# Angler Catch, Harvest, and Characteristics at Neighborhood Fishin' Program Lakes

by Robert J. Mauk

Management Data Series No. 288 2015



INLAND FISHERIES DIVISION 4200 Smith School Road Austin, Texas 78744

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#### **ABSTRACT**

The Neighborhood Fishin' Program (NFP) was begun by the Texas Parks and Wildlife Department (TPWD) in 2003. This program aims to increase fishing opportunity in urban areas and increase participation in fishing by people living in urban areas. Since the NFP's inception, periodic evaluations have led to modifications of the program, and the program has been expanded to new communities. A comprehensive examination of the program was undertaken in 2012. This was a year-long study examining participation, fishing effort, catch, harvest, and angler demographics and opinions. Overall, the fourteen current NFP sites were well utilized with an estimated 81,269 different anglers together expending 275,632 hours of angling effort. "New anglers", defined as those under seventeen years of age or those having fished in fewer than three of the past five years, comprised 45.6% of program participants. The percentage of anglers who caught fish during their trip averaged 44.0% during the warm months of the catfish season, and 28.4% during the fall-winter trout season. Overall, 88.6% of anglers reported they did not need to catch a fish to enjoy their trip and 99.1% stated they would fish the NFP site again. Overall, 32.6% said they fished only at the NFP site and nearly half of all anglers stated they had fished the same NFP site during the previous year. Two-thirds of the respondents claimed knowledge about the NFP, with one-third hearing about the program through word-ofmouth. Various internet media were also popular ways to find out about the program and participating sites. Kiosks and signage, proved effective at sites that had them.

#### INTRODUCTION

In Texas, the population is expected to increase 82 percent between the years 2010 and 2060, growing from 25.4 million to 46.3 million people (TWDB 2012). Not only is the population growing but is shifting from rural to suburban and urban locations (Howell 2008). With this shift from rural to urban areas, there has been a decline in participation in outdoor recreational activities such as fishing for these migrants (Murdock et al. 1996; Kelly 2004; USDI 2007). Overall, fishing participation is lower for urban residents than rural residents (Schramm and Dennis 1993; USFWS 1999). There are many reasons why urban angling participation is lower with one being there are far fewer fishing opportunities per capita in urban areas than rural ones (Howell 2008). Considering that approximately 80% of the state population lives in cities (Howell 2008), the Texas Parks and Wildlife Department (TPWD) has attempted to promote urban fishing for years.

In 2003, TPWD began the urban fishing initiative now known as the Neighborhood Fishin' Program (NFP). The stated goal of the program was to provide fishing opportunities in all urban areas, emphasizing youth participation. To achieve this, eight objectives were set forth:

- 1) the program must be self-supporting,
- 2) provide at least one NFP lake in each metropolitan statistical area (MSA) having a population of more than 100,000 people,
- 3) provide year-round fishing at each site,
- 4) attract children and adults to fishing, at least one child for every 3 adults,
- 5) half of participants should be new anglers, defined as those under 17 years of age or adults who have fished in fewer than three of the past five years,
- 6) half of all anglers fishing a given site are retained, that is they return year after year,
- 7) make available free fishing-related information at each site, and
- 8) assure accessibility to fishing equipment for borrowing near the NFP site.

Concurrent with the start of the program in 2003, a study was undertaken to evaluate angler effort, and catch and harvest of stocked Channel Catfish *Ictalurus punctatus* at seven NFP sites. The first part of the study was in July, 2003, with follow up in August. Average catch rates ranged from 0.3-1.5 fish/h. Suggested catch rates, for angler satisfaction, have been reported as 0.5 fish/h (Shupp 1972) or 1.0 fish/h (Eades and Lang 2012). While some of the original NFP lakes had catch rates in the targeted range or above, those rates can be heavily influenced by a few anglers catching the majority of the fish; it might have been better to assess the percentage of participants who caught at least one fish (i.e., percent success). Since the initial study, stocking rates and schedules have been adjusted and August stockings have ceased. The NFP now stocks every two weeks with a consistent stocking rate.

Studies of NFP angler demographics occurred in 2005-06 to determine if the NFP was meeting some of its stated objectives (the results of these studies were summarized in Howell et al. 2008). At that time, there were eight lakes in the NFP and it was estimated some 30,000 anglers used the NFP sites. The child-to-adult ratio among participants was 1:2.6 and more than 50% of the participants were "new anglers". Some 67% of the anglers lived within 5 miles of the NFP lake they were fishing, and more than 50% fished only at the NFP site.

Most of the NFP data collected to date is from the program's first few years. TPWD has not measured effort, catch, or harvest since the 2003 evaluation. The program is now better established and it has been more than five years since it was last evaluated. Many changes have occurred since then, including an advertising campaign to make the public more aware of the program and seven additional sites have been added, as well as some sites are no longer in the program. Since the NFP has changed substantially, an evaluation was warranted to determine if it still meets some of its stated objectives. A creel survey and angler count was designed and implemented in 2012 and 2013, with the following objectives:

- 1) Determine if the NFP is meeting stated objectives in terms of percentage of participants who are children, and drawing new anglers,
- 2) Examine NFP angler participation, catch, and harvest throughout the year, to determine if fish stocking schedules or rates should be altered to better meet temporal demand or expectations,
- 3) Examine angler catch using percent-success as an index, and
- 4) Determine angler expectations in terms of catch and harvest of stocked fish.

#### **METHODS**

Fourteen NFP sites, in eight metropolitan areas (Figure 1), were examined in this study. The lakes ranged in size from 0.7 to 7.5 acres. All sites were located within a MSA of >100,000 people. The MSA's with >1 million people often had more than one site located within them. Sites usually had amenities such as bathrooms, seating, and shade. Many sites had a kiosk with information about the NFP and general fishing information. Sites and the NFP were usually promoted through various media to increase public awareness and encourage participation. Stockings occurred every two weeks, on the same day of the week, and at about the same time of the day, though this wasn't always possible due to weather delays and in at least one case water quality issues.

Channel Catfish, nominally 12 inches in total length, were stocked into each NFP site every two weeks at a rate of 142 per acre. Stocking began the week of April 23, 2012 and continued through the week of July 30, 2012. No catfish were stocked in August, and then stocking every two weeks resumed the week of September 3, 2012 and continued through the week of October 29, 2012. Rainbow Trout *Oncorhynchus mykiss*, nominally 10 inches in total length, were stocked at a rate of 112 per acre into NFP ponds that were 2 acres or smaller, and 79 per acre for larger ponds; trout were stocked every two weeks from the beginning of December, 2012 through the end of March, 2013.

Angler counts and creel surveys began with the April, 2012 stocking of Channel Catfish and ended two weeks after the last trout stocking in March 2013 – with the exception that no surveys or counts occurred in the latter half of August or the first part of November, when stocking was not occurring. Adults and youth (less than 17 years of age) were differentiated in counts and creel interviews. Two instantaneous angler counts and creel surveys occurred during the week of stocking. Two more instantaneous angler counts were conducted the following

week. Because of personnel limitations, different protocols were followed depending on whether the TPWD Inland Fisheries District had one or more sites to survey.

## Single Site Districts

The protocol for Buena Vista Park, Bullfrog, South Weeks Park, and Medical Center South sites consisted of an instantaneous angler count within one hour of stocking, followed immediately by a creel survey; then a second angler count and creel survey was conducted at a randomly-selected time and day during the weekend immediately following stocking. Instantaneous angler counts (Appendix 1) involved onsite creel clerks visually counting the number of adults and youth fishing. Two more instantaneous angler counts were made the week after stocking, one each on a randomly-selected weekday and weekend day, at randomly selected times. A total of 52 instantaneous angler counts were made (per site) associated with Channel Catfish stockings and 32 counts were made in association with Rainbow Trout stockings. The creel survey required a creel clerk to walk a circuit around the site and interview each angler. The interviews consisted of questions from a modified TPWD creel survey form (Appendix 2). Fish in possession of the angler at the time of the interview were considered harvested. After stocking occurred, at least 30 minutes of angling was completed before the angler count and creel survey were begun on the half hour (for example: stocking occurs at 0843 so angler count and creel and pressure count would begin at 0930). The creel survey was complete once all anglers had been interviewed. With the exception of the stocking day, dates and start times for creel surveys and instantaneous counts were randomly selected from among three equal-length periods (morning, afternoon, and evening) covering the daylight period. Daylight was divided into equal length periods beginning one hour after sunrise until one hour prior to sunset as determined by the U.S. Naval Observatory website for Waco, Texas (May 15<sup>th</sup> representing the period April-June, August 15<sup>th</sup> representing the period July-September, November 15<sup>th</sup> representing October-December and February 15<sup>th</sup> representing January-March). Starting time was randomly selected from within the chosen time period (on the half hour). For the Channel Catfish and Rainbow Trout stockings, this resulted in 26 and 16 creel periods, respectively.

#### Multiple Site Districts

The protocol for Tom Bass I, Central Park Pond I, Greenbriar, Chisholm Park, Lakeside Park, South Lakes Park, Mary Jo Peckham, Mesquite City Lake, Millers Pond, and Southside Lions Park NFP sites consisted of angler counts and creel surveys beginning the day of stocking or the following day, depending on the time of stocking. If stockings occurred too late in the day to perform a creel survey with the required 30-minute angling pressure, or the creel clerk could not complete surveys at all of their assigned lakes before dark, then creel surveys were conducted the next day beginning one hour after sunrise, on the half hour. Instantaneous angler counts (Appendix 1) occurred at the beginning of each creel survey. Another angler count and creel survey was conducted at a randomly-selected time and day during the weekend immediately following stocking. Instantaneous angler counts the week after stocking were conducted on a randomly selected weekday, and weekend day, at a randomly selected time through the use of cameras (exception: creel clerks made these counts at Millers Pond and Southside Lions Pond). One or more cameras were installed around the NFP lake to record anglers present at the time of the scheduled count. Some sites were able to get photos capturing all the angling activity – the entire pond was visible in the photographs – while others were only able to document activity along most of the shoreline. In order to correct these partial counts, photo counts were compared

with simultaneous counts by a creel clerk; regression was then used to derive a correction factor for photo counts. This correction factor was used to correct photo counts in the weeks when stocking did not occur to determine the total activity. At least twenty comparisons (each time a creel survey was performed) were completed to derive each correction factor. For the Channel Catfish stockings, a total of 52 angler counts were made and for the Rainbow Trout stockings, a total of 32 angler counts were completed. If there were problems such as camera failure, alternate random dates and times were analyzed and included in calculations. The creel survey portion of the study required a creel clerk to walk a circuit around the site and interview each angler. The interviews consisted of questions from a modified TPWD creel survey form (Appendix 2). Fish in possession of the angler at the time of the interview were considered harvested. After stocking occurred, creel clerks allowed at least 30 minutes of angling before beginning the creel survey and pressure counts on the half hour (Example: stocking occurs at 0843 so creel and pressure count would begin at 0930) at the first site. Since clerks had multiple lakes and significant travel distance, the creels and counts at the subsequent lakes would begin on the nearest half hour upon arrival but not necessarily to the nearest half hour after stocking in order to verify camera counts. A randomly selected weekend creel survey occurred the Saturday or Sunday following stocking. The time period of the interviews were randomly chosen from among one hour after sunrise until six hours prior to sunset as determined by the U.S. Naval Observatory website for Waco, Texas (May 15<sup>th</sup> representing the period April-June, August 15<sup>th</sup> representing the period July-September, November 15<sup>th</sup> representing October-December and February 15<sup>th</sup> representing January-March). The time period of six hours before sunset was to insure that creel clerks could get to all of their NFP sites during the day. For the Channel Catfish and Rainbow Trout stockings, 26 and 16 creel surveys respectively, were completed.

#### All Districts

Data were reviewed for errors and corrected. Angling effort was calculated following methodology described by Pollock et al. (1994). The number of angler trips was determined by dividing the angling effort by two hours, which is reported as the average trip length for Arkansas Family and Community Fishing Program sites (Lang 2007). Using responses from the creel survey, first time respondents were identified, as were respondents who were surveyed multiple times over the course of the sample year. This allowed for the partitioning of the effort into unique anglers based on the percentage of first time respondents and total number of respondents. Metrics were calculated separately for each NFP site, and then totaled for the program as a whole. Only the first response, from people interviewed multiple times, was used, except that all responses were used in calculating fishing effort. Total catch and harvest were determined for the stocking day and the following weekend by calculating the average catch and harvest rates and the average effort for those days at each site. Stocking-day catch and harvest data was adjusted to the average time that stocking actually occurred for each site (i.e. if stocking occurred at 1200 h, then the total catch and harvest would be calculated on the basis of number of hours from 1200 to sunset instead of sunrise to sunset).

### **RESULTS**

A total of 5,497 anglers were interviewed at the 14 NFP sites during the creel surveys: 4,269 anglers associated with Channel Catfish stockings (range 39-843 interviews per lake;

Figure 2) and 1,228 associated with Rainbow Trout stockings (range 51-152 interviews per lake; Figure 2). From the instantaneous counts, total angling effort was estimated to be 275,632 h expended at the 14 NFP sites (Table 2). This effort represented an estimated 137,816 angling trips. Further analysis of the creel responses estimated 81,269 different anglers utilized the sites from April, 2012 through March, 2013 (Table 3). Of the anglers interviewed, 99.1% said they would fish the site again. "New anglers", those less than 17 years of age and adults, who had fished fewer than three of the past five years, comprised 45.6% (range 27.6%-62.4%; Figure 3) of participants. An estimated 25.6% of anglers participating in the NFP are youth (less than 17 years of age; Table 3; Figure 4).

The smaller NFP lakes (1 acre sites) had higher initial Channel Catfish catch and harvest rates (Table 6), with estimates of nearly 70% of the stocked fish being harvested within 3-4 days of stocking, with the exception of Tom Bass I (Table 4). South Weeks Park Pond was estimated to have all stocked Channel Catfish harvested by four days post-stocking. For NFP sites larger than 1 acre, the percent harvest of stocked Channel Catfish ranged from 14.9%-64.4%. Catch and harvest following Rainbow Trout stocking was highly variable with some sites having high stocking-day harvest that fell by the weekend (Bullfrog), others with constant harvest the first few days (Buena Vista), others with low stocking-day harvest but a higher weekend harvest (South Weeks), and others with low overall harvest (Chisholm, Mesquite City, and Southside Lions Park; Table 5).

While the majority of anglers (88.6%; range 81.7-94.4%) surveyed stated they did not need to catch fish to enjoy their angling experience, there are those that need to catch something. Those that said they needed to catch something were then asked how many fish they needed to catch to make it a successful trip and the answers ranged from 1 to 10 with two anglers stating 40 (Figure 5). The most popular answer was one fish (42.2%) with 10.8% stating two, and 11.1% answering three. Catching a limit was important to 26.2% of anglers reporting a need to catch fish and 5.4% needed to catch over their harvest limit. The survey revealed that if respondents could catch at least three fish, 95.4% all anglers would be satisfied (Figure 5). The percent of anglers catching at least one fish (percent success) during the Channel Catfish season ranged from 26.0%-60.0% among sites (average 44.0 %, with six sites over 50%; Figure 6). During the Rainbow Trout season, percent success ranged from 10.2%-60.7% (average 28.4%, with three sites over 40%; Figure 7).

The majority of the NFP anglers also fish other waters, usually dependent on what is locally available. Tom Bass I had only 15.5% of anglers state they only fish the NFP site while Medical Center South had the highest percentage at 48.8% followed by South Weeks at 42.1% (Figure 8). An average of 32.6% of all anglers stated they only fish the NFP site. Anglers are being retained in the program as 48.2% (range 39.9-58.2%) responded they had fished at the site the previous year (Figure 9). Figures 10-15 show the percentage of anglers that also fished saltwater, rivers, reservoirs, private waters, other NFP sites, and community fishing lakes (a TPWD classification for public impoundments 75 acres or smaller, located within an incorporated city limits or a public park, or any impoundment lying totally within the boundaries of a state park).

Examining the marketing of the NFP sites, an average of 66.8% of interviewees said they were aware of the program (range: 37.7-81.6%). Different media strategies were used at

different sites and there was great variability among sites as to their effectiveness. Most respondents stated they learned of the site by word of mouth (30.0%; range: 8.4-50.6%). The internet was the second most popular (19.3%; range: 5.1-40.8%) way they stated they learned of the site. Kiosks at the site (not all sites had kiosks at the time) accounted for 9.3% (range: 3.0-15.2%) of the anglers learning about the site. Television and newspapers were used to promote some sites with 0.5-9.7% of the respondents learning about the program from television and 0.9-11.7% from newspapers.

#### **DISCUSSION**

The estimated 81,269 unique anglers utilizing NFP sites April 2012-March 2013 compares favorably to the estimated 30,000 different anglers reported for eight sites in 2005-2006 (Howell et al. 2008). While these numbers indicate that the NFP is a popular program, it does not indicate if all of the stated objectives for the program are being met, or whether or not those objectives are currently attainable or still relevant to the now 10-year old program. This study did not attempt to examine all the stated program objectives. It did examine children's participation, "new angler" participation, and angler retention. The study also shed light on catch and harvest of the stocked fish and gained insight into the angler's satisfaction and expectations with the program.

Children and "new angler" participation is essential in the program, especially when the stated goal is to provide fishing opportunities in all urban areas, emphasizing youth participation. The NFP sites in the current study had an overall estimated 45.6% "new angler" participation rate which is close to the 50% stated objective. This is less than the over 50% that was reported in 2005-06 (Howell et al. 2008). Perhaps the 50% participation target over time is not attainable, since as the years pass, the public residing near the site has had an opportunity to either become anglers or not. In terms of participation by youth (<17 years old), the goal was one child for every three adults. An estimated 25.6% of the anglers participating in the NFP are youth, which meets the stated goal (Table 3; Figure 4).

In order to keep most anglers interested and active in fishing, some catch and sometimes harvest are required (Eades and Lang 2012). Examining the NFP catch and harvest data (Tables 4-6), it is clear that the size of the water body often influenced angler's catch and harvest rates, at least in the Channel Catfish fisheries. Lakes with a smaller size (1 acre) had higher initial Channel Catfish catch and harvest rates than larger lakes (Table 6) with the exception of Tom Bass I (Table 4), which was reported to be covered by aquatic vegetation that inhibited angling. Some of these estimates are likely to be inflated for all but the multiple site districts since the stocking day catch rate was based on reported catch within the first 30-60 minutes of stocking when many fish were being caught. This catch rate was used to extrapolate out the rest of the days' catch. Most likely, as the day progressed, the catch rate would have decreased as fish were caught and harvested.

Rainbow Trout stocking creel survey data exhibited no particular pattern among lakes in catch and harvest, as opposed to the Channel Catfish stockings. Some sites had high stockingday catch and harvest that then fell by the weekend, other lakes maintained constant catch and

harvest through the first weekend. That several lakes (Chisholm, Mesquite City, and Southside Lions Park; Table 5) yielded low overall catch and harvest rates, and the lowest percentage of effort targeting Rainbow Trout (compared to Channel Catfish), is disconcerting since considerable expense and effort goes into these trout stockings, with little return. Local biologists suggested cormorants *Phalacrocorax spp.* were a possible cause of low catch rates at some sites as the birds were consuming many of the stocked trout before anglers could catch them. Anecdotal evidence suggests another possible reason for low catch and harvest at certain sites is that trout might take refuge in deeper areas of the impoundments. These deep holes are possibly not within casting range for most anglers. One recommendation of this current study is to alter trout stocking such that total numbers of trout stocked remain the same but stockings are less frequent, with larger number of trout, at sites where cormorants are a problem. This change in stocking might give anglers a chance to catch more trout before the cormorants deplete them. When choosing new NFP sites, cormorant predation should be considered, as well as lake depth and casting distances.

Several options are available to try and prolong harvest at NFP sites, especially the smaller ones. One option would be to increase the number of fish stocked, though this would increase the cost of the program. Another option would be to reduce the allowable number of poles an angler can use from two to one. This would lower the catch rate and probably increase effort, but it would not necessarily reduce harvest by itself. A third option would be to decrease the bag limit from five fish to some lesser number (e.g., three fish), which would especially help the 1-acre sites. This might result in shorter fishing trips since a limit could be caught in less time, but it also might increase the number of angling trips since some anglers, desiring to harvest more than three fish, might return more often (potentially even harvesting more than one limit in a day, which would be illegal). It would be hoped that it would extend the fishing associated with each stocking by a few days and distribute fish among more anglers.

While catch rates have been the standard metric to determine angler success, with specified rates for different types of angling being the goal of some management organizations, such as 0.5 fish per hour being caught meeting a stated organizational objective (Eades and Lang 2012), it is probably not the most useful for an intensively managed fishery like the NFP. One knowledgeable angler can greatly influence the average catch rate. An example would be one angler catching a five-fish limit in an hour, while nine other anglers catch nothing during the same time period. The calculated average catch rate would be 0.5 fish/h and meets the stated objective. In reality, what you have is one satisfied angler and nine possibly unsatisfied anglers. Percent success tells you the percentage of anglers that actually caught a fish. During the creel surveys, an average of 44.0% of Channel Catfish anglers and 28.4% of Rainbow Trout anglers caught fish; this is very good, considering there was no minimum time limit on an angler's effort when they were surveyed. Some were surveyed shortly after they had begun to fish. Reasons why Rainbow Trout success rates were lower than Channel Catfish anglers could include possible cormorant predation, the need for a more specialized knowledge of trout angling, or what appeared to be the lack of an "active bite" when trout were stocked at many sites. Percent success showed great variation among sites, but comparisons are difficult since some creel surveys were performed within an hour of stocking and the percent success was quite high compared to those when the creel survey occurred later, in some instances much later. For

Rainbow Trout, percent success on the stocking day was generally low, but usually improved by the weekend (unless the site was identified as one with cormorant predation).

Most NFP anglers also fish other waters, often dependent on what is locally available. Overall, nearly one-third of the anglers reported fishing only at the NFP site, so the program is important to many urban anglers. The highest percentage of anglers exhibiting site fidelity was Medical Center South and South Weeks Park Pond. Both sites were located in areas of extreme drought and alternative, nearby angling opportunities were very limited. While this study was not set up to examine angler retention, the survey did include a question about past angling activity at the site and nearly half of the respondents answered that they had fished the site the previous year. This suggests there is retention of anglers.

Nearly two-thirds of anglers stated they were aware of the NFP program with nearly one-third hearing about it through word of mouth. The media that seemed to do the best in educating the public about the program was the internet including social media and web pages, which nearly one-fifth of the respondents indicated as how they became aware of the program. Nearly one-tenth learned of the program from kiosks which had been erected at the site. At the time of the survey, not all NFP sites had kiosks but it still proved to be an important tool in informing the public about the program. Some districts utilized television and newspapers to inform the public about the NFP and local sites. This method seemed to work better in smaller metropolitan areas and markets where advertising costs were lower than in large metropolitan areas.

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TABLE 1.—Neighborhood Fishin' Program sites, acreage, and stocking rate.

Site	City	Acreage	CCF/Stocking	RBT/Stocking
Buena Vista Park	Waco	0.7	142	112
Bullfrog	Austin	1	142	112
South Weeks Park	Wichita Falls	1	142	112
Tom Bass I	Houston	1	142	112
Central Park Pond #1	College Station	2	284	224
Greenbriar	Fort Worth	3	426	237
Chisholm Park	Hurst	3	426	237
Lakeside Park	Duncanville	3	426	237
South Lakes Park	Denton	3.8	540	300
Mary Jo Peckham	Houston	5	710	395
Mesquite City Lake	Mesquite City	5	710	395
Millers Pond	San Antonio	6	852	474
Medical Center South	Amarillo	7	994	553
Southside Lions Park	San Antonio	7.5	1,065	593

TABLE 2.—Estimated angling effort in hours for the Channel Catfish stockings, Rainbow Trout stockings, and for all stockings. Standard errors are in parentheses.

Site	Fishing for Channel Catfish (h)	Fishing for Rainbow Trout (h)	Total Effort (h)
	· ·		
Buena Vista Park	6,348 (333)	3,742 (324)	10,090 (464)
Bullfrog	7,890 (329)	3,079 (89)	10,969 (341)
South Weeks Park	6,120 (287)	3,111 (131)	9,231 (315)
Tom Bass I	1,571 (83)	1,281 (76)	2,852 (113)
Central Park Pond #1	10,210 (282)	5,237 (134)	15,447 (313)
Greenbriar	19,019 (481)	5,796 (158)	24,815 (506)
Chisholm Park	19,929 (791)	5,722 (642)	25,651 (1,019)
Lakeside Park	16,144 (397)	6,686 (401)	22,829 (565)
South Lakes Park	7,683 (285)	4,224 (148)	11,907 (321)
Mary Jo Peckham	11,113 (193)	3,932 (155)	15,045 (248)
Mesquite City Lake	23,207 (464)	2,055 (106)	25,262 (476)
Millers Pond	28,009 (516)	7,769 (256)	35,776 (352)
Medical Center South	17,247 (651)	4,967 (258)	22,214 (700)
Southside Lions Park	37,432 (572)	6,112 (185)	43,544 (601)
Totals	211,922	63,711	275,632

TABLE 3.—Estimated numbers of unique anglers, "new anglers", "new adult anglers", and number of youth at NFP sites.

Site	# of Unique, Individual Anglers	Estimated # New Anglers	# New Adult Anglers	# Youth Anglers
Buena Vista Park	2,701	1,445	462	983
Bullfrog	3,235	1,216	712	505
South Weeks Park	2,821	1,667	384	1,283
Tom Bass I	985	272	130	142
Central Park Pond #1	5,464	2,262	803	1,459
Greenbriar	7,463	3,037	1,127	1,911
Chisholm Park	7,245	3,021	1,203	1,819
Lakeside Park	5,188	1,826	939	887
South Lakes Park	4,631	2,005	625	1380
Mary Jo Peckham	6,139	3,831	1,444	2,382
Mesquite City Lake	5,652	2,199	1,543	656
Millers Pond	10,291	4,960	2,439	2.521
Medical Center South	7,563	3,978	1,596	2,382
Southside Lions Park	11,892	5,946	3,484	2,462
Totals	81,269	37,666	16,895	20,771

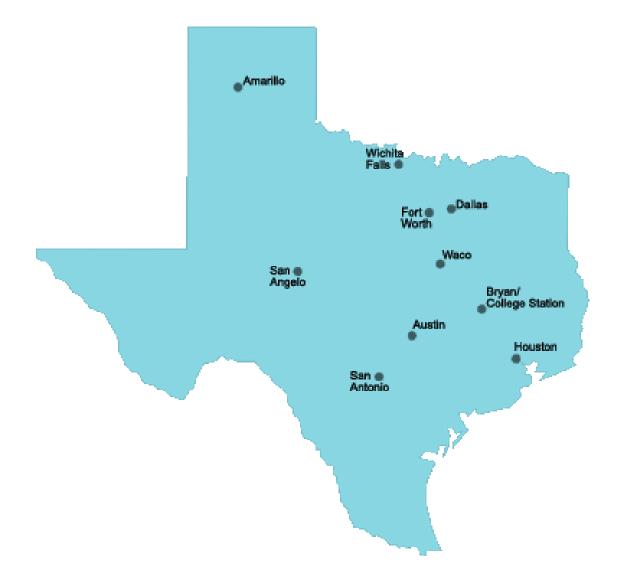


FIGURE 1.—Metropolitan areas where NFP sites were located at the time of this study. San Angelo was the site of a NFP lake, but the lake was being renovated at the time of the study so no stockings occurred, and the lake was not surveyed for this study.

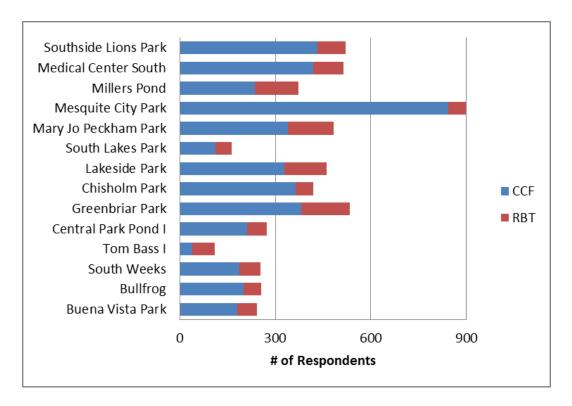


FIGURE 2.— Number of interviews conducted at each NFP site for Channel Catfish (CCF) and Rainbow Trout (RBT) stockings.

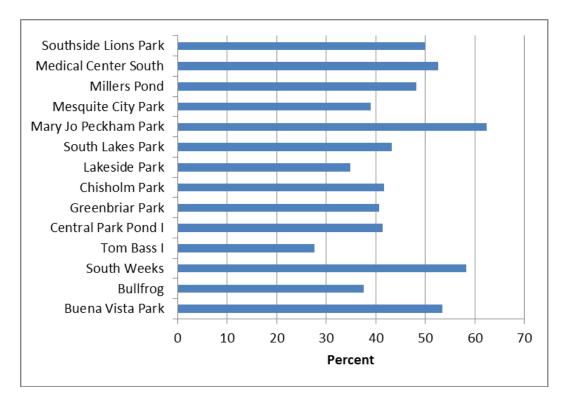


FIGURE 3.—Percent of "new anglers" during the year-long survey.

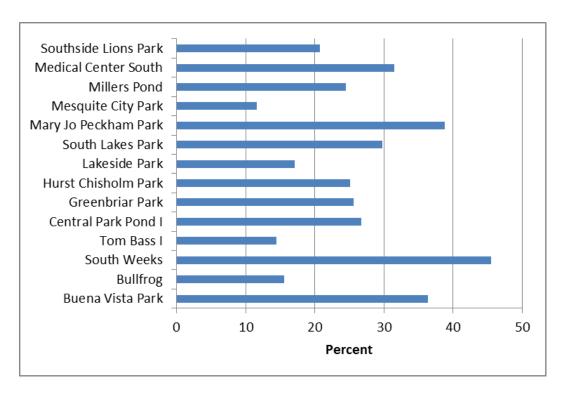


FIGURE 4.—Percent of anglers that were youth (less than 17 years old).

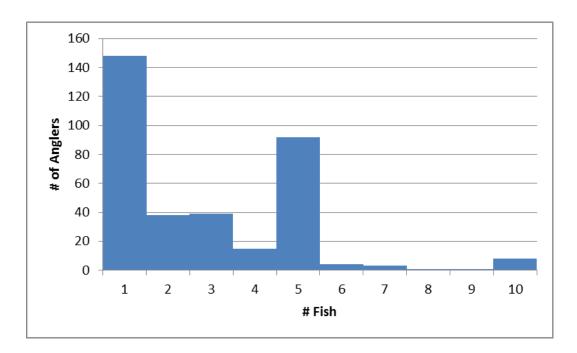


FIGURE 5.—The number of fish required for a "successful trip", as reported by those anglers that responded that they must catch fish for a trip to be successful. Most anglers (88.6%) said they did not need to catch a fish for a trip to be successful.

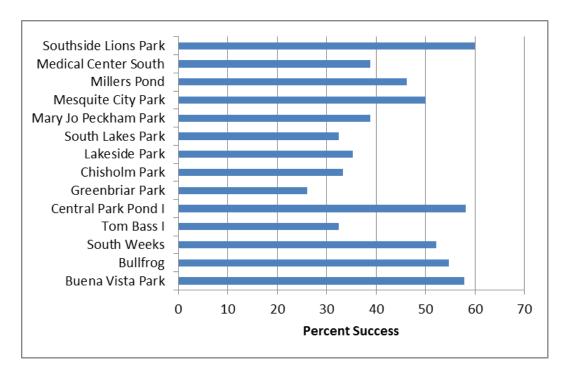


FIGURE 6.—Percent success (catching at least one fish during the trip) among anglers fishing for Channel Catfish.

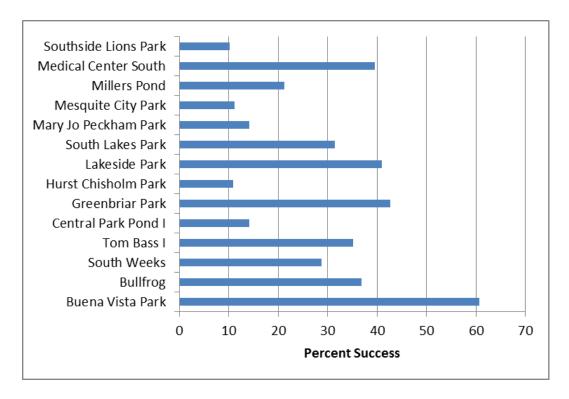


FIGURE 7.—Percent success (catching at least one fish during the trip) among anglers fishing for Rainbow Trout.

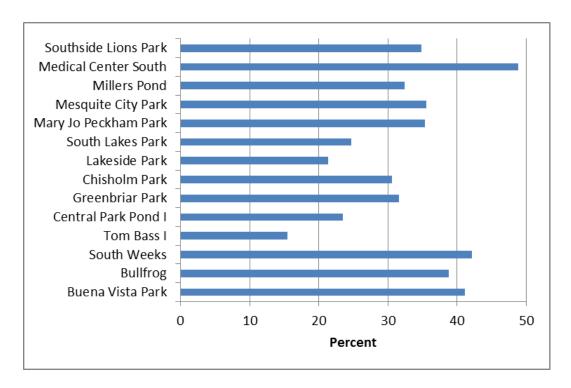


FIGURE 8.—Percentage of anglers reporting they only fish the NFP site.

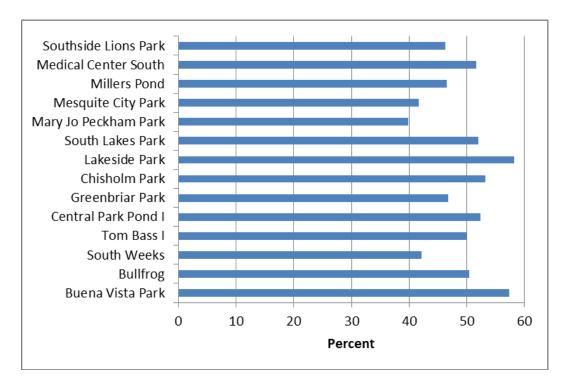


FIGURE 9.—Percentage of anglers reporting they fish the NFP site in the previous year.

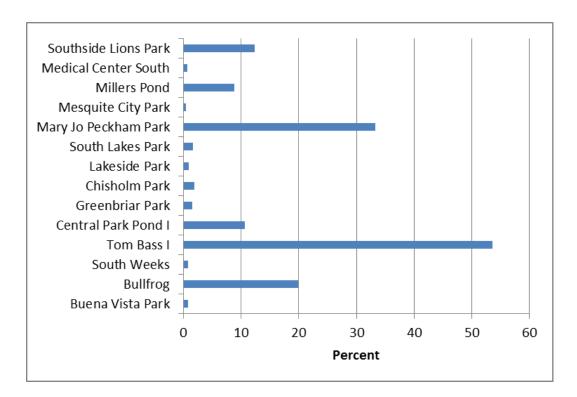


FIGURE 10.—Percentage of anglers reporting they also fished in salt water.

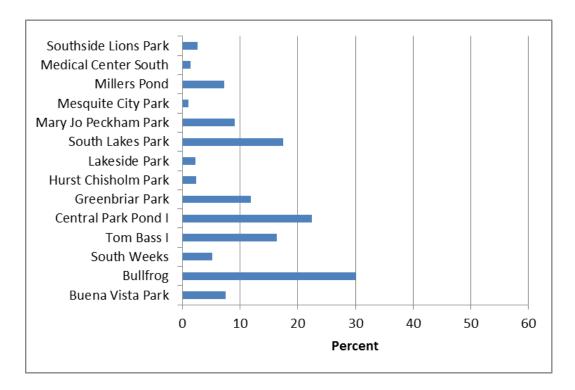


FIGURE 11.—Percentage of anglers reporting they also fished in rivers.

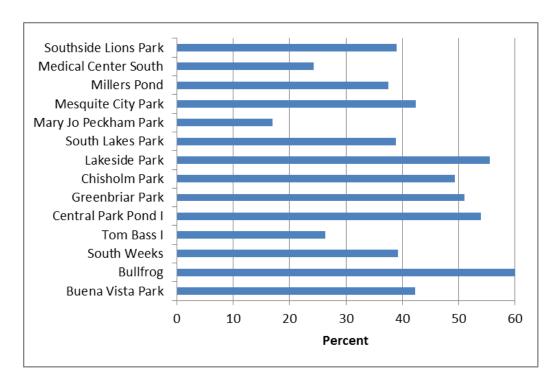


FIGURE 12.—Percentage of anglers reporting they also fished in reservoirs.

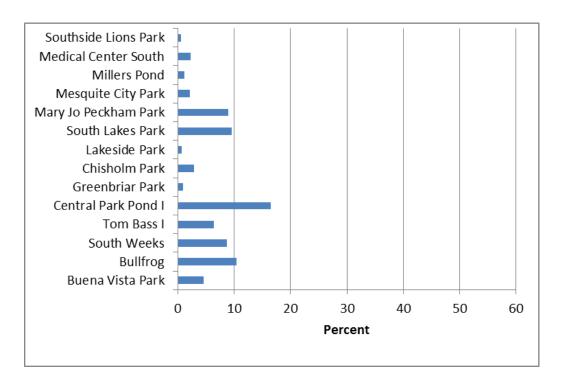


FIGURE 13.—Percentage of anglers reporting they also fished in private waters.

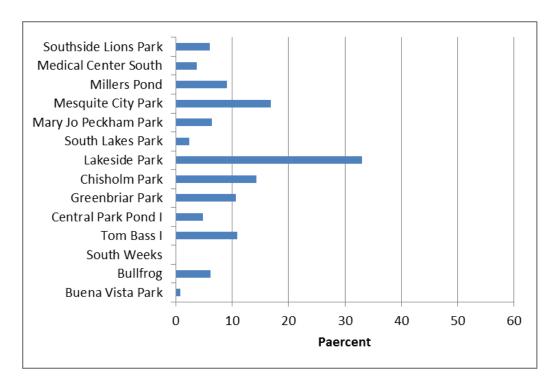


FIGURE 14.—Percentage of anglers reporting they also fished other NFP sites.

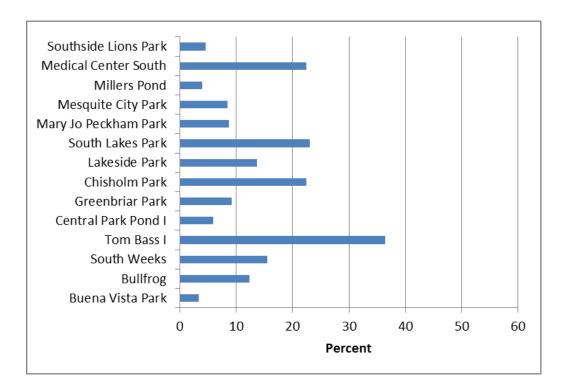


FIGURE 15.—Percentage of anglers reporting they also fished Community Fishing Lakes.

# Appendix 1

Creel survey count card used during evaluation.

Texas Parks and Wildlife Urban Fishing Program Evaluation				
Waterbody:Creel Clerk Name:				
Date:				
Angler Count Time:				
Total No. of Anglers: No. of Children:				
Survey Start Time: Survey End Time:				

# Appendix 2

Creel survey questionnaire card used during evaluation.

Texas Parks and Wildlife Neighborhood Fishin' Program Evaluation  Waterbody:Date: Time:
☐ Child ☐ Adult
1. Is this the first time you have fished here since April 1, 2012? YES NO
2. Is this the only place you have fished in TX since April 1, 2012? YES NO
If No, where else have you fished?
CFL Other NFP Private Waterbody Reservoir River Salt Water
3. Did you fish here during 2011? YES NO
4. How many years in the last five have you fished anywhere in Texas?
5. Zip Code:
6. How long have you been fishing today?
7. Did you catch fish today? YES NO
If yes, what species and how many? Channel catfish Others Rainbow trout
8. Did you harvest fish today? YES NO
If yes, what species and how many? Channel catfish Others Rainbow trout
9. Would you consider today fishing trip enjoyable? YES NO
10. Do you have to catch fish for a fishing trip to be considered enjoyable? YES NO
If Yes, how many fish would you have to harvest for the trip to be enjoyable?
11. Would you fish here again? YES NO
12. Are you aware this site is part of the Texas Parks and Wildlife Department's Neighborhood
Fishing Program? YES NO
13. How did you learn about the Neighborhood Fishing Program?
14. Have you previously been asked these questions since April 1, 2012? YES NO

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