22	75%	44	621.90341
2018	16863	30768	11731178	0.26%	54.81%	22	75%	44	287.4375
2019	28465	43933	11650303	0.38%	64.79%	22	75%	44	485.19886
2020	29732	45889	12168993	0.38%	64.79%	22	75%	44	506.79545
2025	31858	49171	13039395	0.38%	64.79%	22	75%	44	543.03409
2030	33985	52453	13909798	0.38%	64.79%	22	75%	44	579.28977
2035	36112	55736	14780200	0.38%	64.79%	22	75%	44	615.54545
2040	38238	59018	15650603	0.38%	64.79%	22	75%	44	651.78409
2045	40365	62300	16521005	0.38%	64.79%	22	75%	44	688.03977
2050	42491	65582	17391407	0.38%	64.79%	22	75%	44	724.27841

Table C-31: Burton Mill Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	465	6	2	2	116	122	6
2015	578	6	2	2	145	122	-23
2016	471	6	2	2	118	122	4
2017	622	6	2	2	156	122	-34
2018	287	6	2	2	72	122	50
2019	485	6	2	2	121	122	1
2020	507	6	2	2	127	122	-5
2025	543	6	2	2	136	122	-14
2030	579	6	2	2	145	122	-23
2035	616	6	2	2	154	122	-32
2040	652	6	2	2	163	122	-41
2045	688	6	2	2	172	122	-50
2050	724	6	2	2	181	122	-59

Table C-32: Charleston Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	42365	72648	11271594	0.64%	58.32%	22	75%	44	722.13068
2015	51687	82024	11152173	0.74%	63.01%	22	75%	44	881.02841
2016	44422	77193	12256543	0.63%	57.55%	22	75%	44	757.19318
2017	48725	88753	11517491	0.77%	54.90%	22	75%	44	830.53977
2018	59480	92837	11731178	0.79%	64.07%	22	75%	44	1013.8636
2019	49576	83225	11650303	0.71%	59.57%	22	75%	44	845.04545
2020	51783	86930	12168993	0.71%	59.57%	22	75%	44	882.66477
2025	55487	93148	13039395	0.71%	59.57%	22	75%	44	945.80114
2030	59191	99366	13909798	0.71%	59.57%	22	75%	44	1008.9375
2035	62895	105584	14780200	0.71%	59.57%	22	75%	44	1072.0739
2040	66599	111801	15650603	0.71%	59.57%	22	75%	44	1135.2102
2045	70303	118019	16521005	0.71%	59.57%	22	75%	44	1198.3466
2050	74007	124237	17391407	0.71%	59.57%	22	75%	44	1261.483

Table C-33: Charleston Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	722	2.5	4.80	2.1	72	120	48
2015	881	2.5	4.80	2.1	87	120	33
2016	757	2.5	4.80	2.1	75	120	45
2017	831	2.5	4.80	2.1	82	120	38
2018	1014	2.5	4.80	2.1	101	120	19
2019	845	2.5	4.80	2.1	84	120	36
2020	883	2.5	4.80	2.1	88	120	32
2025	946	2.5	4.80	2.1	94	120	26
2030	1009	2.5	4.80	2.1	100	120	20
2035	1072	2.5	4.80	2.1	106	120	14
2040	1135	2.5	4.80	2.1	113	120	7
2045	1198	2.5	4.80	2.1	119	120	1
2050	1261	2.5	4.80	2.1	125	120	-5

Table C-34: Chattahoochee Country Club Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	83727	171033	11271594	1.52%	48.95%	22	75%	44	1427.1648
2015	58301	126502	11152173	1.13%	46.09%	22	75%	44	993.76705
2016	129053	177290	12256543	1.45%	72.79%	22	75%	44	2199.767
2017	73746	179219	11517491	1.56%	41.15%	22	75%	44	1257.0341
2018	71133	157269	11731178	1.34%	45.23%	22	75%	44	1212.4943
2019	82865	162985	11650303	1.40%	50.84%	22	75%	44	1412.4716
2020	86554	170241	12168993	1.40%	50.84%	22	75%	44	1475.3523
2025	92745	182418	13039395	1.40%	50.84%	22	75%	44	1580.8807
2030	98936	194594	13909798	1.40%	50.84%	22	75%	44	1686.4091
2035	105127	206771	14780200	1.40%	50.84%	22	75%	44	1791.9375
2040	111318	218948	15650603	1.40%	50.84%	22	75%	44	1897.4659
2045	117509	231124	16521005	1.40%	50.84%	22	75%	44	2002.9943
2050	123700	243301	17391407	1.40%	50.84%	22	75%	44	2108.5227

Table C-35: Chattahoochee County Club Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1427	2.5	4.80	2.1	142	262	120
2015	994	2.5	4.80	2.1	99	262	163
2016	2200	2.5	4.80	2.1	218	262	44
2017	1257	2.5	4.80	2.1	125	262	137
2018	1212	2.5	4.80	2.1	120	262	142
2019	1412	2.5	4.80	2.1	140	262	122
2020	1475	2.5	4.80	2.1	146	262	116
2025	1581	2.5	4.80	2.1	157	262	105
2030	1686	2.5	4.80	2.1	167	262	95
2035	1792	2.5	4.80	2.1	178	262	84
2040	1897	2.5	4.80	2.1	188	262	74
2045	2003	2.5	4.80	2.1	199	262	63
2050	2109	2.5	4.80	2.1	209	262	53

Table C-36: Clarks Bridge Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	85561	184026	11271594	1.63%	46.49%	22	75%	44	1458.4261
2015	62909	129685	11152173	1.16%	48.51%	22	75%	44	1072.3125
2016	121799	129615	12256543	1.06%	93.97%	22	75%	44	2076.1193
2017	74348	156204	11517491	1.36%	47.60%	22	75%	44	1267.2955
2018	118275	190118	11731178	1.62%	62.21%	22	75%	44	2016.0511
2019	95097	159141	11650303	1.37%	59.76%	22	75%	44	1620.9716
2020	99330	166226	12168993	1.37%	59.76%	22	75%	44	1693.125
2025	106435	178115	13039395	1.37%	59.76%	22	75%	44	1814.233
2030	113540	190005	13909798	1.37%	59.76%	22	75%	44	1935.3409
2035	120644	201894	14780200	1.37%	59.76%	22	75%	44	2056.4318
2040	127749	213784	15650603	1.37%	59.76%	22	75%	44	2177.5398
2045	134854	225673	16521005	1.37%	59.76%	22	75%	44	2298.6477
2050	141959	237563	17391407	1.37%	59.76%	22	75%	44	2419.7557

Table C-37: Clarks Bridge Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1458	3.1	3.87	2.6	145	162	17
2015	1072	3.1	3.87	2.6	107	162	55
2016	2076	3.1	3.87	2.6	206	162	-44
2017	1267	3.1	3.87	2.6	126	162	36
2018	2016	3.1	3.87	2.6	200	162	-38
2019	1621	3.1	3.87	2.6	161	162	1
2020	1693	3.1	3.87	2.6	168	162	-6
2025	1814	3.1	3.87	2.6	180	162	-18
2030	1935	3.1	3.87	2.6	192	162	-30
2035	2056	3.1	3.87	2.6	204	162	-42
2040	2178	3.1	3.87	2.6	216	162	-54
2045	2299	3.1	3.87	2.6	228	162	-66
2050	2420	3.1	3.87	2.6	240	162	-78

Table C-38: Don Carter State Park Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	9316	23492	11271594	0.21%	39.66%	22	75%	44	158.79545
2015	98338	136572	11152173	1.22%	72.00%	22	75%	44	1676.2159
2016	-	-	12256543	-	-	22	75%	44	-
2017	51483	135815	11517491	1.18%	37.91%	22	75%	44	877.55114
2018	60727	128500	11731178	1.10%	47.26%	22	75%	44	1035.1193
2019	53137	107987	11650303	0.93%	49.21%	22	75%	44	905.74432
2020	55502	112795	12168993	0.93%	49.21%	22	75%	44	946.05682
2025	59472	120863	13039395	0.93%	49.21%	22	75%	44	1013.7273
2030	63442	128931	13909798	0.93%	49.21%	22	75%	44	1081.3977
2035	67412	136998	14780200	0.93%	49.21%	22	75%	44	1149.0682
2040	71382	145066	15650603	0.93%	49.21%	22	75%	44	1216.7386
2045	75352	153134	16521005	0.93%	49.21%	22	75%	44	1284.4091
2050	79322	161202	17391407	0.93%	49.21%	22	75%	44	1352.0795

Table C-39: Don Carter State Park Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	159	2.5	4.80	2.1	16	325	309
2015	1676	2.5	4.80	2.1	166	325	159
2016	-	2.5	4.80	2.1	-	325	-
2017	878	2.5	4.80	2.1	87	325	238
2018	1035	2.5	4.80	2.1	103	325	222
2019	906	2.5	4.80	2.1	90	325	235
2020	946	2.5	4.80	2.1	94	325	231
2025	1014	2.5	4.80	2.1	101	325	224
2030	1081	2.5	4.80	2.1	107	325	218
2035	1149	2.5	4.80	2.1	114	325	211
2040	1217	2.5	4.80	2.1	121	325	204
2045	1284	2.5	4.80	2.1	127	325	198
2050	1352	2.5	4.80	2.1	134	325	191

Table C-40: Duckett Mill Campground Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	2898	14784	11271594	0.13%	19.60%	22	75%	44	49.397727
2015	10999	39727	11152173	0.36%	27.69%	22	75%	44	187.48295
2016	30276	67616	12256543	0.55%	44.78%	22	75%	44	516.06818
2017	23079	65099	11517491	0.57%	35.45%	22	75%	44	393.39205
2018	18337	62387	11731178	0.53%	29.39%	22	75%	44	312.5625
2019	15619	49772	11650303	0.43%	31.38%	22	75%	44	266.23295
2020	16315	51988	12168993	0.43%	31.38%	22	75%	44	278.09659
2025	17482	55706	13039395	0.43%	31.38%	22	75%	44	297.98864
2030	18649	59425	13909798	0.43%	31.38%	22	75%	44	317.88068
2035	19816	63144	14780200	0.43%	31.38%	22	75%	44	337.77273
2040	20983	66862	15650603	0.43%	31.38%	22	75%	44	357.66477
2045	22150	70581	16521005	0.43%	31.38%	22	75%	44	377.55682
2050	23316	74299	17391407	0.43%	31.38%	22	75%	44	397.43182

Table C-41: Duckett Mill Campground Parking Demand.

Year	Design Load	Turnover (36/Day Use Hours per Visitor)	Maximum People Per Campsite	Campsites	Maximum Campground Occupancy	Net Differences	Campsite Forecast
2014	49	1	8	111	888	839	105
2015	187	1	8	111	888	701	88
2016	516	1	8	111	888	372	47
2017	393	1	8	111	888	495	62
2018	313	1	8	111	888	575	72
2019	266	1	8	111	888	622	78
2020	278	1	8	111	888	610	76
2025	298	1	8	111	888	590	74
2030	318	1	8	111	888	570	71
2035	338	1	8	111	888	550	69
2040	358	1	8	111	888	530	66
2045	378	1	8	111	888	510	64
2050	397	1	8	111	888	491	61

Table C-42: East Bank Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	35435	67863	11271594	0.60%	52.22%	22	75%	44	604.00568
2015	22803	42783	11152173	0.38%	53.30%	22	75%	44	388.6875
2016	25037	40580	12256543	0.33%	61.70%	22	75%	44	426.76705
2017	38053	62181	11517491	0.54%	61.20%	22	75%	44	648.63068
2018	35038	70562	11731178	0.60%	49.66%	22	75%	44	597.23864
2019	31853	57277	11650303	0.49%	55.61%	22	75%	44	542.94886
2020	33272	59827	12168993	0.49%	55.61%	22	75%	44	567.13636
2025	35651	64106	13039395	0.49%	55.61%	22	75%	44	607.6875
2030	38031	68385	13909798	0.49%	55.61%	22	75%	44	648.25568
2035	40411	72664	14780200	0.49%	55.61%	22	75%	44	688.82386
2040	42790	76943	15650603	0.49%	55.61%	22	75%	44	729.375
2045	45171	81223	16521005	0.49%	55.61%	22	75%	44	769.96023
2050	47550	85502	17391407	0.49%	55.61%	22	75%	44	810.51136

Table C-43: East Bank Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	604	3.25	3.69	2.15	76	66	-10
2015	389	3.25	3.69	2.15	49	66	17
2016	427	3.25	3.69	2.15	54	66	12
2017	649	3.25	3.69	2.15	82	66	-16
2018	597	3.25	3.69	2.15	75	66	-9
2019	543	3.25	3.69	2.15	68	66	-2
2020	567	3.25	3.69	2.15	71	66	-5
2025	608	3.25	3.69	2.15	77	66	-11
2030	648	3.25	3.69	2.15	82	66	-16
2035	689	3.25	3.69	2.15	87	66	-21
2040	729	3.25	3.69	2.15	92	66	-26
2045	770	3.25	3.69	2.15	97	66	-31
2050	811	3.25	3.69	2.15	102	66	-36

Table C-44: Flowery Branch Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	-	-	11271594	-	-	22	75%	44	-
2015	22101	25327	11152173	0.23%	87.26%	22	75%	44	376.7216
2016	-	-	12256543	-	-	22	75%	44	-
2017	12357	28027	11517491	0.24%	44.09%	22	75%	44	210.6307
2018	15135	31311	11731178	0.27%	48.34%	22	75%	44	257.983
2019	17151	28635	11650303	0.25%	59.90%	22	75%	44	292.3466
2020	17914	29909	12168993	0.25%	59.90%	22	75%	44	305.3523
2025	19196	32049	13039395	0.25%	59.90%	22	75%	44	327.2045
2030	20477	34188	13909798	0.25%	59.90%	22	75%	44	349.0398
2035	21759	36327	14780200	0.25%	59.90%	22	75%	44	370.892
2040	23040	38467	15650603	0.25%	59.90%	22	75%	44	392.7273
2045	24322	40606	16521005	0.25%	59.90%	22	75%	44	414.5795
2050	25603	42745	17391407	0.25%	59.90%	22	75%	44	436.4148

Table C-45: Flowery Branch Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	-	2.5	4.80	2.1	-	50	-
2015	377	2.5	4.80	2.1	37	50	13
2016	-	2.5	4.80	2.1	-	50	-
2017	211	2.5	4.80	2.1	21	50	29
2018	258	2.5	4.80	2.1	26	50	24
2019	292	2.5	4.80	2.1	29	50	21
2020	305	2.5	4.80	2.1	30	50	20
2025	327	2.5	4.80	2.1	32	50	18
2030	349	2.5	4.80	2.1	35	50	15
2035	371	2.5	4.80	2.1	37	50	13
2040	393	2.5	4.80	2.1	39	50	11
2045	415	2.5	4.80	2.1	41	50	9
2050	436	2.5	4.80	2.1	43	50	7

Table C-46: Gainesville Marina Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	46848	80762	11271594	0.72%	58.01%	22	75%	44	798.54545
2015	148934	209208	11152173	1.88%	71.19%	22	75%	44	2538.6477
2016	726914	1219395	12256543	9.95%	59.61%	22	75%	44	12390.58
2017	109259	602251	11517491	5.23%	18.14%	22	75%	44	1862.3693
2018	96401	125387	11731178	1.07%	76.88%	22	75%	44	1643.1989
2019	249187	438965	11650303	3.77%	56.77%	22	75%	44	4247.5057
2020	260281	458509	12168993	3.77%	56.77%	22	75%	44	4436.608
2025	278898	491304	13039395	3.77%	56.77%	22	75%	44	4753.9432
2030	297515	524100	13909798	3.77%	56.77%	22	75%	44	5071.2784
2035	316132	556895	14780200	3.77%	56.77%	22	75%	44	5388.6136
2040	334749	589691	15650603	3.77%	56.77%	22	75%	44	5705.9489
2045	353366	622486	16521005	3.77%	56.77%	22	75%	44	6023.2841
2050	371982	655281	17391407	3.77%	56.77%	22	75%	44	6340.6023

Table C-47: Gainesville Marina Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	799	2.5	4.80	2.1	79	483	404
2015	2539	2.5	4.80	2.1	252	483	231
2016	12391	2.5	4.80	2.1	1229	483	-746
2017	1862	2.5	4.80	2.1	185	483	298
2018	1643	2.5	4.80	2.1	163	483	320
2019	4248	2.5	4.80	2.1	421	483	62
2020	4437	2.5	4.80	2.1	440	483	43
2025	4754	2.5	4.80	2.1	472	483	11
2030	5071	2.5	4.80	2.1	503	483	-20
2035	5389	2.5	4.80	2.1	535	483	-52
2040	5706	2.5	4.80	2.1	566	483	-83
2045	6023	2.5	4.80	2.1	598	483	-115
2050	6341	2.5	4.80	2.1	629	483	-146

Table C-48: Girl Scouts Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	6593	8972	11271594	0.08%	73.48%	22	75%	44	112.38068
2015	8488	11189	11152173	0.10%	75.86%	22	75%	44	144.68182
2016	10106	12181	12256543	0.10%	82.97%	22	75%	44	172.26136
2017	6054	14914	11517491	0.13%	40.59%	22	75%	44	103.19318
2018	6390	8688	11731178	0.07%	73.55%	22	75%	44	108.92045
2019	7796	11251	11650303	0.10%	69.29%	22	75%	44	132.88636
2020	8143	11752	12168993	0.10%	69.29%	22	75%	44	138.80114
2025	8725	12592	13039395	0.10%	69.29%	22	75%	44	148.72159
2030	9308	13433	13909798	0.10%	69.29%	22	75%	44	158.65909
2035	9891	14274	14780200	0.10%	69.29%	22	75%	44	168.59659
2040	10473	15114	15650603	0.10%	69.29%	22	75%	44	178.51705
2045	11055	15955	16521005	0.10%	69.29%	22	75%	44	188.4375
2050	11637	16795	17391407	0.10%	69.29%	22	75%	44	198.35795

Table C-49: Girl Scouts Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	112	3.1	3.87	3.1	9	30	21
2015	145	3.1	3.87	3.1	12	30	18
2016	172	3.1	3.87	3.1	14	30	16
2017	103	3.1	3.87	3.1	9	30	21
2018	109	3.1	3.87	3.1	9	30	21
2019	133	3.1	3.87	3.1	11	30	19
2020	139	3.1	3.87	3.1	12	30	18
2025	149	3.1	3.87	3.1	12	30	18
2030	159	3.1	3.87	3.1	13	30	17
2035	169	3.1	3.87	3.1	14	30	16
2040	179	3.1	3.87	3.1	15	30	15
2045	188	3.1	3.87	3.1	16	30	14
2050	198	3.1	3.87	3.1	17	30	13

Table C-50: Habersham Marina Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	25956	42646	11271594	0.38%	60.86%	22	75%	44	442.43182
2015	30334	75630	11152173	0.68%	40.11%	22	75%	44	517.05682
2016	24983	36840	12256543	0.30%	67.81%	22	75%	44	425.84659
2017	33897	48851	11517491	0.42%	69.39%	22	75%	44	577.78977
2018	23133	61503	11731178	0.52%	37.61%	22	75%	44	394.3125
2019	29631	53720	11650303	0.46%	55.16%	22	75%	44	505.07386
2020	30950	56111	12168993	0.46%	55.16%	22	75%	44	527.55682
2025	33164	60125	13039395	0.46%	55.16%	22	75%	44	565.29545
2030	35377	64138	13909798	0.46%	55.16%	22	75%	44	603.01705
2035	37591	68152	14780200	0.46%	55.16%	22	75%	44	640.75568
2040	39805	72165	15650603	0.46%	55.16%	22	75%	44	678.49432
2045	42018	76178	16521005	0.46%	55.16%	22	75%	44	716.21591
2050	44232	80192	17391407	0.46%	55.16%	22	75%	44	753.95455

Table C-51: Habersham Marina Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	442	2.5	4.80	2.1	44	82	38
2015	517	2.5	4.80	2.1	51	82	31
2016	426	2.5	4.80	2.1	42	82	40
2017	578	2.5	4.80	2.1	57	82	25
2018	394	2.5	4.80	2.1	39	82	43
2019	505	2.5	4.80	2.1	50	82	32
2020	528	2.5	4.80	2.1	52	82	30
2025	565	2.5	4.80	2.1	56	82	26
2030	603	2.5	4.80	2.1	60	82	22
2035	641	2.5	4.80	2.1	64	82	18
2040	678	2.5	4.80	2.1	67	82	15
2045	716	2.5	4.80	2.1	71	82	11
2050	754	2.5	4.80	2.1	75	82	7

Table C-52: Hideaway Bay Marina Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	91188	177106	11271594	1.57%	51.49%	22	75%	44	1554.3409
2015	35491	96422	11152173	0.86%	36.81%	22	75%	44	604.96023
2016	65837	115152	12256543	0.94%	57.17%	22	75%	44	1122.2216
2017	86776	143947	11517491	1.25%	60.28%	22	75%	44	1479.1364
2018	60318	90028	11731178	0.77%	67.00%	22	75%	44	1028.1477
2019	68543	125651	11650303	1.08%	54.55%	22	75%	44	1168.3466
2020	71595	131245	12168993	1.08%	54.55%	22	75%	44	1220.3693
2025	76716	140633	13039395	1.08%	54.55%	22	75%	44	1307.6591
2030	81837	150020	13909798	1.08%	54.55%	22	75%	44	1394.9489
2035	86958	159408	14780200	1.08%	54.55%	22	75%	44	1482.2386
2040	92078	168795	15650603	1.08%	54.55%	22	75%	44	1569.5114
2045	97200	178183	16521005	1.08%	54.55%	22	75%	44	1656.8182
2050	102320	187570	17391407	1.08%	54.55%	22	75%	44	1744.0909

Table C-53: Hideaway Bay Marina Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1554	2.5	4.80	2.1	154	346	192
2015	605	2.5	4.80	2.1	60	346	286
2016	1122	2.5	4.80	2.1	111	346	235
2017	1479	2.5	4.80	2.1	147	346	199
2018	1028	2.5	4.80	2.1	102	346	244
2019	1168	2.5	4.80	2.1	116	346	230
2020	1220	2.5	4.80	2.1	121	346	225
2025	1308	2.5	4.80	2.1	130	346	216
2030	1395	2.5	4.80	2.1	138	346	208
2035	1482	2.5	4.80	2.1	147	346	199
2040	1570	2.5	4.80	2.1	156	346	190
2045	1657	2.5	4.80	2.1	164	346	182
2050	1744	2.5	4.80	2.1	173	346	173

Table C-54: Holiday on Lanier Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	152301	267559	11271594	2.37%	56.92%	22	75%	44	2596.0398
2015	62558	116199	11152173	1.04%	53.84%	22	75%	44	1066.3295
2016	73915	121167	12256543	0.99%	61.00%	22	75%	44	1259.9148
2017	65174	105497	11517491	0.92%	61.78%	22	75%	44	1110.9205
2018	221294	326162	11731178	2.78%	67.85%	22	75%	44	3772.0568
2019	113773	188748	11650303	1.62%	60.28%	22	75%	44	1939.3125
2020	118838	197151	12168993	1.62%	60.28%	22	75%	44	2025.6477
2025	127338	211253	13039395	1.62%	60.28%	22	75%	44	2170.5341
2030	135838	225354	13909798	1.62%	60.28%	22	75%	44	2315.4205
2035	144338	239455	14780200	1.62%	60.28%	22	75%	44	2460.3068
2040	152838	253557	15650603	1.62%	60.28%	22	75%	44	2605.1932
2045	161338	267658	16521005	1.62%	60.28%	22	75%	44	2750.0795
2050	169838	281760	17391407	1.62%	60.28%	22	75%	44	2894.9659

Table C-55: Holiday on Lanier Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	2596	2.5	4.80	2.1	258	880	622
2015	1066	2.5	4.80	2.1	106	880	774
2016	1260	2.5	4.80	2.1	125	880	755
2017	1111	2.5	4.80	2.1	110	880	770
2018	3772	2.5	4.80	2.1	374	880	506
2019	1939	2.5	4.80	2.1	192	880	688
2020	2026	2.5	4.80	2.1	201	880	679
2025	2171	2.5	4.80	2.1	215	880	665
2030	2315	2.5	4.80	2.1	230	880	650
2035	2460	2.5	4.80	2.1	244	880	636
2040	2605	2.5	4.80	2.1	258	880	622
2045	2750	2.5	4.80	2.1	273	880	607
2050	2895	2.5	4.80	2.1	287	880	593

Table C-56: Holly Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	26089	51796	11271594	0.46%	50.37%	22	75%	44	444.69886
2015	20411	40746	11152173	0.37%	50.09%	22	75%	44	347.91477
2016	22327	39150	12256543	0.32%	57.03%	22	75%	44	380.57386
2017	20031	41036	11517491	0.36%	48.81%	22	75%	44	341.4375
2018	23453	35840	11731178	0.31%	65.44%	22	75%	44	399.76705
2019	22872	42084	11650303	0.36%	54.35%	22	75%	44	389.86364
2020	23890	43957	12168993	0.36%	54.35%	22	75%	44	407.21591
2025	25599	47101	13039395	0.36%	54.35%	22	75%	44	436.34659
2030	27307	50245	13909798	0.36%	54.35%	22	75%	44	465.46023
2035	29016	53389	14780200	0.36%	54.35%	22	75%	44	494.59091
2040	30725	56534	15650603	0.36%	54.35%	22	75%	44	523.72159
2045	32434	59678	16521005	0.36%	54.35%	22	75%	44	552.85227
2050	34143	62822	17391407	0.36%	54.35%	22	75%	44	581.98295

Table C-57: Holly Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	445	2.5	4.80	2.1	44	34	-10
2015	348	2.5	4.80	2.1	35	34	-1
2016	381	2.5	4.80	2.1	38	34	-4
2017	341	2.5	4.80	2.1	34	34	0
2018	400	2.5	4.80	2.1	40	34	-6
2019	390	2.5	4.80	2.1	39	34	-5
2020	407	2.5	4.80	2.1	40	34	-6
2025	436	2.5	4.80	2.1	43	34	-9
2030	465	2.5	4.80	2.1	46	34	-12
2035	495	2.5	4.80	2.1	49	34	-15
2040	524	2.5	4.80	2.1	52	34	-18
2045	553	2.5	4.80	2.1	55	34	-21
2050	582	2.5	4.80	2.1	58	34	-24

Table C-58: Keiths Bridge Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	53274	85683	11271594	0.76%	62.18%	22	75%	44	908.07955
2015	14670	49419	11152173	0.44%	29.68%	22	75%	44	250.05682
2016	36060	64129	12256543	0.52%	56.23%	22	75%	44	614.65909
2017	30661	59774	11517491	0.52%	51.29%	22	75%	44	522.63068
2018	33802	54816	11731178	0.47%	61.66%	22	75%	44	576.17045
2019	33001	63209	11650303	0.54%	52.21%	22	75%	44	562.51705
2020	34471	66023	12168993	0.54%	52.21%	22	75%	44	587.57386
2025	36937	70746	13039395	0.54%	52.21%	22	75%	44	629.60795
2030	39402	75468	13909798	0.54%	52.21%	22	75%	44	671.625
2035	41868	80191	14780200	0.54%	52.21%	22	75%	44	713.65909
2040	44333	84913	15650603	0.54%	52.21%	22	75%	44	755.67614
2045	46799	89636	16521005	0.54%	52.21%	22	75%	44	797.71023
2050	49264	94358	17391407	0.54%	52.21%	22	75%	44	839.72727

Table C-59: Keiths Bridge Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	908	3.1	3.87	2.6	90	144	54
2015	250	3.1	3.87	2.6	25	144	119
2016	615	3.1	3.87	2.6	61	144	83
2017	523	3.1	3.87	2.6	52	144	92
2018	576	3.1	3.87	2.6	57	144	87
2019	563	3.1	3.87	2.6	56	144	88
2020	588	3.1	3.87	2.6	58	144	86
2025	630	3.1	3.87	2.6	63	144	81
2030	672	3.1	3.87	2.6	67	144	77
2035	714	3.1	3.87	2.6	71	144	73
2040	756	3.1	3.87	2.6	75	144	69
2045	798	3.1	3.87	2.6	79	144	65
2050	840	3.1	3.87	2.6	83	144	61

Table C-60: Lanier Islands Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	251947	680181	11271594	6.03%	37.04%	22	75%	44	4294.5511
2015	262778	751510	11152173	6.74%	34.97%	22	75%	44	4479.1705
2016	327311	875491	12256543	7.14%	37.39%	22	75%	44	5579.1648
2017	262743	831853	11517491	7.22%	31.59%	22	75%	44	4478.5739
2018	276689	730984	11731178	6.23%	37.85%	22	75%	44	4716.2898
2019	278095	777538	11650303	6.67%	35.77%	22	75%	44	4740.2557
2020	290476	812155	12168993	6.67%	35.77%	22	75%	44	4951.2955
2025	311253	870245	13039395	6.67%	35.77%	22	75%	44	5305.4489
2030	332030	928336	13909798	6.67%	35.77%	22	75%	44	5659.6023
2035	352806	986426	14780200	6.67%	35.77%	22	75%	44	6013.7386
2040	373583	1044516	15650603	6.67%	35.77%	22	75%	44	6367.892
2045	394360	1102607	16521005	6.67%	35.77%	22	75%	44	6722.0455
2050	415136	1160697	17391407	6.67%	35.77%	22	75%	44	7076.1818

Table C-61: Lanier Islands Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	4295	3.1	3.87	2.6	427	3616	3189
2015	4479	3.1	3.87	2.6	445	3616	3171
2016	5579	3.1	3.87	2.6	554	3616	3062
2017	4479	3.1	3.87	2.6	445	3616	3171
2018	4716	3.1	3.87	2.6	469	3616	3147
2019	4740	3.1	3.87	2.6	471	3616	3145
2020	4951	3.1	3.87	2.6	492	3616	3124
2025	5305	3.1	3.87	2.6	527	3616	3089
2030	5660	3.1	3.87	2.6	562	3616	3054
2035	6014	3.1	3.87	2.6	598	3616	3018
2040	6368	3.1	3.87	2.6	633	3616	2983
2045	6722	3.1	3.87	2.6	668	3616	2948
2050	7076	3.1	3.87	2.6	703	3616	2913

Table C-62: Lanier Park Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	43341	59241	11271594	0.53%	73.16%	22	75%	44	738.76705
2015	44664	50576	11152173	0.45%	88.31%	22	75%	44	761.31818
2016	52500	61766	12256543	0.50%	85.00%	22	75%	44	894.88636
2017	67956	79738	11517491	0.69%	85.22%	22	75%	44	1158.3409
2018	53608	65366	11731178	0.56%	82.01%	22	75%	44	913.77273
2019	52681	63670	11650303	0.55%	82.74%	22	75%	44	897.97159
2020	55027	66505	12168993	0.55%	82.74%	22	75%	44	937.96023
2025	58963	71262	13039395	0.55%	82.74%	22	75%	44	1005.0511
2030	62898	76018	13909798	0.55%	82.74%	22	75%	44	1072.125
2035	66834	80775	14780200	0.55%	82.74%	22	75%	44	1139.2159
2040	70770	85532	15650603	0.55%	82.74%	22	75%	44	1206.3068
2045	74706	90289	16521005	0.55%	82.74%	22	75%	44	1273.3977
2050	78642	95046	17391407	0.55%	82.74%	22	75%	44	1340.4886

Table C-63: Lanier Park Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	739	6	2	2	185	233	48
2015	761	6	2	2	190	233	43
2016	895	6	2	2	224	233	9
2017	1158	6	2	2	290	233	-57
2018	914	6	2	2	229	233	4
2019	898	6	2	2	225	233	8
2020	938	6	2	2	235	233	-2
2025	1005	6	2	2	251	233	-18
2030	1072	6	2	2	268	233	-35
2035	1139	6	2	2	285	233	-52
2040	1206	6	2	2	302	233	-69
2045	1273	6	2	2	318	233	-85
2050	1340	6	2	2	335	233	-102

Table C-64: Lanier Point Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	48840	95557	11271594	0.85%	51.11%	22	75%	44	832.5
2015	53138	108139	11152173	0.97%	49.14%	22	75%	44	905.76136
2016	57933	123116	12256543	1.00%	47.06%	22	75%	44	987.49432
2017	54218	103099	11517491	0.90%	52.59%	22	75%	44	924.17045
2018	43488	79793	11731178	0.68%	54.50%	22	75%	44	741.27273
2019	52130	102459	11650303	0.88%	50.88%	22	75%	44	888.57955
2020	54451	107020	12168993	0.88%	50.88%	22	75%	44	928.14205
2025	58345	114675	13039395	0.88%	50.88%	22	75%	44	994.51705
2030	62240	122330	13909798	0.88%	50.88%	22	75%	44	1060.9091
2035	66135	129985	14780200	0.88%	50.88%	22	75%	44	1127.3011
2040	70029	137639	15650603	0.88%	50.88%	22	75%	44	1193.6761
2045	73924	145294	16521005	0.88%	50.88%	22	75%	44	1260.0682
2050	77819	152949	17391407	0.88%	50.88%	22	75%	44	1326.4602

Table C-65: Lanier Point Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	833	2.5	4.80	2.1	83	278	195
2015	906	2.5	4.80	2.1	90	278	188
2016	987	2.5	4.80	2.1	98	278	180
2017	924	2.5	4.80	2.1	92	278	186
2018	741	2.5	4.80	2.1	74	278	204
2019	889	2.5	4.80	2.1	88	278	190
2020	928	2.5	4.80	2.1	92	278	186
2025	995	2.5	4.80	2.1	99	278	179
2030	1061	2.5	4.80	2.1	105	278	173
2035	1127	2.5	4.80	2.1	112	278	166
2040	1194	2.5	4.80	2.1	118	278	160
2045	1260	2.5	4.80	2.1	125	278	153
2050	1326	2.5	4.80	2.1	132	278	146

Table C-66: Lanier Sailing Club Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	30196	59282	11271594	0.53%	50.94%	22	75%	44	514.70455
2015	37026	79633	11152173	0.71%	46.50%	22	75%	44	631.125
2016	20975	42283	12256543	0.34%	49.61%	22	75%	44	357.52841
2017	19707	40303	11517491	0.35%	48.90%	22	75%	44	335.91477
2018	15290	36948	11731178	0.31%	41.38%	22	75%	44	260.625
2019	24882	52423	11650303	0.45%	47.46%	22	75%	44	424.125
2020	25990	54757	12168993	0.45%	47.46%	22	75%	44	443.01136
2025	27849	58674	13039395	0.45%	47.46%	22	75%	44	474.69886
2030	29707	62590	13909798	0.45%	47.46%	22	75%	44	506.36932
2035	31567	66507	14780200	0.45%	47.46%	22	75%	44	538.07386
2040	33426	70424	15650603	0.45%	47.46%	22	75%	44	569.76136
2045	35284	74340	16521005	0.45%	47.46%	22	75%	44	601.43182
2050	37144	78257	17391407	0.45%	47.46%	22	75%	44	633.13636

Table C-67: Lanier Sailing Club Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	515	2.5	4.80	2.25	48	160	112
2015	631	2.5	4.80	2.25	58	160	102
2016	358	2.5	4.80	2.25	33	160	127
2017	336	2.5	4.80	2.25	31	160	129
2018	261	2.5	4.80	2.25	24	160	136
2019	424	2.5	4.80	2.25	39	160	121
2020	443	2.5	4.80	2.25	41	160	119
2025	475	2.5	4.80	2.25	44	160	116
2030	506	2.5	4.80	2.25	47	160	113
2035	538	2.5	4.80	2.25	50	160	110
2040	570	2.5	4.80	2.25	53	160	107
2045	601	2.5	4.80	2.25	56	160	104
2050	633	2.5	4.80	2.25	59	160	101

Table C-68: Laurel Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	90691	165432	11271594	1.47%	54.82%	22	75%	44	1545.8693
2015	63360	125087	11152173	1.12%	50.65%	22	75%	44	1080
2016	73513	133430	12256543	1.09%	55.09%	22	75%	44	1253.0625
2017	78452	139098	11517491	1.21%	56.40%	22	75%	44	1337.25
2018	52872	125603	11731178	1.07%	42.09%	22	75%	44	901.22727
2019	71909	138787	11650303	1.19%	51.81%	22	75%	44	1225.7216
2020	75111	144966	12168993	1.19%	51.81%	22	75%	44	1280.3011
2025	80483	155335	13039395	1.19%	51.81%	22	75%	44	1371.8693
2030	85855	165703	13909798	1.19%	51.81%	22	75%	44	1463.4375
2035	91228	176072	14780200	1.19%	51.81%	22	75%	44	1555.0227
2040	96600	186441	15650603	1.19%	51.81%	22	75%	44	1646.5909
2045	101973	196810	16521005	1.19%	51.81%	22	75%	44	1738.1761
2050	107345	207179	17391407	1.19%	51.81%	22	75%	44	1829.7443

Table C-69: Laurel Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1546	2.5	4.80	2.1	153	683	530
2015	1080	2.5	4.80	2.1	107	683	576
2016	1253	2.5	4.80	2.1	124	683	559
2017	1337	2.5	4.80	2.1	133	683	550
2018	901	2.5	4.80	2.1	89	683	594
2019	1226	2.5	4.80	2.1	122	683	561
2020	1280	2.5	4.80	2.1	127	683	556
2025	1372	2.5	4.80	2.1	136	683	547
2030	1463	2.5	4.80	2.1	145	683	538
2035	1555	2.5	4.80	2.1	154	683	529
2040	1647	2.5	4.80	2.1	163	683	520
2045	1738	2.5	4.80	2.1	172	683	511
2050	1830	2.5	4.80	2.1	182	683	501

Table C-70: Lazy Days Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	35801	53464	11271594	0.47%	66.96%	22	75%	44	610.24432
2015	41595	65367	11152173	0.59%	63.63%	22	75%	44	709.00568
2016	43414	67636	12256543	0.55%	64.19%	22	75%	44	740.01136
2017	30535	57214	11517491	0.50%	53.37%	22	75%	44	520.48295
2018	34465	54348	11731178	0.46%	63.42%	22	75%	44	587.47159
2019	37349	59937	11650303	0.51%	62.31%	22	75%	44	636.63068
2020	39012	62605	12168993	0.51%	62.31%	22	75%	44	664.97727
2025	41802	67083	13039395	0.51%	62.31%	22	75%	44	712.53409
2030	44592	71561	13909798	0.51%	62.31%	22	75%	44	760.09091
2035	47383	76039	14780200	0.51%	62.31%	22	75%	44	807.66477
2040	50173	80517	15650603	0.51%	62.31%	22	75%	44	855.22159
2045	52964	84995	16521005	0.51%	62.31%	22	75%	44	902.79545
2050	55754	89473	17391407	0.51%	62.31%	22	75%	44	950.35227

Table C-71: Lazy Days Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	610	2.5	4.80	2.1	61	321	260
2015	709	2.5	4.80	2.1	70	321	251
2016	740	2.5	4.80	2.1	73	321	248
2017	520	2.5	4.80	2.1	52	321	269
2018	587	2.5	4.80	2.1	58	321	263
2019	637	2.5	4.80	2.1	63	321	258
2020	665	2.5	4.80	2.1	66	321	255
2025	713	2.5	4.80	2.1	71	321	250
2030	760	2.5	4.80	2.1	75	321	246
2035	808	2.5	4.80	2.1	80	321	241
2040	855	2.5	4.80	2.1	85	321	236
2045	903	2.5	4.80	2.1	90	321	231
2050	950	2.5	4.80	2.1	94	321	227

Table C-72: Little Hall Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	34374	60133	11271594	0.53%	57.16%	22	75%	44	585.920455
2015	32456	59234	11152173	0.53%	54.79%	22	75%	44	553.227273
2016	21103	44465	12256543	0.36%	47.46%	22	75%	44	359.710227
2017	27280	53903	11517491	0.47%	50.61%	22	75%	44	465
2018	27738	51385	11731178	0.44%	53.98%	22	75%	44	472.806818
2019	28709	54371	11650303	0.47%	52.80%	22	75%	44	489.357955
2020	29987	56792	12168993	0.47%	52.80%	22	75%	44	511.142045
2025	32132	60854	13039395	0.47%	52.80%	22	75%	44	547.704545
2030	34276	64916	13909798	0.47%	52.80%	22	75%	44	584.25
2035	36421	68978	14780200	0.47%	52.80%	22	75%	44	620.8125
2040	38566	73040	15650603	0.47%	52.80%	22	75%	44	657.375
2045	40711	77102	16521005	0.47%	52.80%	22	75%	44	693.9375
2050	42856	81164	17391407	0.47%	52.80%	22	75%	44	730.5

Table C-73: Little Hall Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	586	3.1	3.87	2.6	58	249	191
2015	553	3.1	3.87	2.6	55	249	194
2016	360	3.1	3.87	2.6	36	249	213
2017	465	3.1	3.87	2.6	46	249	203
2018	473	3.1	3.87	2.6	47	249	202
2019	489	3.1	3.87	2.6	49	249	200
2020	511	3.1	3.87	2.6	51	249	198
2025	548	3.1	3.87	2.6	54	249	195
2030	584	3.1	3.87	2.6	58	249	191
2035	621	3.1	3.87	2.6	62	249	187
2040	657	3.1	3.87	2.6	65	249	184
2045	694	3.1	3.87	2.6	69	249	180
2050	731	3.1	3.87	2.6	73	249	176

Table C-74: Little Ridge Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	42724	70937	11271594	0.63%	60.23%	22	75%	44	728.25
2015	33366	123194	11152173	1.10%	27.08%	22	75%	44	568.73864
2016	30290	73555	12256543	0.60%	41.18%	22	75%	44	516.30682
2017	63860	104414	11517491	0.91%	61.16%	22	75%	44	1088.5227
2018	50495	102503	11731178	0.87%	49.26%	22	75%	44	860.71023
2019	45809	95870	11650303	0.82%	47.78%	22	75%	44	780.83523
2020	47849	100138	12168993	0.82%	47.78%	22	75%	44	815.60795
2025	51271	107300	13039395	0.82%	47.78%	22	75%	44	873.9375
2030	54694	114463	13909798	0.82%	47.78%	22	75%	44	932.28409
2035	58116	121625	14780200	0.82%	47.78%	22	75%	44	990.61364
2040	61539	128788	15650603	0.82%	47.78%	22	75%	44	1048.9602
2045	64961	135950	16521005	0.82%	47.78%	22	75%	44	1107.2898
2050	68384	143113	17391407	0.82%	47.78%	22	75%	44	1165.6364

Table C-75: Little Ridge Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	728	6	2	2	182	168	-14
2015	569	6	2	2	142	168	26
2016	516	6	2	2	129	168	39
2017	1089	6	2	2	272	168	-104
2018	861	6	2	2	215	168	-47
2019	781	6	2	2	195	168	-27
2020	816	6	2	2	204	168	-36
2025	874	6	2	2	219	168	-51
2030	932	6	2	2	233	168	-65
2035	991	6	2	2	248	168	-80
2040	1049	6	2	2	262	168	-94
2045	1107	6	2	2	277	168	-109
2050	1166	6	2	2	292	168	-124

Table C-76: Little River Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	27870	57655	11271594	0.51%	48.34%	22	75%	44	475.05682
2015	20725	41453	11152173	0.37%	50.00%	22	75%	44	353.26705
2016	18978	39287	12256543	0.32%	48.31%	22	75%	44	323.48864
2017	21582	41496	11517491	0.36%	52.01%	22	75%	44	367.875
2018	19252	33938	11731178	0.29%	56.73%	22	75%	44	328.15909
2019	22057	43184	11650303	0.37%	51.08%	22	75%	44	375.97159
2020	23038	45106	12168993	0.37%	51.08%	22	75%	44	392.69318
2025	24686	48333	13039395	0.37%	51.08%	22	75%	44	420.78409
2030	26334	51559	13909798	0.37%	51.08%	22	75%	44	448.875
2035	27982	54785	14780200	0.37%	51.08%	22	75%	44	476.96591
2040	29630	58012	15650603	0.37%	51.08%	22	75%	44	505.05682
2045	31278	61238	16521005	0.37%	51.08%	22	75%	44	533.14773
2050	32925	64464	17391407	0.37%	51.08%	22	75%	44	561.22159

Table C-77: Little River Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	475	2.5	4.80	2.1	47	101	54
2015	353	2.5	4.80	2.1	35	101	66
2016	323	2.5	4.80	2.1	32	101	69
2017	368	2.5	4.80	2.1	37	101	64
2018	328	2.5	4.80	2.1	33	101	68
2019	376	2.5	4.80	2.1	37	101	64
2020	393	2.5	4.80	2.1	39	101	62
2025	421	2.5	4.80	2.1	42	101	59
2030	449	2.5	4.80	2.1	45	101	56
2035	477	2.5	4.80	2.1	47	101	54
2040	505	2.5	4.80	2.1	50	101	51
2045	533	2.5	4.80	2.1	53	101	48
2050	561	2.5	4.80	2.1	56	101	45

Table C-78: Little Shoal Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	24072	42763	11271594	0.38%	56.29%	22	75%	44	410.31818
2015	45498	71049	11152173	0.64%	64.04%	22	75%	44	775.53409
2016	18593	31628	12256543	0.26%	58.79%	22	75%	44	316.92614
2017	16572	30490	11517491	0.26%	54.35%	22	75%	44	282.47727
2018	13815	25302	11731178	0.22%	54.60%	22	75%	44	235.48295
2019	23559	40891	11650303	0.35%	57.61%	22	75%	44	401.57386
2020	24608	42712	12168993	0.35%	57.61%	22	75%	44	419.45455
2025	26368	45767	13039395	0.35%	57.61%	22	75%	44	449.45455
2030	28128	48822	13909798	0.35%	57.61%	22	75%	44	479.45455
2035	29888	51877	14780200	0.35%	57.61%	22	75%	44	509.45455
2040	31648	54932	15650603	0.35%	57.61%	22	75%	44	539.45455
2045	33408	57987	16521005	0.35%	57.61%	22	75%	44	569.45455
2050	35169	61042	17391407	0.35%	57.61%	22	75%	44	599.47159

Table C-79: Little Shoal Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	410	3.25	3.69	2.15	52	58	6
2015	776	3.25	3.69	2.15	98	58	-40
2016	317	3.25	3.69	2.15	40	58	18
2017	282	3.25	3.69	2.15	36	58	22
2018	235	3.25	3.69	2.15	30	58	28
2019	402	3.25	3.69	2.15	51	58	7
2020	419	3.25	3.69	2.15	53	58	5
2025	449	3.25	3.69	2.15	57	58	1
2030	479	3.25	3.69	2.15	60	58	-2
2035	509	3.25	3.69	2.15	64	58	-6
2040	539	3.25	3.69	2.15	68	58	-10
2045	569	3.25	3.69	2.15	72	58	-14
2050	599	3.25	3.69	2.15	75	58	-17

Table C-80: Long Hollow Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	22968	38133	11271594	0.34%	60.23%	22	75%	44	391.5
2015	18055	29841	11152173	0.27%	60.50%	22	75%	44	307.75568
2016	15194	27302	12256543	0.22%	55.65%	22	75%	44	258.98864
2017	14262	24314	11517491	0.21%	58.66%	22	75%	44	243.10227
2018	12593	21783	11731178	0.19%	57.81%	22	75%	44	214.65341
2019	16724	28553	11650303	0.25%	58.57%	22	75%	44	285.06818
2020	17469	29825	12168993	0.25%	58.57%	22	75%	44	297.76705
2025	18718	31958	13039395	0.25%	58.57%	22	75%	44	319.05682
2030	19967	34091	13909798	0.25%	58.57%	22	75%	44	340.34659
2035	21217	36224	14780200	0.25%	58.57%	22	75%	44	361.65341
2040	22467	38358	15650603	0.25%	58.57%	22	75%	44	382.96023
2045	23716	40491	16521005	0.25%	58.57%	22	75%	44	404.25
2050	24965	42624	17391407	0.25%	58.57%	22	75%	44	425.53977

Table C-81: Long Hollow Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	392	3.1	3.87	2.6	39	84	45
2015	308	3.1	3.87	2.6	31	84	53
2016	259	3.1	3.87	2.6	26	84	58
2017	243	3.1	3.87	2.6	24	84	60
2018	215	3.1	3.87	2.6	21	84	63
2019	285	3.1	3.87	2.6	28	84	56
2020	298	3.1	3.87	2.6	30	84	54
2025	319	3.1	3.87	2.6	32	84	52
2030	340	3.1	3.87	2.6	34	84	50
2035	362	3.1	3.87	2.6	36	84	48
2040	383	3.1	3.87	2.6	38	84	46
2045	404	3.1	3.87	2.6	40	84	44
2050	426	3.1	3.87	2.6	42	84	42

Table C-82: Longwood Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	81407	168561	11271594	1.50%	48.30%	22	75%	44	1387.6193
2015	48660	106311	11152173	0.95%	45.77%	22	75%	44	829.43182
2016	17131	64447	12256543	0.53%	26.58%	22	75%	44	292.00568
2017	49934	113487	11517491	0.99%	44.00%	22	75%	44	851.14773
2018	64982	119338	11731178	1.02%	54.45%	22	75%	44	1107.6477
2019	50818	115971	11650303	1.00%	43.82%	22	75%	44	866.21591
2020	53081	121134	12168993	1.00%	43.82%	22	75%	44	904.78977
2025	56877	129798	13039395	1.00%	43.82%	22	75%	44	969.49432
2030	60674	138463	13909798	1.00%	43.82%	22	75%	44	1034.2159
2035	64471	147127	14780200	1.00%	43.82%	22	75%	44	1098.9375
2040	68268	155791	15650603	1.00%	43.82%	22	75%	44	1163.6591
2045	72064	164455	16521005	1.00%	43.82%	22	75%	44	1228.3636
2050	75861	173120	17391407	1.00%	43.82%	22	75%	44	1293.0852

Table C-83: Longwood Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1388	1.75	6.86	2.1	96	77	-19
2015	829	1.75	6.86	2.1	58	77	19
2016	292	1.75	6.86	2.1	20	77	57
2017	851	1.75	6.86	2.1	59	77	18
2018	1108	1.75	6.86	2.1	77	77	0
2019	866	1.75	6.86	2.1	60	77	17
2020	905	1.75	6.86	2.1	63	77	14
2025	969	1.75	6.86	2.1	67	77	10
2030	1034	1.75	6.86	2.1	72	77	5
2035	1099	1.75	6.86	2.1	76	77	1
2040	1164	1.75	6.86	2.1	81	77	-4
2045	1228	1.75	6.86	2.1	85	77	-8
2050	1293	1.75	6.86	2.1	90	77	-13

Table C-84: Lower Overlook Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	50898	96115	11271594	0.85%	52.96%	22	75%	44	867.57955
2015	31801	78138	11152173	0.70%	40.70%	22	75%	44	542.0625
2016	60346	92321	12256543	0.75%	65.37%	22	75%	44	1028.625
2017	52466	88638	11517491	0.77%	59.19%	22	75%	44	894.30682
2018	49257	89503	11731178	0.76%	55.03%	22	75%	44	839.60795
2019	48886	89455	11650303	0.77%	54.65%	22	75%	44	833.28409
2020	51062	93437	12168993	0.77%	54.65%	22	75%	44	870.375
2025	54715	100121	13039395	0.77%	54.65%	22	75%	44	932.64205
2030	58367	106804	13909798	0.77%	54.65%	22	75%	44	994.89205
2035	62019	113487	14780200	0.77%	54.65%	22	75%	44	1057.142
2040	65672	120170	15650603	0.77%	54.65%	22	75%	44	1119.4091
2045	69324	126853	16521005	0.77%	54.65%	22	75%	44	1181.6591
2050	72976	133537	17391407	0.77%	54.65%	22	75%	44	1243.9091

Table C-85: Lower Overlook Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	868	6	2	2	217	35	-182
2015	542	6	2	2	136	35	-101
2016	1029	6	2	2	257	35	-222
2017	894	6	2	2	224	35	-189
2018	840	6	2	2	210	35	-175
2019	833	6	2	2	208	35	-173
2020	870	6	2	2	218	35	-183
2025	933	6	2	2	233	35	-198
2030	995	6	2	2	249	35	-214
2035	1057	6	2	2	264	35	-229
2040	1119	6	2	2	280	35	-245
2045	1182	6	2	2	296	35	-261
2050	1244	6	2	2	311	35	-276

Table C-86: Lower Pool East Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	18554	43846	11271594	0.39%	42.32%	22	75%	44	316.26136
2015	27555	29128	11152173	0.26%	94.60%	22	75%	44	469.6875
2016	33631	36403	12256543	0.30%	92.39%	22	75%	44	573.25568
2017	21876	25435	11517491	0.22%	86.01%	22	75%	44	372.88636
2018	20670	24346	11731178	0.21%	84.90%	22	75%	44	352.32955
2019	25654	32051	11650303	0.28%	80.04%	22	75%	44	437.28409
2020	26796	33478	12168993	0.28%	80.04%	22	75%	44	456.75
2025	28713	35873	13039395	0.28%	80.04%	22	75%	44	489.42614
2030	30630	38268	13909798	0.28%	80.04%	22	75%	44	522.10227
2035	32547	40662	14780200	0.28%	80.04%	22	75%	44	554.77841
2040	34464	43057	15650603	0.28%	80.04%	22	75%	44	587.45455
2045	36380	45451	16521005	0.28%	80.04%	22	75%	44	620.11364
2050	38297	47846	17391407	0.28%	80.04%	22	75%	44	652.78977

Table C-87: Lower Pool East Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	316	6	2	2	79	98	19
2015	470	6	2	2	118	98	-20
2016	573	6	2	2	143	98	-45
2017	373	6	2	2	93	98	5
2018	352	6	2	2	88	98	10
2019	437	6	2	2	109	98	-11
2020	457	6	2	2	114	98	-16
2025	489	6	2	2	122	98	-24
2030	522	6	2	2	131	98	-33
2035	555	6	2	2	139	98	-41
2040	587	6	2	2	147	98	-49
2045	620	6	2	2	155	98	-57
2050	653	6	2	2	163	98	-65

Table C-88: Lower Pool West Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	68218	107189	11271594	0.95%	63.64%	22	75%	44	1162.8068
2015	60454	96486	11152173	0.87%	62.66%	22	75%	44	1030.4659
2016	43941	79723	12256543	0.65%	55.12%	22	75%	44	748.99432
2017	37999	68456	11517491	0.59%	55.51%	22	75%	44	647.71023
2018	38261	65061	11731178	0.55%	58.81%	22	75%	44	652.17614
2019	49828	84245	11650303	0.72%	59.15%	22	75%	44	849.34091
2020	52046	87995	12168993	0.72%	59.15%	22	75%	44	887.14773
2025	55769	94289	13039395	0.72%	59.15%	22	75%	44	950.60795
2030	59491	100583	13909798	0.72%	59.15%	22	75%	44	1014.0511
2035	63214	106877	14780200	0.72%	59.15%	22	75%	44	1077.5114
2040	66937	113171	15650603	0.72%	59.15%	22	75%	44	1140.9716
2045	70659	119465	16521005	0.72%	59.15%	22	75%	44	1204.4148
2050	74382	125759	17391407	0.72%	59.15%	22	75%	44	1267.875

Table C-89: Lower Pool West Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1163	6	2	2	291	132	-159
2015	1030	6	2	2	258	132	-126
2016	749	6	2	2	187	132	-55
2017	648	6	2	2	162	132	-30
2018	652	6	2	2	163	132	-31
2019	849	6	2	2	212	132	-80
2020	887	6	2	2	222	132	-90
2025	951	6	2	2	238	132	-106
2030	1014	6	2	2	254	132	-122
2035	1078	6	2	2	270	132	-138
2040	1141	6	2	2	285	132	-153
2045	1204	6	2	2	301	132	-169
2050	1268	6	2	2	317	132	-185

Table C-90: Lula Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	14552	28632	11271594	0.25%	50.82%	22	75%	44	248.04545
2015	13028	24415	11152173	0.22%	53.36%	22	75%	44	222.06818
2016	10814	19485	12256543	0.16%	55.50%	22	75%	44	184.32955
2017	-	-	11517491	-	-	22	75%	44	-
2018	-	-	11731178	-	-	22	75%	44	-
2019	13062	24540	11650303	0.21%	53.23%	22	75%	44	222.64773
2020	13644	25633	12168993	0.21%	53.23%	22	75%	44	232.56818
2025	14620	27466	13039395	0.21%	53.23%	22	75%	44	249.20455
2030	15596	29300	13909798	0.21%	53.23%	22	75%	44	265.84091
2035	16571	31133	14780200	0.21%	53.23%	22	75%	44	282.46023
2040	17548	32967	15650603	0.21%	53.23%	22	75%	44	299.11364
2045	18523	34800	16521005	0.21%	53.23%	22	75%	44	315.73295
2050	19499	36633	17391407	0.21%	53.23%	22	75%	44	332.36932

Table C-91: Lula Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	248	3.25	3.69	2.15	31	61	30
2015	222	3.25	3.69	2.15	28	61	33
2016	184	3.25	3.69	2.15	23	61	38
2017	-	3.25	3.69	2.15	-	61	-
2018	-	3.25	3.69	2.15	-	61	-
2019	223	3.25	3.69	2.15	28	61	33
2020	233	3.25	3.69	2.15	29	61	32
2025	249	3.25	3.69	2.15	31	61	30
2030	266	3.25	3.69	2.15	34	61	27
2035	282	3.25	3.69	2.15	36	61	25
2040	299	3.25	3.69	2.15	38	61	23
2045	316	3.25	3.69	2.15	40	61	21
2050	332	3.25	3.69	2.15	42	61	19

Table C-92: Lumpkin Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	14504	26917	11271594	0.24%	53.88%	22	75%	44	247.22727
2015	11429	21620	11152173	0.19%	52.86%	22	75%	44	194.8125
2016	18856	38769	12256543	0.32%	48.64%	22	75%	44	321.40909
2017	9448	18063	11517491	0.16%	52.31%	22	75%	44	161.04545
2018	11139	18659	11731178	0.16%	59.70%	22	75%	44	189.86932
2019	13269	24812	11650303	0.21%	53.48%	22	75%	44	226.17614
2020	13860	25917	12168993	0.21%	53.48%	22	75%	44	236.25
2025	14851	27770	13039395	0.21%	53.48%	22	75%	44	253.14205
2030	15842	29624	13909798	0.21%	53.48%	22	75%	44	270.03409
2035	16834	31478	14780200	0.21%	53.48%	22	75%	44	286.94318
2040	17825	33332	15650603	0.21%	53.48%	22	75%	44	303.83523
2045	18816	35185	16521005	0.21%	53.48%	22	75%	44	320.72727
2050	19808	37039	17391407	0.21%	53.48%	22	75%	44	337.63636

Table C-93: Lumpkin Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	247	3.25	3.69	2.15	31	10	-21
2015	195	3.25	3.69	2.15	25	10	-15
2016	321	3.25	3.69	2.15	40	10	-30
2017	161	3.25	3.69	2.15	20	10	-10
2018	190	3.25	3.69	2.15	24	10	-14
2019	226	3.25	3.69	2.15	28	10	-18
2020	236	3.25	3.69	2.15	30	10	-20
2025	253	3.25	3.69	2.15	32	10	-22
2030	270	3.25	3.69	2.15	34	10	-24
2035	287	3.25	3.69	2.15	36	10	-26
2040	304	3.25	3.69	2.15	38	10	-28
2045	321	3.25	3.69	2.15	40	10	-30
2050	338	3.25	3.69	2.15	43	10	-33

Table C-94: Mary Alice Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	63038	103923	11271594	0.92%	60.66%	22	75%	44	1074.5114
2015	97487	139016	11152173	1.25%	70.13%	22	75%	44	1661.7102
2016	54100	88885	12256543	0.73%	60.87%	22	75%	44	922.15909
2017	44774	77588	11517491	0.67%	57.71%	22	75%	44	763.19318
2018	64889	95894	11731178	0.82%	67.67%	22	75%	44	1106.0625
2019	64780	102169	11650303	0.88%	63.40%	22	75%	44	1104.2045
2020	67665	106718	12168993	0.88%	63.40%	22	75%	44	1153.3807
2025	72504	114351	13039395	0.88%	63.40%	22	75%	44	1235.8636
2030	77344	121984	13909798	0.88%	63.40%	22	75%	44	1318.3636
2035	82184	129617	14780200	0.88%	63.40%	22	75%	44	1400.8636
2040	87023	137250	15650603	0.88%	63.40%	22	75%	44	1483.3466
2045	91863	144883	16521005	0.88%	63.40%	22	75%	44	1565.8466
2050	96703	152516	17391407	0.88%	63.40%	22	75%	44	1648.3466

Table C-95: Mary Alice Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1075	3.1	3.87	2.6	107	346	239
2015	1662	3.1	3.87	2.6	165	346	181
2016	922	3.1	3.87	2.6	92	346	254
2017	763	3.1	3.87	2.6	76	346	270
2018	1106	3.1	3.87	2.6	110	346	236
2019	1104	3.1	3.87	2.6	110	346	236
2020	1153	3.1	3.87	2.6	115	346	231
2025	1236	3.1	3.87	2.6	123	346	223
2030	1318	3.1	3.87	2.6	131	346	215
2035	1401	3.1	3.87	2.6	139	346	207
2040	1483	3.1	3.87	2.6	147	346	199
2045	1566	3.1	3.87	2.6	156	346	190
2050	1648	3.1	3.87	2.6	164	346	182

Table C-96: Mountain View Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	15860	31427	11271594	0.28%	50.47%	22	75%	44	270.34091
2015	8142	21309	11152173	0.19%	38.21%	22	75%	44	138.78409
2016	12561	26419	12256543	0.22%	47.55%	22	75%	44	214.10795
2017	9198	25866	11517491	0.22%	35.56%	22	75%	44	156.78409
2018	12907	22764	11731178	0.19%	56.70%	22	75%	44	220.00568
2019	11755	25725	11650303	0.22%	45.70%	22	75%	44	200.36932
2020	12279	26871	12168993	0.22%	45.70%	22	75%	44	209.30114
2025	13157	28793	13039395	0.22%	45.70%	22	75%	44	224.26705
2030	14036	30715	13909798	0.22%	45.70%	22	75%	44	239.25
2035	14914	32637	14780200	0.22%	45.70%	22	75%	44	254.21591
2040	15792	34559	15650603	0.22%	45.70%	22	75%	44	269.18182
2045	16670	36481	16521005	0.22%	45.70%	22	75%	44	284.14773
2050	17549	38403	17391407	0.22%	45.70%	22	75%	44	299.13068

Table C-97: Mountain View Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	270	3.25	3.69	2.15	34	21	-13
2015	139	3.25	3.69	2.15	18	21	3
2016	214	3.25	3.69	2.15	27	21	-6
2017	157	3.25	3.69	2.15	20	21	1
2018	220	3.25	3.69	2.15	28	21	-7
2019	200	3.25	3.69	2.15	25	21	-4
2020	209	3.25	3.69	2.15	26	21	-5
2025	224	3.25	3.69	2.15	28	21	-7
2030	239	3.25	3.69	2.15	30	21	-9
2035	254	3.25	3.69	2.15	32	21	-11
2040	269	3.25	3.69	2.15	34	21	-13
2045	284	3.25	3.69	2.15	36	21	-15
2050	299	3.25	3.69	2.15	38	21	-17

Table C-98: Nix Bridge Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	17724	33054	11271594	0.29%	53.62%	22	75%	44	302.11364
2015	31012	44769	11152173	0.40%	69.27%	22	75%	44	528.61364
2016	23551	37906	12256543	0.31%	62.13%	22	75%	44	401.4375
2017	17272	56309	11517491	0.49%	30.67%	22	75%	44	294.40909
2018	16022	29803	11731178	0.25%	53.76%	22	75%	44	273.10227
2019	21936	40704	11650303	0.35%	53.89%	22	75%	44	373.90909
2020	22912	42516	12168993	0.35%	53.89%	22	75%	44	390.54545
2025	24551	45557	13039395	0.35%	53.89%	22	75%	44	418.48295
2030	26190	48598	13909798	0.35%	53.89%	22	75%	44	446.42045
2035	27829	51639	14780200	0.35%	53.89%	22	75%	44	474.35795
2040	29468	54680	15650603	0.35%	53.89%	22	75%	44	502.29545
2045	31107	57721	16521005	0.35%	53.89%	22	75%	44	530.23295
2050	32745	60762	17391407	0.35%	53.89%	22	75%	44	558.15341

Table C-99: Nix Bridge Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	302	2.5	4.80	2.1	30	48	18
2015	529	2.5	4.80	2.1	52	48	-4
2016	401	2.5	4.80	2.1	40	48	8
2017	294	2.5	4.80	2.1	29	48	19
2018	273	2.5	4.80	2.1	27	48	21
2019	374	2.5	4.80	2.1	37	48	11
2020	391	2.5	4.80	2.1	39	48	9
2025	418	2.5	4.80	2.1	41	48	7
2030	446	2.5	4.80	2.1	44	48	4
2035	474	2.5	4.80	2.1	47	48	1
2040	502	2.5	4.80	2.1	50	48	-2
2045	530	2.5	4.80	2.1	53	48	-5
2050	558	2.5	4.80	2.1	55	48	-7

Table C-100: Old Federal Campground Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	3442	39297	11271594	0.35%	8.76%	22	75%	44	58.670455
2015	4149	40862	11152173	0.37%	10.15%	22	75%	44	70.721591
2016	4156	40026	12256543	0.33%	10.38%	22	75%	44	70.840909
2017	4747	47612	11517491	0.41%	9.97%	22	75%	44	80.914773
2018	4332	53418	11731178	0.46%	8.11%	22	75%	44	73.840909
2019	4218	44512	11650303	0.38%	9.48%	22	75%	44	71.897727
2020	4405	46494	12168993	0.38%	9.48%	22	75%	44	75.085227
2025	4721	49820	13039395	0.38%	9.48%	22	75%	44	80.471591
2030	5036	53145	13909798	0.38%	9.48%	22	75%	44	85.840909
2035	5351	56471	14780200	0.38%	9.48%	22	75%	44	91.210227
2040	5666	59796	15650603	0.38%	9.48%	22	75%	44	96.579545
2045	5981	63122	16521005	0.38%	9.48%	22	75%	44	101.94886
2050	6296	66447	17391407	0.38%	9.48%	22	75%	44	107.31818

Table C-101: Old Federal Campground Camping Demand

Year	Design Load	Turnover (36/Day Use Hours per Visitor)	Maximum People Per Campsite	Campsites	Maximum Campground Occupancy	Net Differences	Campsite Forecast
2014	19	1	8	84	672	653	82
2015	38	1	8	84	672	634	79
2016	44	1	8	84	672	628	79
2017	47	1	8	84	672	625	78
2018	49	1	8	84	672	623	78
2019	43	1	8	84	672	629	79
2020	45	1	8	84	672	627	78
2025	49	1	8	84	672	623	78
2030	52	1	8	84	672	620	78
2035	55	1	8	84	672	617	77
2040	58	1	8	84	672	614	77
2045	61	1	8	84	672	611	76
2050	65	1	8	84	672	607	76

Table C-102: Old Federal Day Use Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	89095	130452	11271594	1.16%	68.30%	22	75%	44	1518.6648
2015	42483	69877	11152173	0.63%	60.80%	22	75%	44	724.14205
2016	72981	116854	12256543	0.95%	62.45%	22	75%	44	1243.9943
2017	90944	138369	11517491	1.20%	65.73%	22	75%	44	1550.1818
2018	80607	115610	11731178	0.99%	69.72%	22	75%	44	1373.983
2019	75037	114737	11650303	0.98%	65.40%	22	75%	44	1279.0398
2020	78378	119845	12168993	0.98%	65.40%	22	75%	44	1335.9886
2025	83984	128417	13039395	0.98%	65.40%	22	75%	44	1431.5455
2030	89590	136989	13909798	0.98%	65.40%	22	75%	44	1527.1023
2035	95196	145561	14780200	0.98%	65.40%	22	75%	44	1622.6591
2040	100803	154134	15650603	0.98%	65.40%	22	75%	44	1718.233
2045	106409	162706	16521005	0.98%	65.40%	22	75%	44	1813.7898
2050	112015	171278	17391407	0.98%	65.40%	22	75%	44	1909.3466

Table C-103: Old Federal Day Use Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1519	6	2	2	380	126	-254
2015	724	6	2	2	181	126	-55
2016	1244	6	2	2	311	126	-185
2017	1550	6	2	2	388	126	-262
2018	1374	6	2	2	344	126	-218
2019	1279	6	2	2	320	126	-194
2020	1336	6	2	2	334	126	-208
2025	1432	6	2	2	358	126	-232
2030	1527	6	2	2	382	126	-256
2035	1623	6	2	2	406	126	-280
2040	1718	6	2	2	430	126	-304
2045	1814	6	2	2	454	126	-328
2050	1909	6	2	2	477	126	-351

Table C-104: Port Royale Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	84243	140142	11271594	1.24%	60.11%	22	75%	44	1435.9602
2015	89023	146071	11152173	1.31%	60.95%	22	75%	44	1517.4375
2016	137474	203851	12256543	1.66%	67.44%	22	75%	44	2343.3068
2017	30892	77308	11517491	0.67%	39.96%	22	75%	44	526.56818
2018	71841	123394	11731178	1.05%	58.22%	22	75%	44	1224.5625
2019	79347	138391	11650303	1.19%	57.34%	22	75%	44	1352.5057
2020	82880	144553	12168993	1.19%	57.34%	22	75%	44	1412.7273
2025	88808	154892	13039395	1.19%	57.34%	22	75%	44	1513.7727
2030	94736	165231	13909798	1.19%	57.34%	22	75%	44	1614.8182
2035	100664	175571	14780200	1.19%	57.34%	22	75%	44	1715.8636
2040	106592	185910	15650603	1.19%	57.34%	22	75%	44	1816.9091
2045	112520	196249	16521005	1.19%	57.34%	22	75%	44	1917.9545
2050	118448	206589	17391407	1.19%	57.34%	22	75%	44	2019

Table C-105: Port Royale Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1436	2.5	4.80	2.1	142	670	528
2015	1517	2.5	4.80	2.1	150	670	520
2016	2343	2.5	4.80	2.1	232	670	438
2017	527	2.5	4.80	2.1	52	670	618
2018	1225	2.5	4.80	2.1	122	670	548
2019	1353	2.5	4.80	2.1	134	670	536
2020	1413	2.5	4.80	2.1	140	670	530
2025	1514	2.5	4.80	2.1	150	670	520
2030	1615	2.5	4.80	2.1	160	670	510
2035	1716	2.5	4.80	2.1	170	670	500
2040	1817	2.5	4.80	2.1	180	670	490
2045	1918	2.5	4.80	2.1	190	670	480
2050	2019	2.5	4.80	2.1	200	670	470

Table C-106: River Forks Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	18483	50092	11271594	0.44%	36.90%	22	75%	44	315.05114
2015	12104	44688	11152173	0.40%	27.09%	22	75%	44	206.31818
2016	17258	52661	12256543	0.43%	32.77%	22	75%	44	294.17045
2017	14394	49389	11517491	0.43%	29.14%	22	75%	44	245.35227
2018	17612	52089	11731178	0.44%	33.81%	22	75%	44	300.20455
2019	15984	50041	11650303	0.43%	31.94%	22	75%	44	272.45455
2020	16696	52269	12168993	0.43%	31.94%	22	75%	44	284.59091
2025	17890	56007	13039395	0.43%	31.94%	22	75%	44	304.94318
2030	19084	59746	13909798	0.43%	31.94%	22	75%	44	325.29545
2035	20278	63484	14780200	0.43%	31.94%	22	75%	44	345.64773
2040	21473	67223	15650603	0.43%	31.94%	22	75%	44	366.01705
2045	22667	70962	16521005	0.43%	31.94%	22	75%	44	386.36932
2050	23861	74700	17391407	0.43%	31.94%	22	75%	44	406.72159

Table C-107: River Forks Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	315	2.5	4.80	2.6	25	222	197
2015	206	2.5	4.80	2.6	17	222	205
2016	294	2.5	4.80	2.6	24	222	198
2017	245	2.5	4.80	2.6	20	222	202
2018	300	2.5	4.80	2.6	24	222	198
2019	272	2.5	4.80	2.6	22	222	200
2020	285	2.5	4.80	2.6	23	222	199
2025	305	2.5	4.80	2.6	24	222	198
2030	325	2.5	4.80	2.6	26	222	196
2035	346	2.5	4.80	2.6	28	222	194
2040	366	2.5	4.80	2.6	29	222	193
2045	386	2.5	4.80	2.6	31	222	191
2050	407	2.5	4.80	2.6	33	222	189

Table C-108: Robinson Park Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	6222	10513	11271594	0.09%	59.18%	22	75%	44	106.05682
2015	6005	10424	11152173	0.09%	57.61%	22	75%	44	102.35795
2016	3665	7176	12256543	0.06%	51.07%	22	75%	44	62.471591
2017	3245	8267	11517491	0.07%	39.25%	22	75%	44	55.3125
2018	5668	9690	11731178	0.08%	58.49%	22	75%	44	96.613636
2019	4947	9312	11650303	0.08%	53.12%	22	75%	44	84.323864
2020	5167	9727	12168993	0.08%	53.12%	22	75%	44	88.073864
2025	5537	10423	13039395	0.08%	53.12%	22	75%	44	94.380682
2030	5907	11119	13909798	0.08%	53.12%	22	75%	44	100.6875
2035	6276	11814	14780200	0.08%	53.12%	22	75%	44	106.97727
2040	6646	12510	15650603	0.08%	53.12%	22	75%	44	113.28409
2045	7015	13206	16521005	0.08%	53.12%	22	75%	44	119.57386
2050	7385	13902	17391407	0.08%	53.12%	22	75%	44	125.88068

Table C-109: Robinson Park Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	106	2.5	4.8	2.1	11	55	44
2015	102	2.5	4.8	2.1	10	55	45
2016	63	2.5	4.8	2.1	6	55	49
2017	55	2.5	4.8	2.1	5	55	50
2018	97	2.5	4.8	2.1	10	55	45
2019	84	2.5	4.8	2.1	8	55	47
2020	88	2.5	4.8	2.1	9	55	46
2025	94	2.5	4.8	2.1	9	55	46
2030	101	2.5	4.8	2.1	10	55	45
2035	107	2.5	4.8	2.1	11	55	44
2040	113	2.5	4.8	2.1	11	55	44
2045	120	2.5	4.8	2.1	12	55	43
2050	126	2.5	4.8	2.1	13	55	42

Table C-110: Sardis Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	38808	73625	11271594	0.65%	52.71%	22	75%	44	661.5
2015	34527	72887	11152173	0.65%	47.37%	22	75%	44	588.52841
2016	16386	33294	12256543	0.27%	49.22%	22	75%	44	279.30682
2017	19109	33163	11517491	0.29%	57.62%	22	75%	44	325.72159
2018	30204	50852	11731178	0.43%	59.40%	22	75%	44	514.84091
2019	28542	53587	11650303	0.46%	53.26%	22	75%	44	486.51136
2020	29813	55973	12168993	0.46%	53.26%	22	75%	44	508.17614
2025	31945	59976	13039395	0.46%	53.26%	22	75%	44	544.51705
2030	34078	63980	13909798	0.46%	53.26%	22	75%	44	580.875
2035	36210	67983	14780200	0.46%	53.26%	22	75%	44	617.21591
2040	38342	71987	15650603	0.46%	53.26%	22	75%	44	653.55682
2045	40474	75990	16521005	0.46%	53.26%	22	75%	44	689.89773
2050	42607	79994	17391407	0.46%	53.26%	22	75%	44	726.25568

Table C-111: Sardis Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	662	2.5	4.8	2.1	66	118	52
2015	589	2.5	4.8	2.1	58	118	60
2016	279	2.5	4.8	2.1	28	118	90
2017	326	2.5	4.8	2.1	32	118	86
2018	515	2.5	4.8	2.1	51	118	67
2019	487	2.5	4.8	2.1	48	118	70
2020	508	2.5	4.8	2.1	50	118	68
2025	545	2.5	4.8	2.1	54	118	64
2030	581	2.5	4.8	2.1	58	118	60
2035	617	2.5	4.8	2.1	61	118	57
2040	654	2.5	4.8	2.1	65	118	53
2045	690	2.5	4.8	2.1	68	118	50
2050	726	2.5	4.8	2.1	72	118	46

Table C-112: Sawnee Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	1091	10405	11271594	0.09%	10.49%	22	75%	44	18.596591
2015	2233	28750	11152173	0.26%	7.77%	22	75%	44	38.0625
2016	2567	35441	12256543	0.29%	7.24%	22	75%	44	43.755682
2017	2746	51364	11517491	0.45%	5.35%	22	75%	44	46.806818
2018	2853	44738	11731178	0.38%	6.38%	22	75%	44	48.630682
2019	2544	34173	11650303	0.29%	7.44%	22	75%	44	43.363636
2020	2657	35694	12168993	0.29%	7.44%	22	75%	44	45.289773
2025	2847	38247	13039395	0.29%	7.44%	22	75%	44	48.528409
2030	3037	40800	13909798	0.29%	7.44%	22	75%	44	51.767045
2035	3227	43353	14780200	0.29%	7.44%	22	75%	44	55.005682
2040	3417	45906	15650603	0.29%	7.44%	22	75%	44	58.244318
2045	3607	48459	16521005	0.29%	7.44%	22	75%	44	61.482955
2050	3797	51012	17391407	0.29%	7.44%	22	75%	44	64.721591

Table C-113: Sawnee Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	19	2.5	4.80	2.6	2	29	27
2015	38	2.5	4.80	2.6	3	29	26
2016	44	2.5	4.80	2.6	4	29	25
2017	47	2.5	4.80	2.6	4	29	25
2018	49	2.5	4.80	2.6	4	29	25
2019	43	2.5	4.80	2.6	3	29	26
2020	45	2.5	4.80	2.6	4	29	25
2025	49	2.5	4.80	2.6	4	29	25
2030	52	2.5	4.80	2.6	4	29	25
2035	55	2.5	4.80	2.6	4	29	25
2040	58	2.5	4.80	2.6	5	29	24
2045	61	2.5	4.80	2.6	5	29	24
2050	65	2.5	4.80	2.6	5	29	24

Table C-114: Scoutland Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	11351	26464	11271594	0.23%	42.89%	22	75%	44	193.48295
2015	11335	22858	11152173	0.20%	49.59%	22	75%	44	193.21023
2016	10624	29294	12256543	0.24%	36.27%	22	75%	44	181.09091
2017	4823	28617	11517491	0.25%	16.85%	22	75%	44	82.210227
2018	22335	31563	11731178	0.27%	70.76%	22	75%	44	380.71023
2019	12062	27874	11650303	0.24%	43.27%	22	75%	44	205.60227
2020	12599	29115	12168993	0.24%	43.27%	22	75%	44	214.75568
2025	13500	31197	13039395	0.24%	43.27%	22	75%	44	230.11364
2030	14401	33280	13909798	0.24%	43.27%	22	75%	44	245.47159
2035	15302	35362	14780200	0.24%	43.27%	22	75%	44	260.82955
2040	16204	37445	15650603	0.24%	43.27%	22	75%	44	276.20455
2045	17104	39527	16521005	0.24%	43.27%	22	75%	44	291.54545
2050	18006	41610	17391407	0.24%	43.27%	22	75%	44	306.92045

Table C-115: Scoutland Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	193	3.1	3.87	3.1	16	60	44
2015	193	3.1	3.87	3.1	16	60	44
2016	181	3.1	3.87	3.1	15	60	45
2017	82	3.1	3.87	3.1	7	60	53
2018	381	3.1	3.87	3.1	32	60	28
2019	206	3.1	3.87	3.1	17	60	43
2020	215	3.1	3.87	3.1	18	60	42
2025	230	3.1	3.87	3.1	19	60	41
2030	245	3.1	3.87	3.1	20	60	40
2035	261	3.1	3.87	3.1	22	60	38
2040	276	3.1	3.87	3.1	23	60	37
2045	292	3.1	3.87	3.1	24	60	36
2050	307	3.1	3.87	3.1	26	60	34

Table C-116: Shady Grove Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	16636	60535	11271594	0.54%	27.48%	22	75%	44	283.56818
2015	12275	58040	11152173	0.52%	21.15%	22	75%	44	209.23295
2016	20877	67533	12256543	0.55%	30.91%	22	75%	44	355.85795
2017	19680	82329	11517491	0.71%	23.90%	22	75%	44	335.45455
2018	31555	99245	11731178	0.85%	31.80%	22	75%	44	537.86932
2019	19975	73847	11650303	0.63%	27.05%	22	75%	44	340.48295
2020	20864	77134	12168993	0.63%	27.05%	22	75%	44	355.63636
2025	22356	82652	13039395	0.63%	27.05%	22	75%	44	381.06818
2030	23849	88169	13909798	0.63%	27.05%	22	75%	44	406.51705
2035	25341	93686	14780200	0.63%	27.05%	22	75%	44	431.94886
2040	26833	99203	15650603	0.63%	27.05%	22	75%	44	457.38068
2045	28325	104720	16521005	0.63%	27.05%	22	75%	44	482.8125
2050	29818	110237	17391407	0.63%	27.05%	22	75%	44	508.26136

Table C-117: Shady Grove Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	284	2.5	4.80	2.6	23	92	69
2015	209	2.5	4.80	2.6	17	92	75
2016	356	2.5	4.80	2.6	29	92	63
2017	335	2.5	4.80	2.6	27	92	65
2018	538	2.5	4.80	2.6	43	92	49
2019	340	2.5	4.80	2.6	27	92	65
2020	356	2.5	4.80	2.6	29	92	63
2025	381	2.5	4.80	2.6	31	92	61
2030	407	2.5	4.80	2.6	33	92	59
2035	432	2.5	4.80	2.6	35	92	57
2040	457	2.5	4.80	2.6	37	92	55
2045	483	2.5	4.80	2.6	39	92	53
2050	508	2.5	4.80	2.6	41	92	51

Table C-118: Shoal Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	19752	69982	11271594	0.62%	28.22%	22	75%	44	336.68182
2015	27935	85948	11152173	0.77%	32.50%	22	75%	44	476.16477
2016	33529	99868	12256543	0.81%	33.57%	22	75%	44	571.51705
2017	29436	102866	11517491	0.89%	28.62%	22	75%	44	501.75
2018	30070	107845	11731178	0.92%	27.88%	22	75%	44	512.55682
2019	28242	93640	11650303	0.80%	30.16%	22	75%	44	481.39773
2020	29499	97809	12168993	0.80%	30.16%	22	75%	44	502.82386
2025	31609	104805	13039395	0.80%	30.16%	22	75%	44	538.78977
2030	33719	111801	13909798	0.80%	30.16%	22	75%	44	574.75568
2035	35829	118797	14780200	0.80%	30.16%	22	75%	44	610.72159
2040	37939	125793	15650603	0.80%	30.16%	22	75%	44	646.6875
2045	40049	132789	16521005	0.80%	30.16%	22	75%	44	682.65341
2050	42159	139785	17391407	0.80%	30.16%	22	75%	44	718.61932

Table C-119: Shoal Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	337	2.5	4.80	3.1	23	50	27
2015	476	2.5	4.80	3.1	32	50	18
2016	572	2.5	4.80	3.1	38	50	12
2017	502	2.5	4.80	3.1	34	50	16
2018	513	2.5	4.80	3.1	34	50	16
2019	481	2.5	4.80	3.1	32	50	18
2020	503	2.5	4.80	3.1	34	50	16
2025	539	2.5	4.80	3.1	36	50	14
2030	575	2.5	4.80	3.1	39	50	11
2035	611	2.5	4.80	3.1	41	50	9
2040	647	2.5	4.80	3.1	43	50	7
2045	683	2.5	4.80	3.1	46	50	4
2050	719	2.5	4.80	3.1	48	50	2

Table C-120: Simpson Park Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	9805	19434	11271594	0.17%	50.45%	22	75%	44	167.13068
2015	11804	20484	11152173	0.18%	57.63%	22	75%	44	201.20455
2016	7499	14778	12256543	0.12%	50.74%	22	75%	44	127.82386
2017	5615	14003	11517491	0.12%	40.10%	22	75%	44	95.710227
2018	7976	14781	11731178	0.13%	53.96%	22	75%	44	135.95455
2019	8535	16875	11650303	0.14%	50.58%	22	75%	44	145.48295
2020	8915	17627	12168993	0.14%	50.58%	22	75%	44	151.96023
2025	9552	18887	13039395	0.14%	50.58%	22	75%	44	162.81818
2030	10190	20148	13909798	0.14%	50.58%	22	75%	44	173.69318
2035	10828	21409	14780200	0.14%	50.58%	22	75%	44	184.56818
2040	11466	22670	15650603	0.14%	50.58%	22	75%	44	195.44318
2045	12103	23930	16521005	0.14%	50.58%	22	75%	44	206.30114
2050	12741	25191	17391407	0.14%	50.58%	22	75%	44	217.17614

Table C-121: Simpson Park Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	167	3.25	3.69	2.15	21	13	-8
2015	201	3.25	3.69	2.15	25	13	-12
2016	128	3.25	3.69	2.15	16	13	-3
2017	96	3.25	3.69	2.15	12	13	1
2018	136	3.25	3.69	2.15	17	13	-4
2019	145	3.25	3.69	2.15	18	13	-5
2020	152	3.25	3.69	2.15	19	13	-6
2025	163	3.25	3.69	2.15	21	13	-8
2030	174	3.25	3.69	2.15	22	13	-9
2035	185	3.25	3.69	2.15	23	13	-10
2040	195	3.25	3.69	2.15	25	13	-12
2045	206	3.25	3.69	2.15	26	13	-13
2050	217	3.25	3.69	2.15	27	13	-14

Table C-122: Six Mile Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	13395	22737	11271594	0.20%	58.91%	22	75%	44	228.32386
2015	9775	17549	11152173	0.16%	55.70%	22	75%	44	166.61932
2016	7638	13815	12256543	0.11%	55.29%	22	75%	44	130.19318
2017	6305	12812	11517491	0.11%	49.21%	22	75%	44	107.47159
2018	5174	9896	11731178	0.08%	52.28%	22	75%	44	88.193182
2019	8441	15551	11650303	0.13%	54.28%	22	75%	44	143.88068
2020	8817	16243	12168993	0.13%	54.28%	22	75%	44	150.28977
2025	9447	17405	13039395	0.13%	54.28%	22	75%	44	161.02841
2030	10078	18567	13909798	0.13%	54.28%	22	75%	44	171.78409
2035	10708	19728	14780200	0.13%	54.28%	22	75%	44	182.52273
2040	11339	20890	15650603	0.13%	54.28%	22	75%	44	193.27841
2045	11970	22052	16521005	0.13%	54.28%	22	75%	44	204.03409
2050	12600	23214	17391407	0.13%	54.28%	22	75%	44	214.77273

Table C-123: Six Mile Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	228	3.25	3.69	2.15	29	28	-1
2015	167	3.25	3.69	2.15	21	28	7
2016	130	3.25	3.69	2.15	16	28	12
2017	107	3.25	3.69	2.15	13	28	15
2018	88	3.25	3.69	2.15	11	28	17
2019	144	3.25	3.69	2.15	18	28	10
2020	150	3.25	3.69	2.15	19	28	9
2025	161	3.25	3.69	2.15	20	28	8
2030	172	3.25	3.69	2.15	22	28	6
2035	183	3.25	3.69	2.15	23	28	5
2040	193	3.25	3.69	2.15	24	28	4
2045	204	3.25	3.69	2.15	26	28	2
2050	215	3.25	3.69	2.15	27	28	1

Table C-124: Sunrise Cove Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	37128	66067	11271594	0.59%	56.20%	22	75%	44	632.86364
2015	34214	58295	11152173	0.52%	58.69%	22	75%	44	583.19318
2016	38798	67195	12256543	0.55%	57.74%	22	75%	44	661.32955
2017	36909	74789	11517491	0.65%	49.35%	22	75%	44	629.13068
2018	32390	61239	11731178	0.52%	52.89%	22	75%	44	552.10227
2019	36231	65905	11650303	0.57%	54.97%	22	75%	44	617.57386
2020	37844	68839	12168993	0.57%	54.97%	22	75%	44	645.06818
2025	40550	73763	13039395	0.57%	54.97%	22	75%	44	691.19318
2030	43257	78687	13909798	0.57%	54.97%	22	75%	44	737.33523
2035	45964	83611	14780200	0.57%	54.97%	22	75%	44	783.47727
2040	48671	88534	15650603	0.57%	54.97%	22	75%	44	829.61932
2045	51378	93458	16521005	0.57%	54.97%	22	75%	44	875.76136
2050	54085	98382	17391407	0.57%	54.97%	22	75%	44	921.90341

Table C-125: Sunrise Cove Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	633	2.5	4.80	2.1	63	317	254
2015	583	2.5	4.80	2.1	58	317	259
2016	661	2.5	4.80	2.1	66	317	251
2017	629	2.5	4.80	2.1	62	317	255
2018	552	2.5	4.80	2.1	55	317	262
2019	618	2.5	4.80	2.1	61	317	256
2020	645	2.5	4.80	2.1	64	317	253
2025	691	2.5	4.80	2.1	69	317	248
2030	737	2.5	4.80	2.1	73	317	244
2035	783	2.5	4.80	2.1	78	317	239
2040	830	2.5	4.80	2.1	82	317	235
2045	876	2.5	4.80	2.1	87	317	230
2050	922	2.5	4.80	2.1	91	317	226

Table C-126: Thompson Bridge Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	14260	24652	11271594	0.22%	57.85%	22	75%	44	243.06818
2015	22506	31604	11152173	0.28%	71.21%	22	75%	44	383.625
2016	12332	22988	12256543	0.19%	53.65%	22	75%	44	210.20455
2017	15916	29490	11517491	0.26%	53.97%	22	75%	44	271.29545
2018	11994	22546	11731178	0.19%	53.20%	22	75%	44	204.44318
2019	15371	26513	11650303	0.23%	57.97%	22	75%	44	262.00568
2020	16055	27694	12168993	0.23%	57.97%	22	75%	44	273.66477
2025	17204	29675	13039395	0.23%	57.97%	22	75%	44	293.25
2030	18352	31656	13909798	0.23%	57.97%	22	75%	44	312.81818
2035	19500	33636	14780200	0.23%	57.97%	22	75%	44	332.38636
2040	20649	35617	15650603	0.23%	57.97%	22	75%	44	351.97159
2045	21797	37598	16521005	0.23%	57.97%	22	75%	44	371.53977
2050	22946	39579	17391407	0.23%	57.97%	22	75%	44	391.125

Table C-127: Thompson Bridge Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	243	3.25	3.69	2.15	31	84	53
2015	384	3.25	3.69	2.15	48	84	36
2016	210	3.25	3.69	2.15	26	84	58
2017	271	3.25	3.69	2.15	34	84	50
2018	204	3.25	3.69	2.15	26	84	58
2019	262	3.25	3.69	2.15	33	84	51
2020	274	3.25	3.69	2.15	35	84	49
2025	293	3.25	3.69	2.15	37	84	47
2030	313	3.25	3.69	2.15	39	84	45
2035	332	3.25	3.69	2.15	42	84	42
2040	352	3.25	3.69	2.15	44	84	40
2045	372	3.25	3.69	2.15	47	84	37
2050	391	3.25	3.69	2.15	49	84	35

Table C-128: Thompson Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	38742	68878	11271594	0.61%	56.25%	22	75%	44	660.375
2015	27849	38444	11152173	0.34%	72.44%	22	75%	44	474.69886
2016	17851	31536	12256543	0.26%	56.61%	22	75%	44	304.27841
2017	27484	60559	11517491	0.53%	45.38%	22	75%	44	468.47727
2018	39082	68071	11731178	0.58%	57.41%	22	75%	44	666.17045
2019	31136	54038	11650303	0.46%	57.62%	22	75%	44	530.72727
2020	32522	56444	12168993	0.46%	57.62%	22	75%	44	554.35227
2025	34848	60481	13039395	0.46%	57.62%	22	75%	44	594
2030	37174	64518	13909798	0.46%	57.62%	22	75%	44	633.64773
2035	39500	68555	14780200	0.46%	57.62%	22	75%	44	673.29545
2040	41826	72592	15650603	0.46%	57.62%	22	75%	44	712.94318
2045	44153	76630	16521005	0.46%	57.62%	22	75%	44	752.60795
2050	46479	80667	17391407	0.46%	57.62%	22	75%	44	792.25568

Table C-129: Thompson Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	660	2.5	4.8	2.1	65	148	83
2015	475	2.5	4.8	2.1	47	148	101
2016	304	2.5	4.8	2.1	30	148	118
2017	469	2.5	4.8	2.1	47	148	101
2018	666	2.5	4.8	2.1	66	148	82
2019	531	2.5	4.8	2.1	53	148	95
2020	554	2.5	4.8	2.1	55	148	93
2025	594	2.5	4.8	2.1	59	148	89
2030	634	2.5	4.8	2.1	63	148	85
2035	673	2.5	4.8	2.1	67	148	81
2040	713	2.5	4.8	2.1	71	148	77
2045	753	2.5	4.8	2.1	75	148	73
2050	792	2.5	4.8	2.1	79	148	69

Table C-130: Tidwell Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	52350	101973	11271594	0.90%	51.34%	22	75%	44	892.3295
2015	21658	34497	11152173	0.31%	62.78%	22	75%	44	369.1705
2016	38553	67377	12256543	0.55%	57.22%	22	75%	44	657.1534
2017	34029	64401	11517491	0.56%	52.84%	22	75%	44	580.0398
2018	29565	53864	11731178	0.46%	54.89%	22	75%	44	503.9489
2019	36180	64824	11650303	0.56%	55.81%	22	75%	44	616.7045
2020	37791	67710	12168993	0.56%	55.81%	22	75%	44	644.1648
2025	40494	72553	13039395	0.56%	55.81%	22	75%	44	690.2386
2030	43197	77396	13909798	0.56%	55.81%	22	75%	44	736.3125
2035	45900	82239	14780200	0.56%	55.81%	22	75%	44	782.3864
2040	48603	87082	15650603	0.56%	55.81%	22	75%	44	828.4602
2045	51306	91925	16521005	0.56%	55.81%	22	75%	44	874.5341
2050	54009	96768	17391407	0.56%	55.81%	22	75%	44	920.608

Table C-131: Tidwell Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	892	3.25	3.69	2.15	112	62	-50
2015	369	3.25	3.69	2.15	46	62	16
2016	657	3.25	3.69	2.15	83	62	-21
2017	580	3.25	3.69	2.15	73	62	-11
2018	504	3.25	3.69	2.15	63	62	-1
2019	617	3.25	3.69	2.15	78	62	-16
2020	644	3.25	3.69	2.15	81	62	-19
2025	690	3.25	3.69	2.15	87	62	-25
2030	736	3.25	3.69	2.15	93	62	-31
2035	782	3.25	3.69	2.15	99	62	-37
2040	828	3.25	3.69	2.15	104	62	-42
2045	875	3.25	3.69	2.15	110	62	-48
2050	921	3.25	3.69	2.15	116	62	-54

Table C-132: Two Mile Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	23621	44286	11271594	0.39%	53.34%	22	75%	44	402.63068
2015	21503	39469	11152173	0.35%	54.48%	22	75%	44	366.52841
2016	26024	36269	12256543	0.30%	71.75%	22	75%	44	443.59091
2017	13731	25814	11517491	0.22%	53.19%	22	75%	44	234.05114
2018	11936	23351	11731178	0.20%	51.12%	22	75%	44	203.45455
2019	19393	34157	11650303	0.29%	56.78%	22	75%	44	330.5625
2020	20256	35677	12168993	0.29%	56.78%	22	75%	44	345.27273
2025	21705	38229	13039395	0.29%	56.78%	22	75%	44	369.97159
2030	23154	40781	13909798	0.29%	56.78%	22	75%	44	394.67045
2035	24603	43333	14780200	0.29%	56.78%	22	75%	44	419.36932
2040	26052	45885	15650603	0.29%	56.78%	22	75%	44	444.06818
2045	27500	48437	16521005	0.29%	56.78%	22	75%	44	468.75
2050	28949	50988	17391407	0.29%	56.78%	22	75%	44	493.44886

Table C-133: Two Mile Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	403	6	2	2	101	125	24
2015	367	6	2	2	92	125	33
2016	444	6	2	2	111	125	14
2017	234	6	2	2	59	125	66
2018	203	6	2	2	51	125	74
2019	331	6	2	2	83	125	42
2020	345	6	2	2	86	125	39
2025	370	6	2	2	93	125	32
2030	395	6	2	2	99	125	26
2035	419	6	2	2	105	125	20
2040	444	6	2	2	111	125	14
2045	469	6	2	2	117	125	8
2050	493	6	2	2	123	125	2

Table C-134: Toto Creek Campground Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	23407	52316	11271594	0.46%	44.74%	22	75%	44	398.98295
2015	14428	30991	11152173	0.28%	46.56%	22	75%	44	245.93182
2016	21043	39114	12256543	0.32%	53.80%	22	75%	44	358.6875
2017	15250	31739	11517491	0.28%	48.05%	22	75%	44	259.94318
2018	13923	28755	11731178	0.25%	48.42%	22	75%	44	237.32386
2019	17807	36858	11650303	0.32%	48.31%	22	75%	44	303.52841
2020	18600	38499	12168993	0.32%	48.31%	22	75%	44	317.04545
2025	19930	41253	13039395	0.32%	48.31%	22	75%	44	339.71591
2030	21261	44006	13909798	0.32%	48.31%	22	75%	44	362.40341
2035	22591	46760	14780200	0.32%	48.31%	22	75%	44	385.07386
2040	23922	49514	15650603	0.32%	48.31%	22	75%	44	407.76136
2045	25252	52267	16521005	0.32%	48.31%	22	75%	44	430.43182
2050	26582	55021	17391407	0.32%	48.31%	22	75%	44	453.10227

Table C-135: Toto Creek Campground Camping Demand

Year	Design Load	Turnover (36/Day Use Hours per Visitor)	Maximum People Per Campsite	Campsites	Maximum Campground Occupancy	Net Differences	Campsite Forecast
2014	399	1	8	9	72	-327	-41
2015	246	1	8	9	72	-174	-22
2016	359	1	8	9	72	-287	-36
2017	260	1	8	9	72	-188	-24
2018	237	1	8	9	72	-165	-21
2019	304	1	8	9	72	-232	-29
2020	317	1	8	9	72	-245	-31
2025	340	1	8	9	72	-268	-34
2030	362	1	8	9	72	-290	-36
2035	385	1	8	9	72	-313	-39
2040	408	1	8	9	72	-336	-42
2045	430	1	8	9	72	-358	-45
2050	453	1	8	9	72	-381	-48

Table C-136: University Yacht Club Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	37080	70869	11271594	0.63%	52.32%	22	75%	44	632.0455
2015	35330	68857	11152173	0.62%	51.31%	22	75%	44	602.2159
2016	32627	62709	12256543	0.51%	52.03%	22	75%	44	556.142
2017	29466	61736	11517491	0.54%	47.73%	22	75%	44	502.2614
2018	34062	63698	11731178	0.54%	53.47%	22	75%	44	580.6023
2019	33957	66099	11650303	0.57%	51.37%	22	75%	44	578.8125
2020	35469	69042	12168993	0.57%	51.37%	22	75%	44	604.5852
2025	38006	73981	13039395	0.57%	51.37%	22	75%	44	647.8295
2030	40543	78919	13909798	0.57%	51.37%	22	75%	44	691.0739
2035	43080	83857	14780200	0.57%	51.37%	22	75%	44	734.3182
2040	45617	88796	15650603	0.57%	51.37%	22	75%	44	777.5625
2045	48154	93734	16521005	0.57%	51.37%	22	75%	44	820.8068
2050	50690	98672	17391407	0.57%	51.37%	22	75%	44	864.0341

Table C-137: University Yacht Club Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	632	3.1	3.87	2.6	63	158	95
2015	602	3.1	3.87	2.6	60	158	98
2016	556	3.1	3.87	2.6	55	158	103
2017	502	3.1	3.87	2.6	50	158	108
2018	581	3.1	3.87	2.6	58	158	100
2019	579	3.1	3.87	2.6	58	158	100
2020	605	3.1	3.87	2.6	60	158	98
2025	648	3.1	3.87	2.6	64	158	94
2030	691	3.1	3.87	2.6	69	158	89
2035	734	3.1	3.87	2.6	73	158	85
2040	778	3.1	3.87	2.6	77	158	81
2045	821	3.1	3.87	2.6	82	158	76
2050	864	3.1	3.87	2.6	86	158	72

Table C-138: Van Pugh North Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	45479	73146	11271594	0.65%	62.18%	22	75%	44	775.21023
2015	47748	72881	11152173	0.65%	65.52%	22	75%	44	813.88636
2016	64397	91919	12256543	0.75%	70.06%	22	75%	44	1097.6761
2017	44522	77221	11517491	0.67%	57.66%	22	75%	44	758.89773
2018	49953	67846	11731178	0.58%	73.63%	22	75%	44	851.47159
2019	50618	76920	11650303	0.66%	65.81%	22	75%	44	862.80682
2020	52872	80345	12168993	0.66%	65.81%	22	75%	44	901.22727
2025	56654	86092	13039395	0.66%	65.81%	22	75%	44	965.69318
2030	60436	91839	13909798	0.66%	65.81%	22	75%	44	1030.1591
2035	64217	97585	14780200	0.66%	65.81%	22	75%	44	1094.608
2040	67999	103332	15650603	0.66%	65.81%	22	75%	44	1159.0739
2045	71781	109079	16521005	0.66%	65.81%	22	75%	44	1223.5398
2050	75563	114826	17391407	0.66%	65.81%	22	75%	44	1288.0057

Table C-139: Van Pugh North Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	775	6	2	2	194	192	-2
2015	814	6	2	2	204	192	-12
2016	1098	6	2	2	275	192	-83
2017	759	6	2	2	190	192	2
2018	851	6	2	2	213	192	-21
2019	863	6	2	2	216	192	-24
2020	901	6	2	2	225	192	-33
2025	966	6	2	2	242	192	-50
2030	1030	6	2	2	258	192	-66
2035	1095	6	2	2	274	192	-82
2040	1159	6	2	2	290	192	-98
2045	1224	6	2	2	306	192	-114
2050	1288	6	2	2	322	192	-130

Table C-140: Van Pugh South Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	5365	5365	11271594	0.05%	100.00%	22	75%	44	91.448864
2015	10170	10170	11152173	0.09%	100.00%	22	75%	44	173.35227
2016	12033	12033	12256543	0.10%	100.00%	22	75%	44	205.10795
2017	15340	15340	11517491	0.13%	100.00%	22	75%	44	261.47727
2018	-	-	11731178	-	-	22	75%	44	-
2019	10781	10781	11650303	0.09%	100.00%	22	75%	44	183.76705
2020	11261	11261	12168993	0.09%	100.00%	22	75%	44	191.94886
2025	12067	12067	13039395	0.09%	100.00%	22	75%	44	205.6875
2030	12872	12872	13909798	0.09%	100.00%	22	75%	44	219.40909
2035	13677	13677	14780200	0.09%	100.00%	22	75%	44	233.13068
2040	14483	14483	15650603	0.09%	100.00%	22	75%	44	246.86932
2045	15288	15288	16521005	0.09%	100.00%	22	75%	44	260.59091
2050	16094	16094	17391407	0.09%	100.00%	22	75%	44	274.32955

Table C-141: Van Pugh South Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	91	2.5	4.80	2.25	8	118	110
2015	173	2.5	4.80	2.25	16	118	102
2016	205	2.5	4.80	2.25	19	118	99
2017	261	2.5	4.80	2.25	24	118	94
2018	-	2.5	4.80	2.25	-	118	-
2019	184	2.5	4.80	2.25	17	118	101
2020	192	2.5	4.80	2.25	18	118	100
2025	206	2.5	4.80	2.25	19	118	99
2030	219	2.5	4.80	2.25	20	118	98
2035	233	2.5	4.80	2.25	22	118	96
2040	247	2.5	4.80	2.25	23	118	95
2045	261	2.5	4.80	2.25	24	118	94
2050	274	2.5	4.80	2.25	25	118	93

Table C-142: Vanns Tavern Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	24661	43844	11271594	0.39%	56.25%	22	75%	44	420.35795
2015	22201	33182	11152173	0.30%	66.91%	22	75%	44	378.42614
2016	21685	38370	12256543	0.31%	56.52%	22	75%	44	369.63068
2017	22534	46768	11517491	0.41%	48.18%	22	75%	44	384.10227
2018	30731	45697	11731178	0.39%	67.25%	22	75%	44	523.82386
2019	24688	41829	11650303	0.36%	59.02%	22	75%	44	420.81818
2020	25787	43691	12168993	0.36%	59.02%	22	75%	44	439.55114
2025	27631	46816	13039395	0.36%	59.02%	22	75%	44	470.98295
2030	29475	49941	13909798	0.36%	59.02%	22	75%	44	502.41477
2035	31320	53066	14780200	0.36%	59.02%	22	75%	44	533.86364
2040	33164	56191	15650603	0.36%	59.02%	22	75%	44	565.29545
2045	35008	59316	16521005	0.36%	59.02%	22	75%	44	596.72727
2050	36853	62441	17391407	0.36%	59.02%	22	75%	44	628.17614

Table C-143: Vanns Tavern Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	420	6	2	2	105	66	-39
2015	378	6	2	2	95	66	-29
2016	370	6	2	2	93	66	-27
2017	384	6	2	2	96	66	-30
2018	524	6	2	2	131	66	-65
2019	421	6	2	2	105	66	-39
2020	440	6	2	2	110	66	-44
2025	471	6	2	2	118	66	-52
2030	502	6	2	2	126	66	-60
2035	534	6	2	2	134	66	-68
2040	565	6	2	2	141	66	-75
2045	597	6	2	2	149	66	-83
2050	628	6	2	2	157	66	-91

Table C-144: Wahoo Creek Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake vistation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	16820	35281	11271594	0.31%	47.67%	22	75%	44	286.70455
2015	33485	46616	11152173	0.42%	71.83%	22	75%	44	570.76705
2016	24132	45147	12256543	0.37%	53.45%	22	75%	44	411.34091
2017	20132	42083	11517491	0.37%	47.84%	22	75%	44	343.15909
2018	24617	38746	11731178	0.33%	63.53%	22	75%	44	419.60795
2019	23784	41825	11650303	0.36%	56.87%	22	75%	44	405.40909
2020	24843	43687	12168993	0.36%	56.87%	22	75%	44	423.46023
2025	26620	46812	13039395	0.36%	56.87%	22	75%	44	453.75
2030	28397	49937	13909798	0.36%	56.87%	22	75%	44	484.03977
2035	30174	53062	14780200	0.36%	56.87%	22	75%	44	514.32955
2040	31951	56186	15650603	0.36%	56.87%	22	75%	44	544.61932
2045	33728	59311	16521005	0.36%	56.87%	22	75%	44	574.90909
2050	35505	62436	17391407	0.36%	56.87%	22	75%	44	605.19886

Table C-145: Wahoo Creek Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	287	3.25	3.69	2.15	36	24	-12
2015	571	3.25	3.69	2.15	72	24	-48
2016	411	3.25	3.69	2.15	52	24	-28
2017	343	3.25	3.69	2.15	43	24	-19
2018	420	3.25	3.69	2.15	53	24	-29
2019	405	3.25	3.69	2.15	51	24	-27
2020	423	3.25	3.69	2.15	53	24	-29
2025	454	3.25	3.69	2.15	57	24	-33
2030	484	3.25	3.69	2.15	61	24	-37
2035	514	3.25	3.69	2.15	65	24	-41
2040	545	3.25	3.69	2.15	69	24	-45
2045	575	3.25	3.69	2.15	72	24	-48
2050	605	3.25	3.69	2.15	76	24	-52

Table C-146: War Hill Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	28656	52339	11271594	0.46%	54.75%	22	75%	44	488.45455
2015	27202	44713	11152173	0.40%	60.84%	22	75%	44	463.67045
2016	31123	53794	12256543	0.44%	57.86%	22	75%	44	530.50568
2017	24878	52482	11517491	0.46%	47.40%	22	75%	44	424.05682
2018	31398	50929	11731178	0.43%	61.65%	22	75%	44	535.19318
2019	28883	51121	11650303	0.44%	56.50%	22	75%	44	492.32386
2020	30169	53397	12168993	0.44%	56.50%	22	75%	44	514.24432
2025	32327	57216	13039395	0.44%	56.50%	22	75%	44	551.02841
2030	34485	61036	13909798	0.44%	56.50%	22	75%	44	587.8125
2035	36643	64855	14780200	0.44%	56.50%	22	75%	44	624.59659
2040	38800	68674	15650603	0.44%	56.50%	22	75%	44	661.36364
2045	40959	72494	16521005	0.44%	56.50%	22	75%	44	698.16477
2050	43116	76313	17391407	0.44%	56.50%	22	75%	44	734.93182

Table C-147: War Hill Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	488	3.1	3.87	2.6	48	265	217
2015	464	3.1	3.87	2.6	46	265	219
2016	531	3.1	3.87	2.6	53	265	212
2017	424	3.1	3.87	2.6	42	265	223
2018	535	3.1	3.87	2.6	53	265	212
2019	492	3.1	3.87	2.6	49	265	216
2020	514	3.1	3.87	2.6	51	265	214
2025	551	3.1	3.87	2.6	55	265	210
2030	588	3.1	3.87	2.6	58	265	207
2035	625	3.1	3.87	2.6	62	265	203
2040	661	3.1	3.87	2.6	66	265	199
2045	698	3.1	3.87	2.6	69	265	196
2050	735	3.1	3.87	2.6	73	265	192

Table C-148: West Bank Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	105402	168829	11271594	1.50%	62.43%	22	0.75	44	1796.625
2015	71574	120670	11152173	1.08%	59.31%	22	0.75	44	1220.011
2016	84447	149186	12256543	1.22%	56.61%	22	0.75	44	1439.438
2017	92599	141443	11517491	1.23%	65.47%	22	0.75	44	1578.392
2018	45494	104795	11731178	0.89%	43.41%	22	0.75	44	775.4659
2019	79220	137903	11650303	1.18%	57.45%	22	0.75	44	1350.341
2020	82747	144043	12168993	1.18%	57.45%	22	0.75	44	1410.46
2025	88665	154345	13039395	1.18%	57.45%	22	0.75	44	1511.335
2030	94584	164648	13909798	1.18%	57.45%	22	0.75	44	1612.227
2035	100502	174951	14780200	1.18%	57.45%	22	0.75	44	1713.102
2040	106421	185254	15650603	1.18%	57.45%	22	0.75	44	1813.994
2045	112340	195557	16521005	1.18%	57.45%	22	0.75	44	1914.886
2050	118258	205860	17391407	1.18%	57.45%	22	0.75	44	2015.761

Table C-149: West Bank Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	1797	6	2	2	449	381	-68
2015	1220	6	2	2	305	381	76
2016	1439	6	2	2	360	381	21
2017	1578	6	2	2	395	381	-14
2018	775	6	2	2	194	381	187
2019	1350	6	2	2	338	381	43
2020	1410	6	2	2	353	381	28
2025	1511	6	2	2	378	381	3
2030	1612	6	2	2	403	381	-22
2035	1713	6	2	2	428	381	-47
2040	1814	6	2	2	454	381	-73
2045	1915	6	2	2	479	381	-98
2050	2016	6	2	2	504	381	-123

Table C-150: West Bank Overlook Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	9362	16570	11271594	0.15%	56.50%	22	75%	44	159.57955
2015	8163	15582	11152173	0.14%	52.39%	22	75%	44	139.14205
2016	18570	25625	12256543	0.21%	72.47%	22	75%	44	316.53409
2017	10040	21046	11517491	0.18%	47.71%	22	75%	44	171.13636
2018	29383	35496	11731178	0.30%	82.78%	22	75%	44	500.84659
2019	14257	22860	11650303	0.20%	62.37%	22	75%	44	243.01705
2020	14892	23878	12168993	0.20%	62.37%	22	75%	44	253.84091
2025	15957	25586	13039395	0.20%	62.37%	22	75%	44	271.99432
2030	17023	27294	13909798	0.20%	62.37%	22	75%	44	290.16477
2035	18088	29002	14780200	0.20%	62.37%	22	75%	44	308.31818
2040	19153	30710	15650603	0.20%	62.37%	22	75%	44	326.47159
2045	20218	32418	16521005	0.20%	62.37%	22	75%	44	344.625
2050	21284	34126	17391407	0.20%	62.37%	22	75%	44	362.79545

Table C-151: West Bank Overlook Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	160	3.1	3.87	3.1	13	16	3
2015	139	3.1	3.87	3.1	12	16	4
2016	317	3.1	3.87	3.1	26	16	-10
2017	171	3.1	3.87	3.1	14	16	2
2018	501	3.1	3.87	3.1	42	16	-26
2019	243	3.1	3.87	3.1	20	16	-4
2020	254	3.1	3.87	3.1	21	16	-5
2025	272	3.1	3.87	3.1	23	16	-7
2030	290	3.1	3.87	3.1	24	16	-8
2035	308	3.1	3.87	3.1	26	16	-10
2040	326	3.1	3.87	3.1	27	16	-11
2045	345	3.1	3.87	3.1	29	16	-13
2050	363	3.1	3.87	3.1	30	16	-14

Table C-152: YMCA Eagle Point Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	17437	23293	11271594	0.21%	74.86%	22	0.75	44	297.22159
2015	22844	28626	11152173	0.26%	79.80%	22	0.75	44	389.38636
2016	11085	16108	12256543	0.13%	68.82%	22	0.75	44	188.94886
2017	10177	22611	11517491	0.20%	45.01%	22	0.75	44	173.47159
2018	9094	22908	11731178	0.20%	39.70%	22	0.75	44	155.01136
2019	14166	22983	11650303	0.20%	61.64%	22	0.75	44	241.46591
2020	14797	24006	12168993	0.20%	61.64%	22	0.75	44	252.22159
2025	15855	25723	13039395	0.20%	61.64%	22	0.75	44	270.25568
2030	16913	27440	13909798	0.20%	61.64%	22	0.75	44	288.28977
2035	17971	29157	14780200	0.20%	61.64%	22	0.75	44	306.32386
2040	19030	30874	15650603	0.20%	61.64%	22	0.75	44	324.375
2045	20088	32591	16521005	0.20%	61.64%	22	0.75	44	342.40909
2050	21146	34308	17391407	0.20%	61.64%	22	0.75	44	360.44318

Table C-153: YMCA Eagle Point Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	297	1.75	6.86	2.1	21	20	-1
2015	389	1.75	6.86	2.1	27	20	-7
2016	189	1.75	6.86	2.1	13	20	7
2017	173	1.75	6.86	2.1	12	20	8
2018	155	1.75	6.86	2.1	11	20	9
2019	241	1.75	6.86	2.1	17	20	3
2020	252	1.75	6.86	2.1	18	20	2
2025	270	1.75	6.86	2.1	19	20	1
2030	288	1.75	6.86	2.1	20	20	0
2035	306	1.75	6.86	2.1	21	20	-1
2040	324	1.75	6.86	2.1	23	20	-3
2045	342	1.75	6.86	2.1	24	20	-4
2050	360	1.75	6.86	2.1	25	20	-5

Table C-154: Young Deer Design Load.

Year	Peak Season (May 28-Sep 5)	Total Area Visits (Persons)	Total Project Visitation	Area share % of Total Lake visitation	Area Peak Season Visitation % of Total Lake Visitation	Weekends in Peak Season	Percent of Visitation Occuring on Weekends	Number of Weekend Days in Peak Season	Area Peak Season Weekend Average Daily Visitation
2014	24558	42542	11271594	0.38%	57.73%	22	75%	44	418.60227
2015	102586	153763	11152173	1.38%	66.72%	22	75%	44	1748.625
2016	24487	38710	12256543	0.32%	63.26%	22	75%	44	417.39205
2017	21689	38541	11517491	0.33%	56.28%	22	75%	44	369.69886
2018	23965	39160	11731178	0.33%	61.20%	22	75%	44	408.49432
2019	38974	63855	11650303	0.55%	61.03%	22	75%	44	664.32955
2020	40709	66698	12168993	0.55%	61.03%	22	75%	44	693.90341
2025	43620	71468	13039395	0.55%	61.03%	22	75%	44	743.52273
2030	46532	76239	13909798	0.55%	61.03%	22	75%	44	793.15909
2035	49444	81009	14780200	0.55%	61.03%	22	75%	44	842.79545
2040	52356	85780	15650603	0.55%	61.03%	22	75%	44	892.43182
2045	55268	90551	16521005	0.55%	61.03%	22	75%	44	942.06818
2050	58179	95321	17391407	0.55%	61.03%	22	75%	44	991.6875

Table C-155: Young Deer Parking Demand.

Year	Area Peak Season Weekend Average Daily Visitation	Day Use Hours per Visitor	Turnover (12/Day Use Hours per Visitor)	Visitors Per Vehicle	Parking Space Demand	Existing Parking Space Supply	Net Differences
2014	419	3.1	3.87	2.6	42	94	52
2015	1749	3.1	3.87	2.6	174	94	-80
2016	417	3.1	3.87	2.6	41	94	53
2017	370	3.1	3.87	2.6	37	94	57
2018	408	3.1	3.87	2.6	41	94	53
2019	664	3.1	3.87	2.6	66	94	28
2020	694	3.1	3.87	2.6	69	94	25
2025	744	3.1	3.87	2.6	74	94	20
2030	793	3.1	3.87	2.6	79	94	15
2035	843	3.1	3.87	2.6	84	94	10
2040	892	3.1	3.87	2.6	89	94	5
2045	942	3.1	3.87	2.6	94	94	0
2050	992	3.1	3.87	2.6	99	94	-5

History has proven that certain parks currently receive extreme visitation during peak periods. This is evidenced by the number of parking spots filling to capacity, which requires park staff to close parks for signification portions of the day. Oftentimes, if park staff are not present to close the area when the park reaches capacity, vehicles spill out onto public roads and/or private property for parking. (See the photographs in the following section.) With the expected population increase, this problem is expected to only get worse. To accommodate current and future demand, additional parking spaces and recreational amenities/facilities may need to be developed in these areas commensurate with the environmental constraints of the area. Some parks may not be able to be expanded, potentially requiring the development of additional parks.

E PROJECT SITE AREA (PSA) PARKING PICTURES

The following pictures provide a snapshot a typical weekend day during peak seasons at six of the PSAs included in the design loads shown in the previous section.

Figure C-95: Parking at Burton Mill.

Figure C-96: Parking at East Bank.

Figure C-97: Parking at Little Ridge.

Figure C-98: Parking at Lower Overlook.

Figure C-99: Parking at Old Federal Day Use.

Figure C-100: Parking at Van Pugh North.

APPENDIX D—RECREATIONAL CARRYING CAPACITY STUDY

Prepared by Tetra Tech, Inc. and Boating Capacity Solutions, LLC (March 27, 2020)

EXECUTIVE SUMMARY

Lake Sidney Lanier (Lake Lanier) is a U.S. Army Corps of Engineers (USACE) managed water resources project in north-central Georgia. At its full conservation pool (1,071 feet), the lake has a surface area of 39,000 acres and, 693 miles of shoreline, and encompasses 17,000 acres of islands. The lake's recreational resources include 40 USACE-operated parks, 10 marinas with more than 10,000 boats, nearly 10,000 privately owned boat docks, more than 20 parks leased to other government agencies, and 25 undeveloped areas. The lake attracts more than 11 million visitors each year.

USACE uses the Lake Lanier Master Plan as a guide to comprehensive management and development of all the project's recreational, natural, and cultural resources. Because of changes in regional land use, population, outdoor recreation trends, and USACE management policy since the Master Plan was published in 1987, USACE is revising the plan to bring it up to date. This Recreational Carrying Capacity Study is the first of several components to be developed for the update. The purpose of this report is to provide Lake Lanier managers with a science-based rationale for proposed management actions that address future desired conditions on the lake and the land. These conditions support USACE's vision for Lake Lanier *to provide high-quality, safe, and enjoyable recreation experiences in a diversity of settings while protecting the natural resource for future generations*.

A secondary purpose is to foster a collaborative process that is transparent by giving voice to citizens through a series of group and public engagements with many opportunities for input through focused stakeholder and public workshops, a story board of study data in spatial and text form, and a website for additional comment.

Proposed management actions are supported by a lake management compartment map with 28 color-coded units based on a classification matrix derived from two sources of information: boat density and a conflict rating for places avoided and unsafe. A series of maps project future conditions from baseline to 100 percent saturation for density and conflict based on a typical weekend day during the peak boating period for June 24, 2018. With population projections indicating a 60 percent increase for north-central Georgia, the projection map with a 60 percent increase in boat density and conflict was selected as the recommended map to support the proposed management actions. It was presented to stakeholder groups and the public and available on the USACE website for comment. Because land-based recreation activities influence the lake, accepted recreation space standards were incorporated for a 60 percent increase in visitation from baseline conditions to support proposed management actions for recreation activities on the land.

Project managers used several techniques to obtain information on recreational use and the carrying capacity of Lake Lanier.

- Public meetings were held in November 2017 at four community locations to gather input on issues and concerns and in the same communities in February 2020 to obtain feedback on proposed management actions.

- Aerial and on-the-water boat counts were conducted the summer of 2018. The boat counts provided data for typical weekday boat density (Count 1), weekend boat density (Count 2), and peak holiday boat density (Count 3).

- Boater activity perceptions of which locations should be avoided and which are unsafe were collected through a mail survey approved by the U.S. Office of Management and Budget during the summer of 2019 and used for the lake classification maps.

- Land-based activity perceptions were recorded in August 2018 using guided conversations at 11 day-use areas and campground locations around the lake where USACE was considering management changes.

This report summarizes the data collected through these efforts and discusses the relevant literature, accepted methodology, and conclusions drawn from the data. The study supports development of lake management strategies for future desired conditions and the Master Plan Update. USACE presented the report's key findings and proposed management actions at stakeholder and public workshops during the winter of 2020 and used thisfeedback to further refine the proposed management actions before incorporating them into the Master Plan Update. The revised Master Plan will be used to guide management of the Lake Lanier project.

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ACRONYMS AND ABBREVIATIONS

ac—acre(s)

ARC—Atlanta Regional Commission

EM—Engineering Manual

ft—foot/feet

GADNR—Georgia Department of Natural Resources

GIS—geographic information system

hwy—highway

mi^2—square mile(s)

USACE—US Army Corps of Engineers

WMA—wildlife management area

A. INTRODUCTION

The U.S. Army Corps of Engineers (USACE) Mobile District is revising the Lake Sidney Lanier (Lake Lanier) Master Plan. The Master Plan is a strategic land-use management tool that guides the comprehensive management and development of all Lake Lanier Project recreational, natural, and cultural resources throughout the life of the water resources project and helps the USACE realize the vision for Lake Lanier: *to provide high-quality, safe, and enjoyable recreation experiences in a diversity of settings while protecting the natural resource for future generations.*

The Lake Lanier Master Plan was last revised in 1987. Since then regional land use, population, outdoor recreation trends, and USACE management policy have changed. An update to the Master Plan is needed to address key topics, including revised land classifications, new natural and recreational resource management objectives, today's recreation facility needs, and new challenges such as invasive species management and threatened and endangered species habitat management.

This report presents the study area, methodologies, results, and conclusions of the Recreational Carrying Capacity Study, which is a component of the Master Plan Update (Figure D-1). USACE will release the updated Master Plan—along with an associated environmental assessment—to the public in the summer of 2020.

Figure D-1: Components of the Lake Lanier Master Plan Update.

(1) PURPOSE

Project managers conducted the Recreational Carrying Capacity Study to better understand the overall recreational use of Lake Lanier. They will use the results of the study to update the lake's Master Plan. Figures D-1 and D-2 illustrate how the Recreational Carrying Capacity Study fits into the Master Plan Update and the timeline for the study.

Figure D-2: Recreational Carrying Capacity Study Schedule.

(2) OBJECTIVES

The objectives of the Recreational Carrying Capacity Study were to determine the following:

- The impact current lake use has on the quality of recreation, user safety, and the environment.
- The effect that marinas, boat ramps, and commercial activities have on the carrying capacity and distribution of users on the lake.

- Boaters' perceptions of the natural, social, and managerial condition of the lake.
- User patterns and carrying capacity of land-based recreational activities.

(3) STUDY APPROACH

Stakeholder workshops, public meetings, user surveys, boat counts, and delineations of recreational facilitieswere conducted to address the purpose and objectives of the Recreational Carrying Capacity Study:

- Stakeholder workshops identified key land and water lake use issues from the perspective of government, commercial, and special interest groups.
- Information from the workshops was presented at public meetings in four communities near the lake, giving the public an opportunity to comment on and discuss issues with project staff.
- A second round of public meetings in the same communities allowed the general public to engage in a dialogue with managers on the proposed management actions and final recommended lake management compartment map.
- Informal "guided" conversations were held with lake users at lake recreation facilities to gather their perceptions about land-based recreational facilities.
- A survey about boating on the lake was mailed to 1,200 lake users.
- Boats on the lake were counted from boats and using aerial photography.
- Land-based recreational areas where future development is proposed were delineated using geographic information system (GIS) data to determine their physical and facility carrying capacities.

B. PROJECT BACKGROUND

This section describes the physical and facility features of the study area, which is delineated by the project boundary, including the lake surface, shoreline, and public and commercial facilities on or abutting the lake. USACE used the lake's physical and facility features in interpreting the data collected for this study and applied them to social and ecological factors that influence the recreational carrying capacity.

(1) STUDY AREA

(A) LAKE FEATURES

Lake Lanier is a USACE-managed reservoir located in north-central Georgia that has a full conservation pool at1,071 feet (ft) that covers 39,000 acres (ac), 17,000 ac of islands, and 693 miles of shoreline (Figure D-3). LakeLanier is part of the Buford Dam Project, which is a multipurpose project operated to provide benefits for the authorized purposes of hydropower, flood risk management, navigation, recreation, water supply, water quality,and fish and wildlife conservation.

USACE operates the dam at Lake Lanier in conjunction with downstream reservoirs in the basin to maximize recreation use and keep lake drawdowns balanced across the reservoirs on the Chattahoochee River. Reservoirs on the Chattahoochee River, in downstream order from Lake Lanier, are Morgan Falls (operated by Georgia Power), West Point, Walter F. George, George W. Andrews, and Jim Woodruff. Below the Jim Woodruff Reservoir, the Chattahoochee River converges with the Flint River to form the Apalachicola River.

During periods of drought, lake drawdowns to provide drinking water and enough flow for downstream species affect boater access to the water; expose or nearly expose hazards (e.g., trees, shoals, and boulders), and expose banks that diminish the lake's aesthetic appeal. As the water level in the lake drops, portions of the lake become unusable because of exposed shorelines, especially in the Chattahoochee River and Chestatee River arms on the farthest upstream northern portions of the lake.

Specific lake levels of Lake Lanier define which recreation activities are affected. The Initial Impact Level is 1,066 ft, at which some boat ramps are unusable, most beaches are unusable or minimally usable, and navigation hazards begin to surface. The Recreation Impact Level is 1,063 ft, where more ramps are unusable, all beaches are unusable, boats begin having problems maneuvering in and out of marinas, and retail establishments lose business. Finally, when the lake level reaches 1,060 ft, the Water Access Limited Level, all recreational activities are severely impacted.

Similarly, during periods of excessive rain, elevated water levels affect boater access to the water; close beaches and day-use areas; and create floating debris hazards. Some boat ramps and all beaches are closed when the lake level rises to 1,074 ft. At 1,075 ft, all boat ramps and day-use areas are closed. The maximum flood level of Lake Lanier is 1,085 ft, at which point the USACE flood easements around the lake are fully inundated.

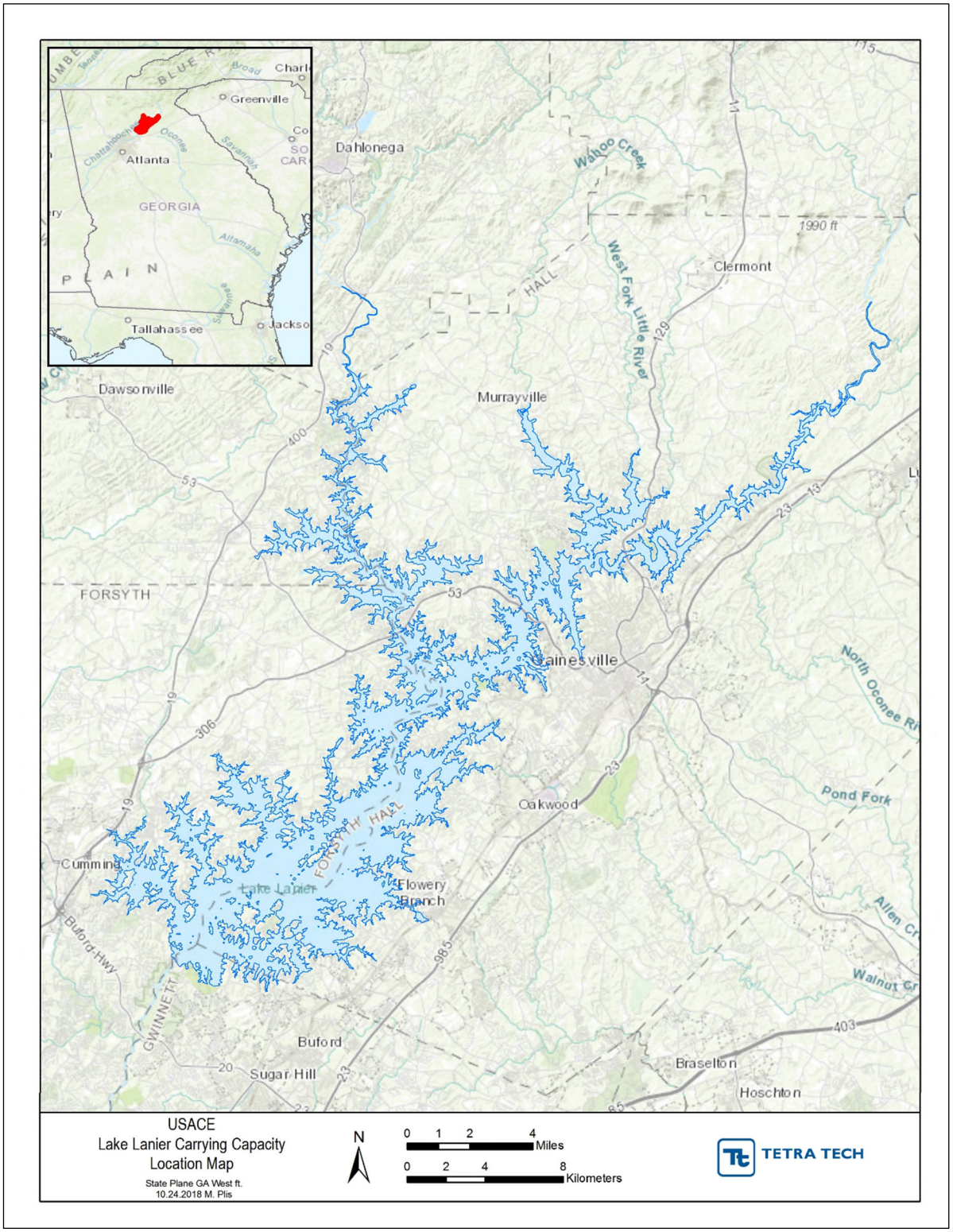

Figure D-3: Location of Lake Lanier.

(B) EXISTING INFRASTRUCTURE

The infrastructure at many of the lake's facilities has been built out or master planning has been approved to maximize their use. Table D-1 and D-2 list facilities at USACE-managed campgrounds and day-use parks, respectively. Additional recreation facilities at day-use areas include basketball (at Bolding Mill, Buford Dam Park, and West Bank) and volleyball courts (at Bolding Mill, Buford Dam Park, West Bank, and Old Federal), soccer fields (at Buford Dam Park), a fitness trail (at West Bank), a hiking trail (at Bolding Mill), and multipurpose trails (at Little Ridge). Many of the privately owned marinas and parks leased to other government agencies offer restaurants, lodging, and other facilities not offered at USACE-managed facilities. Table D-3 lists the facilities offered at marinas on Lake Lanier.

(2) VISITATION AND USER CHARACTERISTICS

Lake Lanier is the most visited USACE project in the United States, attracting nearly 11 million or more visitors each year (USACE 2017, 2018, 2019). Visitation data collected in 2018 indicates that more than 11 million users spent a day at the lake and more than 725,000 stayed overnight. The next most visited USACE project in the United States in 2018 was Hartwell Dam and Lake in Georgia and South Carolina, with 8 million visitors. Tables D2-D4 presents visitation figures for Lake Lanier and three next most visited USACE projects in the United States from 2016 through 2018. The high use figures for Lake Lanier are partly attributable to its proximity to the Metro Atlanta, Georgia, area (the Atlanta-Sandy Springs-Roswell GA Metropolitan Statistical Area, encompassing 29 counties), which had an estimated population of 5.95 million in July 2018 (Census Bureau 2019).

Table D-1: Facilities at USACE-Managed Campgrounds.

Campground	Restroom	Picnic Table	Picnic Shelter	Boat Ramp	Swim Area	Pets Allowed	Playground	RV Sites	# of RV Sites	Primitive Sites	# of Primitive Sites	Showers	Dump Stations	Laundry
Bald Ridge	x	x		x	x	x	x	x	82		0	x	x	x
Bolding Mill	x	x	x	x	x	x	x	x	82	x	9	x	x	x
Duckett Mill	x	x	x	x	x	x	x	x	76	x	15	x	x	x
Old Federal	x	x	x	x	x	x	x	x	65	x	19	x	x	x
Sawnee	x	x		x	x	x	x	x	11	x	12	x	x	x
Toto Creek	x	x		x		x			0	x	9			
Van Pugh South	x	x		x		x	x	x	36	x	18	x	x	

Note: "x" indicates a campground has the listed facility; blank cells indicate the absence of the facility at the campground.

Table D-2: Facilities at USACE-Managed Day-Use Parks.

Day-Use Park	Restroom	Picnic Table	Picnic Shelter	Boat Ramp	Swim Area	Pets Allowed	Playground	Hiking Trails
Balus Creek	x			x		x		
Belton Bridge				x		x		
Bolding Mill	x		x	x		x	x	
Buford Dam Park	x	x	x		x		x	x
Burton Mill	x	x		x	x			x
Duckett Mill	x			x	x	x		
East Bank	x			x				
Keith's Bridge	x	x		x	x	x		x
Lanier Park	x	x	x	x	x			x
Little Hall	x	x	x	x	x	x		x
Little Ridge				x		x		
Little River	x	x		x		x		
Long Hollow	x	x		x	x	x	x	
Lower Overlook	x	x						x
Lower Pool East[a]								
Lower Pool West[a]	x	x		x				
Mountain View				x		x		
Nix Bridge Park	x	x		x		x		
Old Federal	x			x	x			x
Robinson	x	x		x		x		
Sardis Creek	x	x		x		x		
Simpson				x		x		
Thompson Bridge	x			x		x		
Thompson Creek	x		x	x		x		x
Tidwell	x			x		x		
Toto Creek	x	x		x		x	x	

Day-Use Park	Restroom	Picnic Table	Picnic Shelter	Boat Ramp	Swim Area	Pets Allowed	Playground	Hiking Trails
Two Mile Creek	x	x		x	x	x		
Upper Overlook		x	x					
Vann's Tavern	x			x		x		x
Van Pugh North	x	x	x	x	x		x	
West Bank	x	x	x		x			
West Bank Overlook							x	

Note:
[a] Facilities at Lower Pool East are shared with Lower Pool West. The two areas areconnected by a foot bridge with stair access to the powerhouse parking lot.

Table D-3. Facilities at Marinas.

Marina	Dry Storage Slips	Wet Slips	Boat Rentals	Gas	Grocery Store	Restaurant
Aqualand	409	1,738	x		x	x
Bald Ridge	0	610		x		
Gainesville	220	425				x
Habersham	595	0				
Hideaway Bay	0	510				x
Holiday	0	1,225			x	x
Lake Lanier Islands	0	30				x
Lazy Days	559	75				
Port Royale	485	500				
Sunrise Cove	34	688				

Table D-4. Use at Some of the Most Visited USACE Projects.

Project	Surface Area (mi^2)	State	2016		2017		2018	
			Total Sum of Day Use	Total Sum of Overnight	Total Sum of Day Use	Total Sum of Overnight	Total Sum of Day Use	Total Sum of Overnight
Buford Dam-Lake Sidney Lanier	57.92	GA	11,600,605	195,743	10,766,305	751,186	11,005,081	726,097
Hartwell Dam and Lake	87.5	GA/SC	9,888,687	159,564	7,872,473	676,856	8,092,391	662,030
Table Rock Lake	67.4	MO	6,531,788	73,558	7,217,709	685,269	6,519,770	374,889
Allatoona Lake	18.77	GA	6,166,373	224,572	6,061,441	1,008,897	5,690,743	997,780

Note: mi^2 = square miles.
Sources: USACE 2017, 2018, 2019.

C. METHODOLOGY

This section describes the methods the study team used to collect data for the Recreational Carrying Capacity Study. Each of the data collection methods used—stakeholder workshops, public meetings, informal conversations with lake users, on-water and aerial boat counts, and mailed surveys—is discussed. Appendix D1 provides some background information on the theory behind the methodology used.

(1) STAKEHOLDER WORKSHOPS

In November 2017, three stakeholder-focused discussion workshops were held at the Lake Lanier Project Management Office for government, commercial, and special interest groups. The government stakeholders included city and county land and recreation managers, planners, and law enforcement; the commercial stakeholders included marina and dock business owners and managers; and the special interest stakeholders included nonprofit organizations, and sea plane and drone operators. These stakeholders were selected to attend the focused discussions because either they manage USACE-leased lands around the lake or lake management decisions affect their businesses or interests. Stakeholders were asked two questions based on the vision: *To provide a high-quality, safe, and enjoyable recreation experience in a diversity of settings while protecting the natural resource for future generations*:

1. What issues or concerns do you believe need to be addressed to make the boating experience the best it can be?

2. What issues or concerns do you believe need to be addressed to make land-based recreation activities the best they can be?

Fifty-three participants at each workshop were divided into 14 groups, wrote their top three issues on index cards, and presented their ideas to group members. All issues were listed on a flip chart, and participants voted on them within their group. Appendix D2 provides a full list of the participants, organizations represented, and issues identified at these workshops.

The stakeholder workshop was repeated in February 2020, when the three groups reconvened to engage in a dialogue with lake managers on the proposed management actions and the final recommended lake compartment map. Forty people participated. Their feedback allowed for the refinement of the proposed management actions. It also provided support for the final map that included the 60 percent in boat density use and conflict to reflect the 60 percent increase in population for northern Georgia in the next 20–30 years, which is the planning horizon for the Master Plan.

(2) PUBLIC MEETINGS

Four open house-style public meetings were held around Lake Lanier in February 2018. Approximately 450 people attended the meetings in Buford, Cumming, Gainesville, and Dawsonville, Georgia (Table D-5). Each open house featured the same information, with subject matter experts from USACE on hand to brief the public on the purpose and objectives of the study.

Table D-5: 2018 Open House Public Meetings by Date.

Location	City	Date	Attendees
Buford Community Center	Buford	Feb. 13, 2018	80
Hall County Government Center	Gainesville	Feb. 15, 2018	102
Central Park Banquet Room	Cumming	Feb. 20, 2018	146
Kilough Elementary	Dawsonville	Feb. 22, 2018	110

Note: [a] The number of attendees was determined by counter. Not all attendees signed in.

The meetings were used to gather input on the public's issues and concerns about recreation at Lake Lanier. Each meeting included a welcome station, where attendees signed in; two stations where attendees could learn from experts about the Master Plan Update and about the Recreational Carrying Capacity Study; and two interactive stations—the Tell Us About Your Experiences station (station 4) and the Tell Us About Your Issues and Concerns station (station 5). Appendix D2 provides materials from the public meetings.

Station 4 provided an opportunity for attendees to tell USACE about their recreational experiences on the lake using either a hardcopy comment form or an interactive Google Earth map by answering three questions:

1. Are there any favorite locations that you go to on this lake? Why are these your favorite places?

2. Are there any locations on this lake that you deliberately avoid because of other boats/watercraft? Why do you avoid these places?

3. Are there any locations on this lake where you feel unsafe because of other boats/watercraft? Why do you feel unsafe at these locations?

Station 5 provided an opportunity for individuals to identify their issues and concerns about lake- and land-based recreation by putting a dot next to an issue or concern identified at the November 2017 stakeholder-focused discussion workshops or by writing a new issue or concern on a notecard.

A second series of four open house-style public meetings was held around Lake Lanier in February 2020. Approximately 400 people attended the meetings in Dawson County, Forsyth County, Gwinnet County, and Hall County, Georgia (Table D-6). Each open house featured the same information presented at the 2018 meetings, including the subject matter experts from USACE on hand to brief the public on the purpose and objectives of the study.

Table D-6: 2020 Open House Public Meetings by Date.

Location	City/County	Date	Attendees
Kilough Elementary	Dawsonville	Feb. 24, 2020	80
Hall County Government Center	Gainesville	Feb. 25, 2020	160
Central Park Banquet Room	Cumming	Feb. 26, 2020	109
Lake Lanier Project Management Office	Gwinnet County	Feb. 27, 2020	52

Note: [a] The number of attendees was determined by counter. Not all attendees signed in.

These meetings were used to gather feedback on the proposed management actions based on the final recommended lake compartment map for Lake Lanier. Each meeting included six stations: the welcome station; a station that presented the recommended map, key data, and projection maps that reflected the increase in population for the next 20–30 years; a third station where the Project Manager presented the proposed management actions, explaining which were within and which were outside the master plan scope; a fourth station addressing the public involvement process as well as the Master Plan update process; and a fifth station that was interactive and displayed a story board sharing actual findings through a series of digital folders.

The final station provided an opportunity for individuals to identify their issues and concerns about in-scope and out-of-scope proposed management actions by writing a new issue or concern on a notecard. If they wanted to think about what to say, a link was provided to a website where they could comment throughout the month of March 2020.

(3) LAND-BASED DATA COLLECTION

Project managers screened day-use and campground areas on the lake to determine which areas would be most appropriate to consider for improving, expanding, or adding recreational features. USACE day-use and campground areas were the focus of the screening. Project managers determined that 11 USACE-operated facilities would be most appropriate to consider for future development (Table D-7). Table D-8 lists the number of existing facilities at each of the project sites considered for future development (USACE Mobile District 2016).

The land-based survey was conducted by holding guided conversations with users at USACE-operated recreational facilities on the lake. An interviewer used a one-page guide with key words and questions to direct a conversation with each user. This conversational approach allowed themes and issues to emerge that produced a more open and meaningful dialogue than is generally possible when a survey is conducted from a list of static questions. A small, diverse sample of lake users was approached at the recreation locations listed in Table D-7 and engaged in these guided conversations.

The goal was to engage at least one user at each location and ensure that the sample included a diverse group of users. Two interviewers were involved in each conversation, with one asking questions and the other observing. Both took notes of the conversation. Respondents were asked if they felt comfortable with their voices being digitally recorded; if they gave their permission, then the conversation was recorded. Interviewees' names were not taken to maintain anonymity. Each conversation was analyzed immediately after it ended and questions were altered, added, or deleted based on the analysis. Because the objective of the conversations was to give voice to a variety of users, locations, and activities, respondents were selected to reflect different ages, genders, races, and other factors.

The conversation guide began with a grand tour question about why the user was at that location and not somewhere else. The language of each question was changed depending on the person and the situation. The following questions were used to guide the conversations:

1. WHY HERE
    a. Why are you here today?
    b. What brought you here?
2. SPECIAL
    a. Is there anything special about this place?
3. ENHANCE
    a. What would enhance (improve) your experience here today?

4. TAKE AWAY
    a. What would take away from (diminish) your experience?
5. FACILITIES
    a. What facilities/developments would improve your experience here?
    b. What developments/facilities might worsen your experience here today?
6. CONFLICTS
    a. Have you observed conflicts here between visitors?
    b. Can you describe them? Types of groups, activities, etc.
    c. Have there been situations that bothered you here?
7. SAFETY
    a. Have you observed unsafe conditions/situations or accidents?
    b. Have you experienced an unsafe situation?
8. CROWDING
    a. Are there usually a lot of people here or very few?
    b. How has that affected your enjoyment? Positive/neutral/negative.
9. POSITIVE CHANGES
    a. Can you describe positive changes that you have noticed in the last five years?
10. NEGATIVE CHANGES
    a. Tell me about any negative changes that you have noticed in the past five years.

Appendix D3 provides a transcript of each conversation.

Table D-7: USACE-Operated Facilities Considered for Future Development.

Project Site Area	Use	Current Use	Potential Future Development
Balus Creek	M	Boat ramp only	More single-car parking
Belton Bridge	L	Boat ramp and day use	Primitive camping
Bolding Mill	M	Boat ramp, day use, and campground	Potential marina or more campsites
Buford Dam Park	H	Beach	Additional parking
Burton Mill	M	Boat ramp and beach	Additional parking and day-use facilities
Little Ridge	M	Boat ramp and beach	Relocate boat ramp, new picnic shelter, designated swim area, restrooms, and gatehouse
Long Hollow	M	Boat ramp and beach	Picnic shelter, additional parking, and additional day-use facilities
Lower Pool West	H	Day use	Picnic shelter, additional parking, and picnic facilities
Old Federal Campground	H	Boat ramp, beach, and campground	Additional campsites and parking
Sardis Creek	M	Day use and boat ramp	Beach, picnic shelter, picnic sites, and additional parking
Two Mile	M	Day use and boat ramp	Picnic shelter

Note: H = high; L = low; M = moderate.

Table D-8: Existing Facilities.

Facility	BALUS CREEK	BELTON BRIDGE	BOLDING MILL	BUFORD DAM PARK	BURTON MILL	LITTLE RIDGE	LONG HOLLOW	LOWER POOL	OLD FEDERAL	SARDIS CREEK	TWO MILE
Type of Area	Day Use	Day Use	Campground	Day Use	Day Use	Day Use	Day Use	Day Use	Day Use	Government Lease	Day Use
Sanitation											
Dump Station			1								
Restroom Waterborne	1		3	2	1		1	1	1	1	1
Restroom Waterborne–# of Restrooms with Showers			3							1	1
Overnight											
Building Entrance Station			1	1				1	1		1
Campsite Total			97								
Campsite Total–20/30 Amp Outlet			6								

Campsite Total–20/30/50 Amp Outlet			82								
Campsite Total–No Electrical			9								
Campsite Total–Water			88								
Gate/Park Attendant Site (pad)			2	2							2
Water-Based											
Boat Ramp	1	1	1		1	1	1	1	2	1	1
Boat Ramp–Launch Lanes	4	1	3		2	2	2	1	4	3	1
Dock Courtesy Loading	2		1		1	1	1		1	1	1
Fishing Pier			1	2							
Swimming Beach			1	1	1		1		2		1
Other											
Traffic Counters	1	1	1	1	1	1	1	1	1	1	1
Land-Based											
Court Basketball			1	1							
Court Volleyball			1	1					1		
Field Soccer				1							
Group Picnic Shelter			2	3							
Life Jacket Loaner Board				1	1		1				
Picnic Site			4	31	17		15	6		6	32
Playground/ Playground Equipment			2	2			1				
Trail Hiking			1	1	1				1		
Trail Hiking–Miles					1						
Trail Multipurpose						1					
Trail Multipurpose–Miles						1					

Note: Empty cells indicate that the facility is not available at the marina.
Source: USACE Mobile District 2016.

(3) ON-WATER BOAT COUNT DESIGN

The survey team conducted on-water boat counts during peak recreation hours (2 p.m.–5 p.m.) on Mondays through Fridays in June 2018. Project managers divided the lake into 19 compartments and established a route for each compartment assuming a 100-meter buffer around the survey boat. The routes and their buffers were defined to ensure counters could see every accessible portion of the lake to count boats from the water. Boat counters used electronic tablets to collect data, marking the location and type of each boat observed. Field staff were trained in use of the tablets on Monday, June 4. A USACE Ranger drove the boat and spotted boats for all the counts to ensure consistency. Two surveys were done in

12 compartments and three surveys were done in seven compartments to ensure consistency in the results.

The first count (Count 1) was conducted from Monday, June 4, through Friday, June 8, 2018, in 12 compartments; the second count (Count 2) was conducted June 14, 15, 18, and 19, 2018 (Thursday, Friday, Monday, and Tuesday, respectively), also in 12 compartments; the third count (Count 3) was conducted in seven compartments on Tuesday, July 10, and Thursday, July 12, 2018. Count 3 was conducted because of inconsistencies in the results in the seven compartments on which the third count was done. Counts 1 and 2 for these seven compartments had large deviations that resulted in their being placed in different density categories, as described later in "Stakeholder Issues and Concerns."

The lake level during the 2018 recreation season (Memorial Day through Labor Day) was higher than the normal summer pool, particularly in June when the on-water boat counts were conducted. In early June, the lake level temporarily rose to nearly 1,075 ft, and by mid-June, it had subsided to about 1,072 ft. Project managers reviewed ramp closures and the water level to determine whether they would skew boat counts. Data indicated that use during the week, when on-water counts were conducted, was relatively unchanged by high-water levels.

(4) AERIAL BOAT COUNT

Aerial imagery was captured to record the density of boat traffic on Lake Lanier during a typical weekend day and a peak holiday in 2018. A helicopter crew and photographer captured conditions on the lake on Sunday, June 24, and Wednesday, July 4.

The crew first confirmed the angle at which images would be taken and the amount of time needed to cover the project area. They determined that they required an hour longer than originally planned to capture images of the entire lake area, so the crew flew from 1 p.m. to 5 p.m. on June 24 (as opposed to the originally planned 1 p.m.–4 p.m.). At 5 p.m., all boat ramps on the south and east sides of the lake were full. The threat of afternoon thunderstorms on July 4 led to the crew flying earlier—from 11 a.m.to 5 p.m.—to ensure data were captured during peak holiday use. On July 4, all boat ramp parking areas were full by 12 p.m. and all day-use parking areas were full by 10 a.m.

More than 2,000 orthogonal images of the lake were taken during each flight. Latitude and longitude data from each image were entered into a GIS database to determine the area of the lake shown in each photograph. All boats in the images were counted. No attempt was made to determine the types of boats in the photographs.

(5) MAIL SURVEY

The study team used feedback from stakeholders as described earlier in "Stakeholder Workshops," in conjunction with results from previous studies and the *Federal Land Management Agency Compendium of Questions* (OMB Control No. 0596- 0236) (FLMA

undated) to develop questions for the mail survey. USACE provided the draft survey to the U.S. Office of Management and Budget for review and approval prior to conducting the survey. The survey form is included in appendix D4.

The survey was designed to collect data on user preferences on Lake Lanier. Survey recipients were asked to name and map their favorite boating areas, lake areas they avoid, and lake areas they consider to be unsafe and to provide a reason why they gave each response. The survey allowed recipients to name two locations in each category. The survey questions mimicked the questions asked at public meetings in February 2018. The survey also asked about perceptions of boat crowding on the lake and how boat density influences recipients' use of the lake.

The survey was mailed to 1,200 randomly selected users in early June 2019. Recipients included 400 dock permittees, 400 shoreline residents not already represented as dock permittees, and 400 marina clients (slip renters). Table D-9 lists the total number and the percent of users in each category selected to equal 400 users.

Table D-9: Users Selected to Receive Mail Survey.

User Category[a]	Population	Percent of Users in Category	Sample Size
Dock Permittees	**9,594**	**4%**	**400**
Shoreline Residents	**14,787**	**2.7%**	**400**
Dawson County	1,512		41
Forsyth County	4,512		122
Gwinnett County	383		10
Hall County	8,220		223
Lumpkin County	160		4
Marina Renters	**5,902**	**6.8%**	**400**
Aqualand	1,300		88
Bald Ridge	635		43
Habersham	537		36
Holiday	1,062		72
Lazy Days	650		44
Port Royale	1,147		78
Sunrise Cove	571		39

Note: [a] Dock permittees were selected from the USACE list of dock permits and not divided into users by county.

Project managers used Microsoft Excel to select survey recipients in each of the user categories. Every user in each category had an equal chance of being selected to ensure that the samples were representative of the category population. Of the 10 marinas on Lake

Lanier, seven agreed to provide client lists for participation in mailed surveys and slip renters at those marinas received surveys. If any recipient from one category matched a recipient in another category (e.g., a slip renter was also a shoreline resident), one of the entries was deleted andan alternate recipient from the same category was selected. The final list of recipients contained no duplicate entries or invalid addresses.

D. STAKEHOLDER ISSUES AND CONCERNS

This section details issues and concerns identified through public involvement efforts in November 2017 at stakeholder-focused discussion workshops and in February 2018 at open house-style public meetings. It was important to identify the issues and concerns before preparing the survey instrument so that the issues could be measured. This sequence was followed for the proposed management actions where stakeholders provided feedback on the actions followed by the open-house public meetings in February 2020 for greater clarity with a larger audience. These four steps demonstrate a high degree of transparency with respect to public involvement:

1. Stakeholders identify issues and concerns.
2. The general public reacts to those issues and may add more.
3. Stakeholders provide feedback on the proposed management actions.
4. The general public reacts to the refined proposed management actions.

Furthermore, a web link was available to review the information and comment, adding another layer of transparency to this effort to document that USACE values public input throughout the process leading to the Master Plan Update.

(1) NOVEMBER 2017 STAKEHOLDER-FOCUSED DISCUSSION WORKSHOPS

Four themes were developed from the issues identified at the stakeholder-focused workshops:

- Conflict and crowding
- Facility improvements
- Shoreline management
- Watercraft use

Conflict and crowding. Participants at the workshops identified conflict and crowding as a concern both on land and in the water. Roughly one-third of lake-based issues were

associated with this issue; however, fewer than 10 percent of land-based concerns fell into this category. Comments identified concerns with too many boats on the lake not only in general for both land and water, but also in specific areas on the south end and during weekends.

Facility improvements. More than 75 percent of land-based issues were related to facility improvement versus approximately 30 percent of lake-based issues. Issues discussed ranged from frustration with the limits of current policies and regulations to specific ideas for improving facilities. Participants in the workshops and at public meetings expressed a desire for more restaurants (described in the next section). Participants in the workshops asked for more diversity in recreation opportunities and upgrades to existing facilities. Others asked for more trail connectivity between facilities owned and managed by different entities.

Shoreline management. The few comments related to shoreline management were generally associated with erosion and sedimentation and dock regulations.

Watercraft use. Lake-based comments focused on issues associated with watercraft use. Participants requested that USACE create zones for distinct categories of use (e.g., no-wake zones and no-ski areas). They expressed concerns about the increasing size of boats on the lake and the wakes produced by specific watercraft. Some participants expressed interest in allowing seaplanes on the lake and the use of radio-controlled aircraft during specific hours on weekdays when crowding on the water is not a concern.

Some of the feedback received from stakeholders is outside USACE's authority for managing the lake and/or cannot be addressed in the Master Plan Update. Seven of 14 groups commented on how laws and regulations are enforced. The Georgia Department of Natural Resources (GADNR) is responsible for law enforcement on Lake Lanier. Therefore, USACE does not have the authority to specifically address those concerns in the Master Plan Update. USACE and GADNR, however, work closely to ensure safety on the lake. USACE communicated these concerns and the considerable number of comments received to GADNR to ensure stakeholder concerns were heard. Safety, as it relates to perception of use and the carrying capacity study, was incorporated into the surveys described in later sections of this report.

Similarly, the Master Plan Update will not address water management or Buford Dam operations, including issues and concerns related to water levels. Eleven of 14 groups commented on water levels, and USACE is aware of stakeholder concerns related to water levels and the hazards they create for Lake Lanier users.

(2) FEBRUARY 2018 AND 2020 OPEN HOUSE PUBLIC MEETINGS

Table D-10 summarizes the issues and concerns raised by stakeholders who attended the workshops. Figures D-10, D-11, and D-12 graph the dot count results tabulated in Table D-10 by stakeholder group.

*Table D-10: Issues and Concerns of 2018 Open House Meeting Attendees Listed by Stakeholder Group.**

Issue	Buford[a]	Gainesville	Cumming	Dawsonville
Government				
Land-based				
More approvals at local level	28	44	46	13
More economic development in parks	3	4	2	4
More flexibility in master planning	14	12	8	11
Crowding	2	2	40	10
Access to large undeveloped areas	1	1	4	7
More cultural diversity with different ideas for recreation	2	0	1	0
Resource impacts in general	0	1	1	0
Conflicts with mountain bikes, horses, and hikers	0	6	4	1
Better define user experience (currently overused)	1	8	0	0
More access for recreation and camping	0	3	7	6
Better security and safety	12	5	11	22
Lake-based				
Safety and the volume of boats	6	20	18	12
Unsafe boater behavior	54	48	85	52
Large watercraft and engine size	4	14	24	15
Crowding/conflicts	0	4	3	5
Commercial				
Land-based				
Remove geese	0	2	3	5
Improve boat ramps	3	6	4	5
Increase public hunting areas	1	2	3	2
More restaurants	23	30	64	33
More parks like Laurel Park (picnicking, fishing, and parking)	1	3	3	3
Easier Master Plan to meet market changes	2	6	0	1
More mountain biking and walking trails	8	11	15	13
Keep Corps money local	13	24	11	4
Ease regulations on Master Plan-based improvements	10	2	15	10
More access for recreation and camping	2	4	2	2
Better security and safety	1	1	9	13
Lake-based				

Issue	Buford[a]	Gainesville	Cumming	Dawsonville
Boat education classes for adult and youth	7	30	71	48
More navigation markers	5	53	47	25
Better public access at ramps and marinas	2	5	3	5
Boater safety training	3			
More GADNR staff at ramps	4			
More licensed boaters and training	41			
Special Interest				
Land-based				
Protect shoreline from erosion	15	13	45	20
More and larger lakeside parks	0	4	7	2
Better signs to direct flow on weekends	7	1	1	0
Educate public about lake access	2	2	1	1
Control erosion and sedimentation	34	59	65	44
Streamline regulation process	3	7	11	3
Better define user experience (currently overused)	0	1	0	0
More access for recreation and camping	2	6	2	4
Better security and safety	1	0	2	10
Lake-based				
Better and more money for enforcement of regulations	9	15	11	10
Inebriated boater concerns	0	2	7	8
Boater education	6	22	26	9
Proliferation of large boats and wakes	22	15	67	32
Limit high-speed boats	7	23	17	21
Require boater training	18			
Allow seaplane operations		13	4	8

Note: Displays were updated based on comments received during the first meeting to remove any overlap in issue areas and to allow participants to indicate their interest in allowing seaplane operations on Lake Lanier.

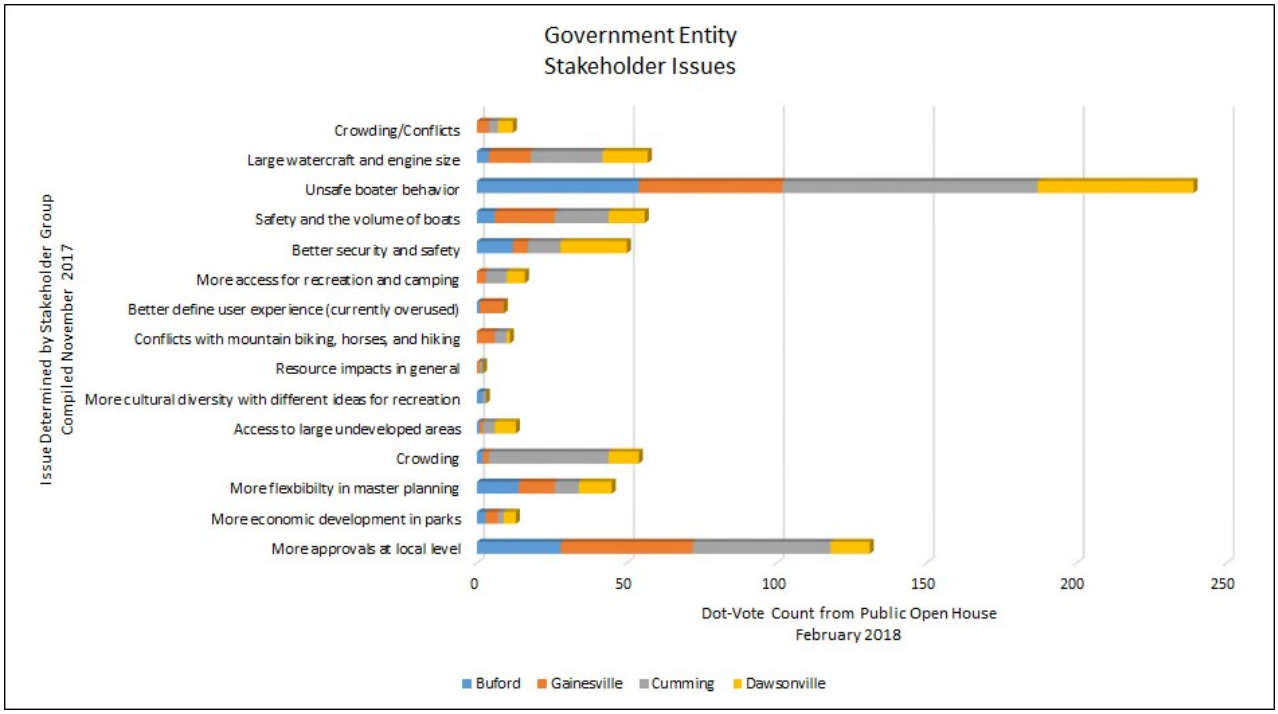

Figure D-4. Issues and Concerns of 2018 Open House Meeting Attendees—Government.

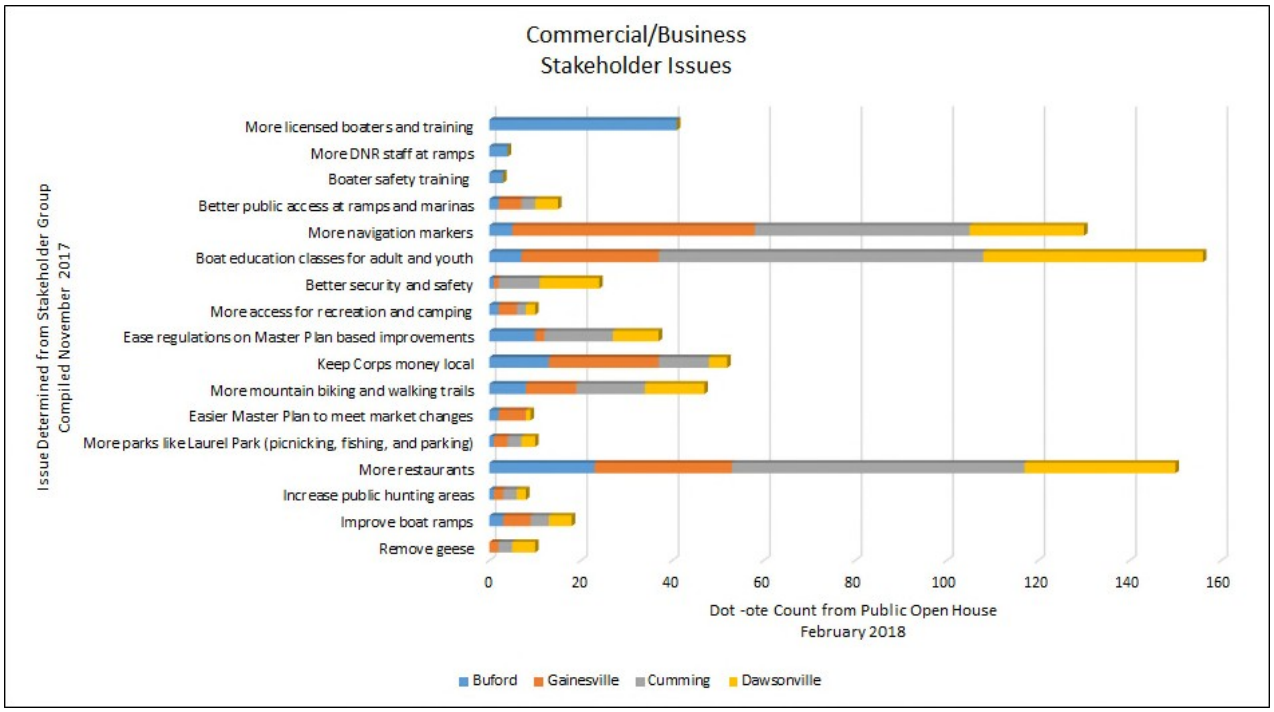

Figure D-5. Issues and Concerns of 2018 Open House Meeting Attendees—Commercial.

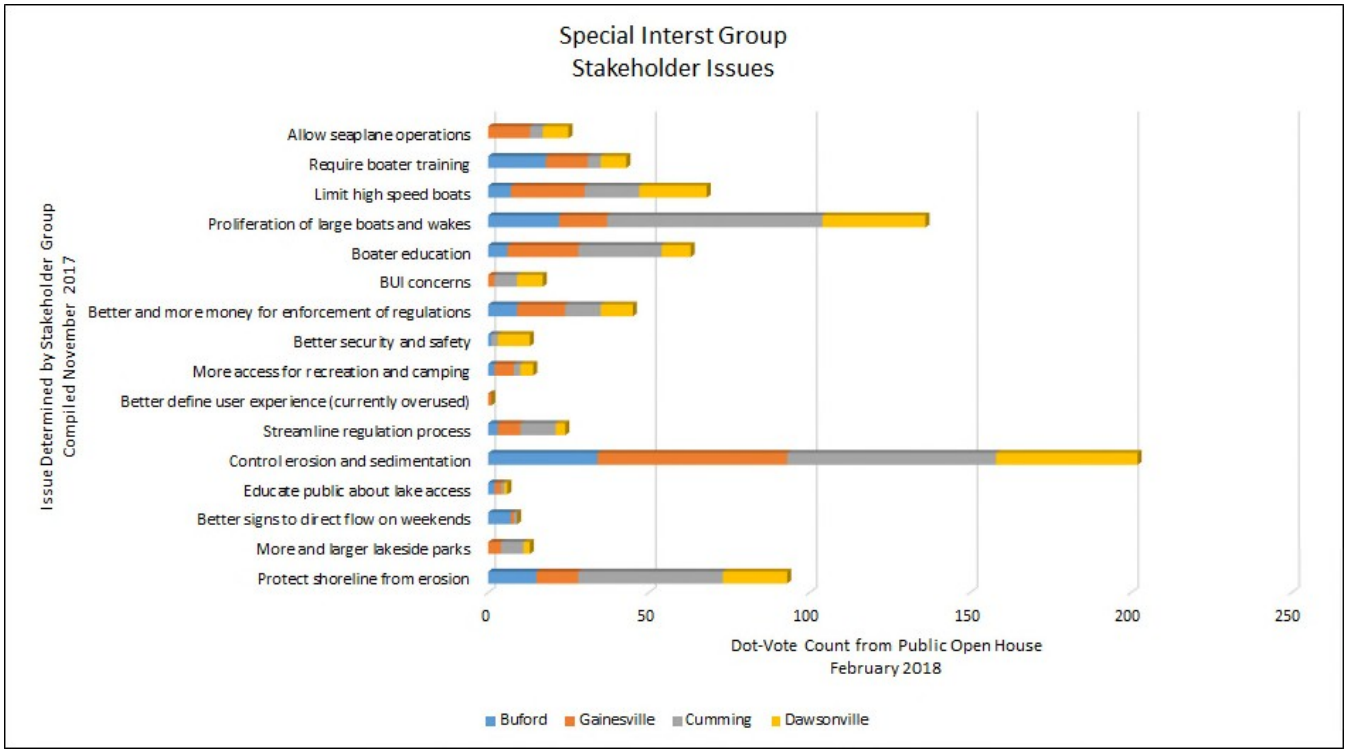

Figure D-6. Issues and Concerns of 2018 Open House Meeting Attendees—Special Interest.

(3) LAKE-BASED RECREATION: BOAT COUNTS

Project managers divided the lake into 28 units called “management compartments.” The compartments were delineated using size, topography, land-use classification, and access as location criteria. An initial set of 19 compartments was presented at stakeholder meetings in November 2017 and at public meetings in February 2018. Based on data collected at those meetings, USACE reevaluated the compartments and adjusted the size of some of them to more accurately represent the distribution of use on Lake Lanier, resulting in 28 compartments based on access points.

Changes made between the 19-compartment map and the 28-compartment map, and the reasons for the changes, are summarized below:

- The Main Body South and Main Body North compartments were each initially more than 4,500 ac, which spread the density of use over very large areas. The Main Body South compartment was divided into two compartments—the Buford Dam compartment (1,563 ac) and a smaller Main Body South compartment (2,958 ac)—and the Main Body North compartment was separated into a smaller Main Body North compartment (2,011 ac), the Browns Bridge South compartment (1,986 ac), the Chattahoochee Bay compartment (711 ac), and the Mud Creek compartment (760 ac).

- The Burton Mill compartment was too small to provide useful information, which clustered the density of use, so it was absorbed into the Big Creek compartment.
- The Six Mile/Four Mile compartment was too large and was divided along geographic features to make the Three Sisters compartment (1,127 ac) and the Six Mile/Four Mile compartment (1,896 ac).
- The Gainesville South compartment was too large and was divided geographically into the Gainesville North compartment (1,836 ac) and the Gainesville South compartment (1,709 ac).
- The Browns Bridge North compartment was too large and was divided into the Browns Bridge North compartment (2,572 ac) and the Big Junction compartment (1,626 ac).
- The Chestatee South compartment was too long and narrow and was divided into the Latham compartment (775 ac) and the Chestatee South (1,369 ac).
- The Chestatee North compartment (2,000 ac) was very long and narrow, so the Thompson Creek compartment (806 ac) was separated from it.
- Two compartments on the 19-compartment map were mislabeled and corrected on the 28-compartment map: the Flowery Branch Bay compartment was mislabeled as "Chattahoochee Bay" and the Chattahoochee Bay compartment was also initially mislabeled.

USACE also created a map with a finer level of detail of lake-use information for management purposes by dividing the lake into 100-ac hexagonal grid cells. Table D-11 summarizes the results of on-water boat counts done on a typical weekday peak-time for the original 19 compartments, and Table D-12 summarizes the results of on- water boat counts on a typical weekday for the final 28 compartments.

Table D-11. Lake Lanier On-Water Boat Counts for a Typical Weekday Peak-Time Using Initial 19 Compartments.

Compartment	Area (ac)	Count 1		Count 2		Count 3		Standard Deviation	Mean	Average Ac per Boat
		Number of Boats[a]	Ac per Boat	Number of Boats[a]	Ac per Boat	Number of Boats	Ac per Boat			
Bald Ridge Creek	1,684	73	23	76	22			2	75	23
Balus	1,307	17	77	11	119			4	14	93
Big Creek	1,550	37	42	47	33			7	42	37
Burton Mill	99	1	99	4	25	7	14	3	4	25
Chattahoochee Bay	1,697	47	36	25	68			16	36	47

Compartment	Area (ac)	Count 1		Count 2		Count 3		Standard Deviation	Mean	Average Ac per Boat
		Number of Boats[a]	Ac per Boat	Number of Boats[a]	Ac per Boat	Number of Boats	Ac per Boat			
East Shoal Creek	278	7	40	5	56			1	6	46
Gainesville North	3,546	29	122	40	89			8	35	103
Gainesville South	4,198	67	63	83	51			11	75	56
Lower Chattahoochee	1,539	12	128	20	77	32	48	10	21	72
Main Body North	5,468	114	48	67	82	96	57	24	92	59
Main Body South	4,654	54	86	59	79			4	57	82
Chestatee North	2,397	28	86	41	58			9	35	69
Chestatee South	2,144	7	306	40	54	40	56	19	29	74
Shoal Creek/ Sunset Cove	1,158	64	18	60	19			3	62	19
Six Mile/Four Mile	2,890	45	64	79	37			24	62	47
Two Mile	218	10	22	3	73	2	109	4	5	44
Upper Chattahoochee	978	4	245	11	89	7	140	4	7	133
Wahoo	2,074	12	173	17	122			4	15	143
Young Deer	1,099	27	41	4	275	20	55	12	17	65
Overall	**38,976**	**655**	**60**	**692**	**56**					

Notes: No "overall" numbers are provided for Count 3 because only seven compartments were counted.
[a] The most consistent/complete count was used when two counters collected data in the sample compartment on the same day. Data were collected when boat ramps were closed because of high water. A list of ramp closures is included in Table D-16.

Table D-12. Lake Lanier On-Water Boat Counts for a Typical Weekday Peak-Time Using Final 28 Compartments.

Compartment	Area (ac)	Count 1		Count 2		Count 3		Standard Deviation	Mean	Average Ac per Boat
		Number of Boats[a]	Ac per Boat	Number of Boats[a]	Ac per Boat	Number of Boats	Ac per Boat			
Bald RidgeCreek	1,684	73	23	76	22			2	75	23
Balus	1,307	17	77	11	119			4	14	93
Big Creek	1,649	38	43	51	32	7	236	23	32	52
Big Junction	1,626	27	60	39	42			8	33	49
Brown's Bridge North	2,572	40	64	44	58			3	42	61
Brown's Bridge South	1,986	36	55	21	95	45	44	12	34	58
Buford Dam	1,563	22	71	16	98			4	19	82
Chattahoochee Bay	711	27	26	19	37	11	65	8	19	37
East Shoal Creek	278	7	40	5	56			1	6	46

Compartment	Area (ac)	Count 1		Count 2		Count 3		Standard Deviation	Mean	Average Ac per Boat
		Number of Boats[a]	Ac per Boat	Number of Boats[a]	Ac per Boat	Number of Boats	Ac per Boat			
Flowery Branch Bay	1,697	47	36	25	68			16	36	47
Gainesville North	1,837	12	153	13	141			1	13	147
Gainesville South	1,709	17	101	27	63			7	22	78
Latham	775	0	0	8	97	5	155	4	4	179
Lower Chattahoochee	1,539	12	128	20	77	32	48	10	21	72
Main Body North	2,011	42	48	24	84	30	67	9	32	63
Main Body South	2,958	32	92	33	90			1	33	91
Mt. Vernon	475	0	0	1	475			1	1	950
Mud Creek	760	9	84	3	253	10	76	4	7	104
Chestatee North	1,591	20	80	22	72			1	21	76
Chestatee South	1,369	7	196	32	43	35	39	15	25	55
Shoal Creek	1,158	64	18	60	19			3	62	19
Six Mile/Four Mile	1,896	28	68	56	34			20	42	45
ThompsonCreek	806	8	101	19	42			8	14	60
Three Sisters	1,127	17	66	33	34			11	25	45
Two Mile	218	10	22	3	73	2	109	4	5	44
Upper Chattahoochee	978	4	245	11	89	7	140	4	7	133
Wahoo	1,600	12	133	16	100			3	14	114
Young Deer	1,099	27	41	4	275	20	55	12	17	65
Overall	**38,976**	**655**	**60**	**692**	**56**					

Notes: No "overall" numbers are provided for Count 3 because only seven compartments were counted.

[a] *The most consistent/complete count was used when two counters collected data in the sample compartment on the same day. Data were collected when boat ramps were closed because of high water. A list of ramp closures is included in Table D-16.*

The boat count results were classified from very high to very low boat densities based on previously defined USACE density classifications. In those studies, survey takers presented users with images illustrating how many boats would be seen from a vessel on the lake at different lake-use levels. From the studies, USACE was able to generally identify user density perceptions based on how much lake surface area each boat had, expressed as acres per boat. Table D-13 summarizes the density levels (CDM 2017). These density classifications were applied to the Lake Lanier boat count data.

Table D-13: Boat Traffic Density Use Categories.

Density	Acres per Boat
Very high	< 10.0
High	10.0–15.0
Moderate	15.1–20.0
Low	20.1–25.0
Very low	> 25.0

USACE also used on-water boat counts to determine the types of watercraft used on Lake Lanier. Concurrent with boat counts, counters logged boat type (Table D-14).

Table D-14: Boat Type Use during Typical Weekday Peak Times.

Boat Type	Count 1	Count 2	Average % of Total Use
Fishing boat/bass boat	76	87	12.1
Flat bottom boat/jon boat	1	4	0.4
High-performance boat (cigarette boat)	2	2	0.3
Houseboat/cabin cruiser	28	24	3.9
Other	8	15	1.7
Personal watercraft (Jet Ski)	112	88	14.9
Pontoon boat	142	139	20.9
Rowboat/kayak/canoe	33	48	6.0
Runabout/speedboat/ski boat	185	234	31.2
Sailboard/paddleboard	9	17	1.9
Sailboat	56	33	6.6
“V” hull boat	1	0	0.1
Total	**653**	**691**	**100**

Appendix D5 contains illustrations of the final compartments and hexagonal maps for typical weekends and weekdays as well as a holiday, as well as background information on the individual compartments. The illustrations also include assumptions about changes in use of 20 percent. The illustrations assist lake managers in understanding areas currently on the fringe of being at a higher or lower use level. Use of Lake Lanier peaks during the July 4th holiday. Understanding how the density of boat use might change if the user population increases by 20 percent will help lake managers determine where to place new boat ramps,

whether to increase the size of existing boat ramps, and whether to increase the amount of parking available at existing boat ramps.

(4) LAND-BASED RECREATION

Project managers determined that 11 USACE-operated facilities might be considered for future development in the Master Plan Update. Table D-15 identifies features proposed for potential future development and references applicable portions of USACE Engineering Manual (EM) 1110-1-400, *Recreation Facility and Customer Services Standards*, for each of the 11 selected areas.

Table D-15: Facilities Considered for Future Development with Guidance Reference.

Project Site Area	Use	Current Use	Potential Future Development	Guidance Reference
Balus Creek	M	Boat ramp only	More single-car parking	EM 1110-1-400/Tables 2.3, 2.4
Belton Bridge	L	Boat ramp and day use	Primitive camping	EM 1110-1-400/Table 5.6
Bolding Mill	M	Boat ramp, day use, and campground	Potential marina or more campsites	EM 1110-1-400/Tables 5.1-5.6
Buford Dam Park	H	Beach	Additional parking	EM 1110-1-400/Tables 2.3, 2.4
Burton Mill	M	Boat ramp and beach	Additional parking and day-use facilities	EM 1110-1-400/Tables 2.3, 2.4, 4.1
Little Ridge	M	Boat ramp and beach	Relocate boat ramp, new picnic shelter, designated swim area, restrooms, andgatehouse	EM 1110-1-400/Tables 3.2, 3.3, 5.8, 5.11
Long Hollow	M	Boat ramp and beach	Picnic shelter, additional parking, and additional day-use facilities	EM 1110-1-400/Tables 2.3, 2.4, 3.2, 4.1
Lower Pool West	H	Day use	Picnic shelter, additional parking, and picnic facilities	EM 1110-1-400/Tables 2.3, 2.4, 3.2, 4.1
Old Federal Campground	H	Boat ramp, beach, and campground	Additional campsites andparking	EM 1110-1-400/Tables 2.3, 2.4, 5.1-5.6
Sardis Creek	M	Day use and boat ramp	Beach, picnic shelter, picnic sites, and additional parking	EM 1110-1-400/Tables 2.3, 2.4, 3.2, 5.11
Two Mile	M	Day use and boat ramp	Picnic shelter	EM 1110-1-400/Table 3.2

Project managers analyzed visitation numbers collected during peak-use days in the 2018 recreation season to determine the use density in the 11 recreational areas. The data came from five sources: (a) weekend reports of early closures at the recreational areas (Table D-16), (b) campground use (Table D-17), (c) credit card transactions (Table D-18), (d) traffic counters, and (e) aerial photographs taken during boat counts (see Appendix D6). The data were paired with perceptions gained during the guided conversations and, if applicable, boat

counts to describe in terms of density whether each facility would support proposed future development considering its existing use.

Table D-16: Early Closure Times Reported by Rangers at Facilities Considered for Future Development.

Project Site Area	June 24 Closure	July 4 Closure
Buford Dam Park	3:28 p.m.	12:34 p.m.
Burton Mill	–	12:12 p.m.
Little Ridge	–	10:47 a.m.
Lower Pool West	–	11:32 a.m.

Note: Recreational areas close early when full. No early closures were reported for the seven facilities not listed (Balus Creek, Belton Bridge, Bolding Mill, Long Hollow, Old Federal Campground, Sardis Creek, and Two Mile).

Table D-17: Campground Status at Facilities Considered for Future Development.

Project Site Area	Sites Used/Percent Full		
	June 22	June 23	July 4
Bolding Mill (97 sites)	95/98	95/98	–
Old Federal Campground (84 sites)	68/81	83/99	84/100

Table D-18 Number of Credit Card Transactions during Use Periods on a Typical Weekend Day and Holiday.

Project Site Area	Transactions								Parking
	Before 8 a.m.		8 a.m.–2 p.m.		2 p.m.–5 p.m.		After 5 p.m.		
	June 24	July 4	June 24	July 4	June 24	July 4	June 24	July 4	Number of areas/spaces
Buford Dam Park	1	31	289	369	148	92	33	52	5 areas/ 308 single spaces
Burton Mill	2	4	68	229	50	77	26	24	
Long Hollow	0	0	17	42	4	24	6	2	
Lower Pool West	8	14	58	98	29	58	6	18	4 areas/ 4 trailer spaces/ 145 single spaces
Old Federal	9	10	83	110	82	52	35	36	

Project Site Area	Transactions								Parking
	Before 8 a.m.		8 a.m.–2 p.m.		2 p.m.–5 p.m.		After 5 p.m.		
	June 24	July 4	June 24	July 4	June 24	July 4	June 24	July 4	Number of areas/spaces
Two Mile	1	0	27	64	16	26	3	20	3 areas / 31 trailer spaces / 92 single spaces

Note: Number of credit card transactions is an indicator of user activity at a recreational area.

E. USER PERCEPTIONS

User perceptions were obtained from conversations with lake users done in 2018 at recreational areas (land- based recreation) and from a mailed survey done in the 2019 recreational season (lake-based recreation). Theresults are summarized below.

(1) LAND-BASED RECREATION

Twenty-two people at 11 recreation areas on Lake Lanier were interviewed in summer 2018 about why they wereat the areas, what they like about the area, what improvements they would like to see, and what problems they had encountered. The questions asked during each interview varied from person to person, but in general they were like the questions listed earlier in “Land-Based Data Collection.” The areas where the interviews were conducted and the number of interviews conducted at each area are listed in Table D-19.

Table D-19. Interviews by Recreation Area.

Recreation Area	Number of Interviews
Balus Creek Park	1
Bolding Mill	3
Buford Dam Park	4
Burton Mill Park	1
Little Ridge Park	5
Long Hollow Park	1
Lower Pool West	2
Old Federal Campground	2
Sardis Creek Park	1
Shoal Creek	1
Two Mile Creek Park	1

General information gained from all interviews is summarized below.

General Question: Why did you come here?

- Why are you here today?
- What brought you here?
- Is there anything special about this place?

Responses:

The answers to the "'why" questions aligned with the nature of the park. Parks with trails attract hikers, parks thatallow dogs attract dog walkers, parks that have boat ramps attract boaters, parks where there is good fishing attract fishers, etc.

General Question: What do you like?

- What would take away from (diminish) your experience?
- Can you describe positive changes that you have noticed in the last 5 years?

Responses:

The answers to the questions about what people like or the good things about the recreational area where theywere generally focused on things they felt improved their experience, with the improvements focused on the reasons they went to that park in the first place.

- Trail maintenance
- Safety: Increased police activity, GADNR presence, security ride-throughs (fewer teenagers drinking)
- High lake level
- The lake is stocked with trout/other fish
- Updates or improvements to facilities: new dump stations, the parking lot repaved, new sidewalks from bathrooms to beach.

General Question: What would make it better?

- What would enhance (improve) your experience here today?

- What facilities/developments would improve your experience here?
- What developments/facilities might worsen your experience here today?

Responses:

The answers to the questions about what would improve the experience also were specific to the reasons thevisitors had chosen to go to the recreational area.

- A designated dog area, a sign stating people can have dogs in the water, a dog waste deposit box
- More trash cans
- More parking
- More facilities (bathroom, showers, septic system)
- A new streetlight
- No fees
- Reflectors on docks so they would be easier to see at dusk
- Issue fewer dock permits
- Require that all boaters be licensed and boats registered

General Question: What problems do you notice at this area?

- Have you observed conflicts here between visitors?
- Have there been situations that bothered you here?
- Are there usually a lot of people here or very few?
- Have you observed or experienced unsafe conditions/situations or accidents?
- What negative changes you have noticed in the past 5 years?

Responses:

The answers to the above questions again aligned with the reasons the people were visiting, although the answers were sometimes more generalized. The range of responses was greater than for other questions.

- Facilities have increased, nature has decreased.
- Some crime and loudness.
- Drinking on the beach.
- Weekend crowding; can make it very dangerous on weekends.
- Litter on the trails. Logs and fallen branches over the trails and pathways.
- Conflicts with Jet Skis; the lake was calm before Jet Skis and big boats were allowed.
- Collisions—Excess horsepower and number of boats have led to more collisions.
- Fish stocked in the lake are not native species.
- The fallen tree policy does not permit removing dangerous ones.
- Dead fish.
- Car break-ins.
- Corps does not do a good job of dam control, making it hard for fishing.
- Corps doesn't post the water-release schedule or the amount (half, full) released online. It was usually done in the past. Anglers need this information to schedule fishing around the releases.
- It's too expensive.
- Dog waste, dogs getting off their leashes.

(2) LAKE-BASED RECREATION

User perceptions of recreating on Lake Lanier are summarized below, based on receipt of a mail survey donedurin the 2019 recreation season.

(A) FAVORITE AREAS TO BOAT

Favorite areas to boat are well distributed across the lake. Generally boaters listed three types of areas as favorites at which to boat: marinas, the Lake Lanier Islands area, and areas off the main lake (inlets, creeks, coves, and upriver areas). The reasons provided for each type of area being a favorite varied by type of area andare listed below.

Marinas are favorites because of:

- Food
- Gas
- Pumpout available
- Bathrooms
- Repair services
- Fireworks
- Where the boat is kept
- Close to home (i.e., convenient to get to)

Lake Lanier Islands is a favorite location because of:

- Waterpark, beach, restaurants
- Boat watching
- Good coves
- Activities

Inlets, creeks, coves, and upriver areas are favorites because of:

- Closeness to home
- Nice beach
- Good fishing

- Convenience of marina
    - Appreciate the amenities a marina offers
    - Close to the marina where they keep their boat
- Channel to kayak
- Calm water
- Quiet, not as much boat traffic
- Good for tubing, wake boarding, skiing
- Deeper water good for fishing and skiing
- Anchor and swim
- Clean, deep water
- Beautiful sunsets
- Sail racing area, watching the rowers

(B) AREAS AVOIDED FOR BOATING/AREAS CONSIDERED UNSAFE FOR BOATING

Areas avoided and considered unsafe for boating are concentrated in the main lake area. On the survey, respondents were asked to list two avoided areas and two unsafe areas, and many respondents provided the same answers to both questions. That is, the areas they avoid are those they consider to be unsafe for boating. The Lake Lanier Islands and Brown's Bridge/Port Royale marina areas were mentioned most frequently as areasthat are avoided or considered unsafe.

Seven primary reasons respondents avoid lake areas are congestion, speeding, rough water, irresponsible boat operation, large boats, narrow or otherwise dangerous passageways, and noise (most often cited as loud music) (Table D-20). Less frequently cited reasons were drinking (boating under the influence), the presence of too many Jet Skis, and dirty water.

Table D-20. Primary Reasons Areas are Avoided.

Reason	Main Lake Inlets	Main Lake Shores	Main Lake	Upper Rivers
Congestion	y	y	y	y
Speeding	y	y		y
Rough water	y	y	y	

Reason	Main Lake Inlets	Main Lake Shores	Main Lake	Upper Rivers
Irresponsible boat operation	y	y	y	y
Large boats	y	y	y	y
Narrow/dangerous passageway	y	y		y
Noise/loud music	y	y		y
Drinking (alcohol)		y	y	
Too many Jet Skis		y		y
Dirty water		y		

Four primary reasons respondents considered lake areas to be unsafe are congestion, speeding, rough water, and irresponsible boat operation (Table D-21). Less frequently cited reasons were the presence of large boats (inthe main lake area), narrow passageways, and drinking (boating under the influence).

Table D-21. Primary Reasons Areas are Considered Unsafe.

Reason	Main Lake Inlets	Main Lake Shores	Main Lake	Upper Rivers
Congestion	y	y	y	y
Speeding	y	y	y	
Rough water	y		y	y
Irresponsible boat operation		y	y	y
Large boats			y	
Narrow passageway		y		y
Drinking (alcohol)		y		

F. MAP PROJECTION ANALYSIS

(1) MANAGEMENT COMPARTMENT CLASSIFICATION

For each of the 28 management compartments, information from the survey and boat counts was analyzed using the Management Compartment Classification Criteria Matrix (Table D-22). This matrix correlates the incidence of conflicts for avoided and unsafe conditions with boat density (surface acres per number of boats) using a four- level classification system. Table D-23 provides definitions for each of these four classes.

Table D-22: Management Compartment Classification Criteria Matrix.

Use Level (density)	Incidence of Conflicts (avoided and unsafe locations)		
	High	**Moderate**	**Low**
Very high	Class I	Class I	Class III
High	Class I	Class I	Class III
Moderate	Class I	Class II	Class II
Low	Class II	Class II	Class IV
Very low	Class II	Class II	Class IV

Table D-23: Class Definitions.

Class	Definition
Class I	Moderate-to-very high boat traffic density at peak use times and moderate-to-high incidence of conflicts
Class II	Moderate boat traffic density at peak use times but low-to-moderate incidence of conflicts ***or*** Very low-to-low boat traffic density and moderate incidence of conflicts
Class III	High-to-very high boat traffic density at peak use times but low incidence of conflicts
Class IV	Very low-to-low boat traffic density at peak use times and low incidence of conflicts

Data on boater conflict are derived from responses to the “avoid” and “unsafe” questions from the mail survey. In general, most boaters (a) seek to avoid heavy boat traffic and/or (b) feel unsafe with incompatible boat types, activities, and unsafe or discourteous boat operation. “Avoid” and “unsafe” spatial data are combined to formulate a conflict scale, because the surveys indicated that both are often located near each other on a waterbody (TVA and Park 2002), demonstrating a close relationship between these two responses. As shown in Table D-24, a compartment is rated low, moderate, or high depending on the percent of total avoided and/or conflict locations onLake Lanier that occurred in the compartment.

Table D-24: Density and Conflicts Criteria.

Conflict Scale (% of Avoided and UnsafeLocations)	Category	Boat Traffic Density	Use-Level Category
		< 10.0 ac/boat	Very high (VH)
> 12%	High (H)	10.1 – 15 ac/boat	High use (H)
6 – 12%	Moderate (M)	15.1 – 20.0 ac/boat	Moderate (M)
< 6.0%	Low (L)	20.1 – 25.0 ac/boat	Low use (L)
		> 25.0 ac/boat	Very low use (VL)

Density refers to the number of boats observed from boat counts. The boat traffic density data are used as the best means of comparing use levels between different-sized management compartments. The five use-level categories in Table D-22 represent relative differences between observed use levels at peak weekend use times. The boat traffic density of 10 acres per boat is a density figure used by reservoir managers as a threshold beyond which a body of water is considered “overcrowded” and is used as the dividing line between the most heavily used and the less heavily used compartments (Chilman et al. 1995).

Placement of compartments into the Management Compartment Classification Criteria Matrix at the intersection of their conflict (H, M, or L) and density ratings (VH, H, M, L, or VL) reveals their classification (see Table D-24). A compartment with high conflict and high density or moderate density falls into the Class I range. At the other extreme, a compartment with low density and low incidence of conflicts falls into the Class IV range.

To provide an idea of what conditions might be like in the next 20–30 years based on population projections for northern Georgia according to the ARC, increases in boat density and in conflicts with increments of 20–100 percent were modeled to produce different future scenarios. Because the population increase is expected to be 60 percent, managers felt this was the most reasonable choice for a future desired condition map to represent Lake Lanier.

G. PROPOSED MANAGEMENT ACTIONS

This section is the culmination of manager meetings to construct descriptions for each of the 28 compartments followed by an engaging dialogue with stakeholders to provide feedback on the lakewide proposed management actions. A final refinement during which the public could provide feedback on what was presented at the February 2020 meetings was underway in March 2020.

The out-of-scope proposed management actions cannot be included in the Master Plan Update. They will be communicated to the appropriate entities having jurisdiction. Some

actions require cooperation from stakeholders, financial means, and compliance with laws, regulations, and policies. They are as follows:

- Conduct discussions and share the results of comments received with state and local jurisdictions regarding boater education, training, and licensing; boat size, engine size, and speed; water quality; erosion and sedimentation; safety and security; fish stocking programs; fish structure programs; educational seminars on fishing conservation; expanding the hunting program; and wildlife control.

- USACE will explore/research the technology/feasibility of using GPS to locate underwater hazards.

- USACE will continue to support recreational fishing and fish structure programs. Expanding educational seminars on future fishing conservation.

- USACE will explore locations for longer walkways to courtesy docks.

- USACE will explore the feasibility of “trash traps” at certain locations.

- Policy change for seaplane operations. Regardless of these proposed management actions and the Master Plan Update, the Mobile District Commander is the only individual with the authority to amend the District policy.

The following proposed management actions were presented at the second round of public workshops.

- Education:
    - Increase natural resource management and safety education outreach efforts.
    - Assess hazard markers, location markers, and regulatory buoys/signs.
- Erosion and Sedimentation:
    - Review site development plans with emphasis on and strict controls of erosion and sedimentation.
    - Conduct a condition assessment of erosion of the lake’s shoreline.
- Facilities:
    - Determine the feasibility of future recreation site improvement/development.

- Add land-based amenities to accommodate current and future demand while balancing the range of diverse opportunities and protection of the resource.

- Noteworthy Actions:
  - The previously approved Concept of a Resort Development at Mary Alice Park will be honored. No additional boat ramps will be developed.
  - Increase hiking / walking trail opportunities.
  - Increase mountain biking opportunities.
  - Consider establishing a dog park on the south end of the lake.
  - Increase paddle sports launching and dock facilities.
  - Identify locations for marine contractors separate from developed recreation areas.
  - Relocate Buford Dam Road off Saddle Dikes 1 and 2 from Sawnee Campground to the main dam. Install roundabouts at Sawnee Campground, West Bank, and the Lake Lanier Project Management Office.

- Crowding and Conflict:
  - Maintain existing and currently approved plans for boat ramps.
  - Consider either (a) allowing no further marina development beyond what has already been approved, or (b) locating a small-to-medium-sized marina in either the Big Junction, Latham Creek, or Chestatee North compartment.
  - Consider conducting a vehicle/road traffic study to address congestion on busy weekends.

- Hunting/Wildlife:
  - Expand wildlife habitat and hunting opportunities.

H. STUDY LIMITATIONS

The data collected in this study have their limitations. Baseline recreational carrying capacity data for the period before this study was conducted are unavailable, making comparisons impossible and projections unreliable.

Decisions on facility management on the lake are based on a 60 percent increase in use over an indefinite time period based on population projections provided by the ARC. Regional

land-use changes and transportation network improvements will affect lake use, but those changes and improvements are currently unknown. That USACE is moving in the direction of leasing lands to state and local agencies must also be considered. All these factors present limitations to how the data from this recreational carrying capacity study can be used.

Lake managers can use the information from interviews with and mailed survey responses from lake users when considering what changes and improvements in lake facilities are needed, but in no way do they provide a complete picture of user perceptions of recreational facility needs at the lake. Each user interviewed and each survey response received provided opinions relevant to the user's reason for being at the lake and their experience, rather than the collective experience of users of each facility or lake area. On a lake with more than 11 million annual visitors—comprised of shoreline residents with docks, local residents with towed boats and boats at marinas, non-residents who rent boats, day-use picnickers and swimmers, nonboating fishers, restaurant goers, overnight vacationers, and day hikers—there is not one "collective" experience, but a multitude of experiences among lake users. This study was designed to capture relevant perceptions of user experiences and it was successful in doing so, but the experiences at the lake are as varied as the users and no study can ever completely capture a complete picture of that "experience."

I. CONCLUSIONS

This study provides insights into how and why visitors use the lake, where they like to go and where they do not like to go and why, improvements they would like to see, and problems they have encountered while visiting the lake. The study provides no definitive answers on how the lake should be managed but provides clues about how lake usage can be balanced to accommodate all types of users. Highlights from the study include the following:

- There is no consensus on "favorite" locations on the lake, although there are clusters in some places.
- There is some consensus on lake areas users avoid and consider unsafe and the two are nearly equivalent. Avoided and unsafe areas are busy or crowded (either many boats or boats confined to narrow channels), areas with large boats or speeding boats, and, to a lesser extent, large areas of open water.
- Lake residents generally prefer locations close to home.
- Lake residents generally prefer uncrowded conditions.
- For every "condition" offered on the lake (e.g., quiet area, party area, few people, many people, restaurant, or marina), some visitors love it, others avoid it.
- The most frequently mentioned "problems" are behavior-related like drinking while boating and not knowing or observing boating rules.

- The classification matrix used satisfied the need to provide an industry-standard justification of the final recommended lake compartment ap.

- Nearly every person at the 2020 open house public meetings confirmed that the final map made sense to them. Stakeholders at the workshops prior to the meetings voiced similar support.

- The word cloud visuals for the two most important variables used in the classification matrix (avoided and unsafe locations) received the same assessment.

- The level of effort was successful with good public participation. This provides a firm foundation for supporting the proposed management actions and moving forward to the Master Plan Update.

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