

ARIZONA DEPARTMENT OF TRANSPORTATION

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2012 ARIZONA WATERCRAFT SURVEY

Volume II –Technical Report

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1.0 INTRODUCTION

The Arizona Department of Transportation (ADOT), the Arizona Game & Fish Department (AGFD) and the Arizona State Parks Board (ASPB) are required, under Arizona Revised Statutes (Sec. 28-5926), to conduct a study every three years on watercraft fuel consumption and recreational watercraft usage. The primary purposes of this effort are as follows:

- To determine the percentage of total state taxes paid to Arizona for motor vehicle fuel that is used for propelling watercraft; and
- To determine the number of days of recreational watercraft use in each of the state's counties by boat use days and person use days.

The fuel consumption data is collected to determine the allocation of motor vehicle fuel tax to the State Lake Improvement Fund (SLIF). The information on recreational watercraft usage patterns on Arizona's lakes and rivers is necessary, in part, to determine the distribution of SLIF funds to applicants.

In addition to collecting the above mandated information, this study also collected selected attitudinal and behavioral data on the following subjects:

- Water-based and non-water-based recreational activities participated in;
- Boating and water-based recreational facility needs;
- SLIF fund utilization priorities;
- Adequacy and focus of watercraft law enforcement activities; and
- Attitudes about selected watercraft and outdoor recreation issues.

The information contained in this report is based on two key study components:

- A statistically valid and projectable telephone survey of 6,803 registered watercraft owners in Arizona, California, Nevada and Utah.
- An audit/survey of the fuel sales and consumption patterns of: (1) marinas, (2) public agencies, and (3) concessionaires, commercial boat operators and excursion operators.

To develop the most accurate data possible, the data collection effort was divided into 24 separate data collection segments spread over the 12-month period from March 29, 2011, to March 8, 2012. Using this format, a total of approximately 560 interviews were conducted each month with one-half being conducted between roughly the 1st and 5th of the month and one-half between roughly the 16th and 20th of the month. During each of the 24 interviewing segments, boaters were asked to recall their boating patterns for only the 30 days prior to the interview.

This study was designed and executed under the direction of a Technical Advisory Committee (TAC) comprised of representatives from each sponsoring agency. The Behavior Research Center (BRC) wishes to thank each of the following TAC members for their indispensable assistance in the successful completion of this most important project:

- Anne Ellis, ADOT
- Dawn Collins, ASPB
- Kevin Bergersen, AGFD

The information generated from this study is presented in two volumes. **VOLUME I – EXECUTIVE SUMMARY** presents a brief summary review of the key study findings and the methodology employed. **VOLUME II – TECHNICAL REPORT** presents an in-depth analysis of the study findings and a detailed explanation of the study methodology.

The Behavior Research Center has presented all of the data germane to the basic research objectives of the project. However, if the TAC requires additional data retrieval or interpretation, we stand ready to provide such input.

BEHAVIOR RESEARCH CENTER

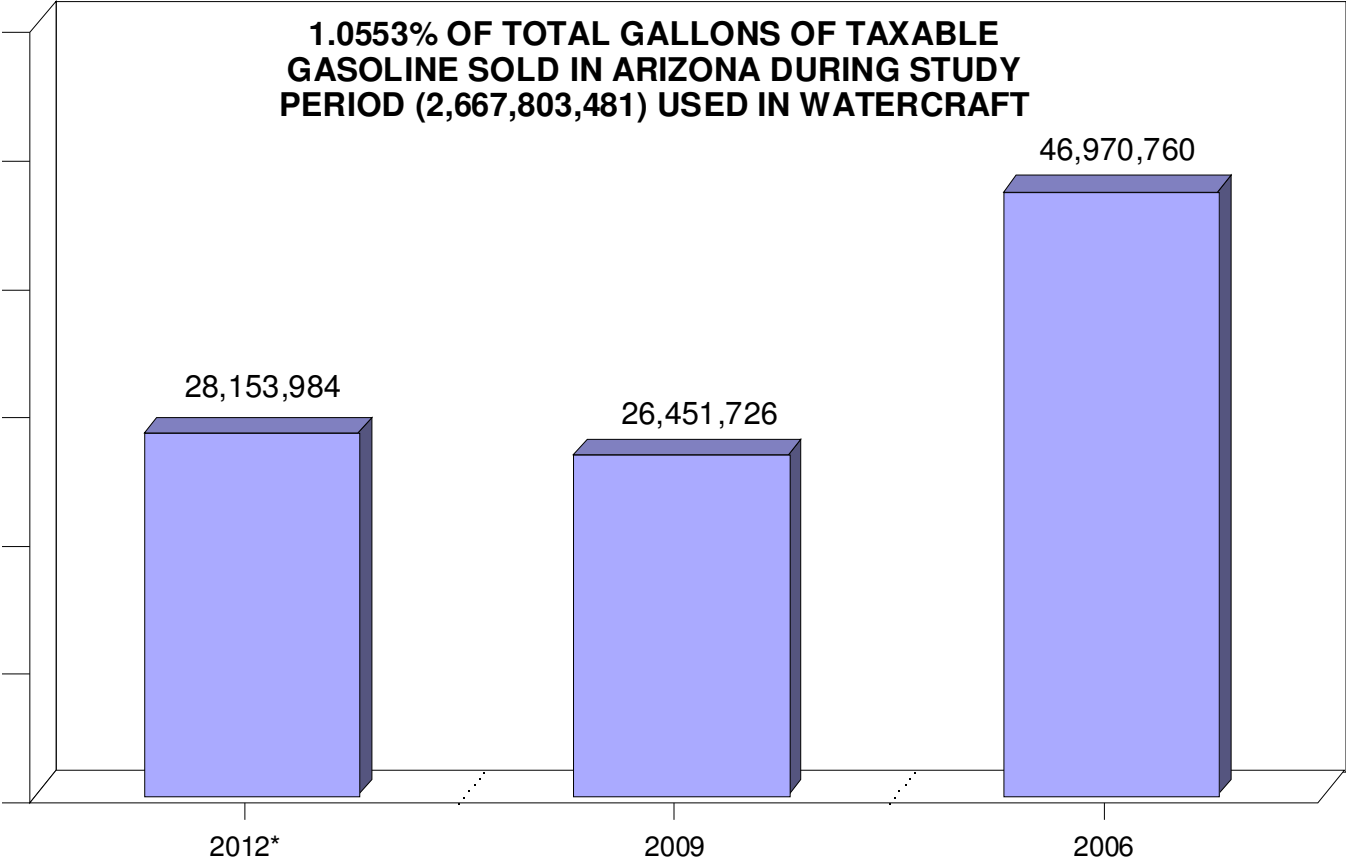
2.0 SUMMARY OF THE FINDINGS

FUEL CONSUMPTION DATA

- Total gasoline used to propel watercraft in the state of Arizona between March 1, 2011, and February 29, 2012, is estimated to be 28,153,984 gallons using Protocol Method Number One as agreed upon by the agencies in 1991. This total represents 1.0553 percent of the total 2,667,803,481 gallons of taxable gasoline sold in Arizona during the study period. This is the percentage which should be used for the SLIF allocation.

The 2012 SLIF allocation of 1.0553 percent is up slightly from the 2009 percentage of 1.0105 but well below the 2006 percentage of 1.7157.

WATERCRAFT FUEL CONSUMPTION OF ARIZONA GASOLINE -- GALLONS



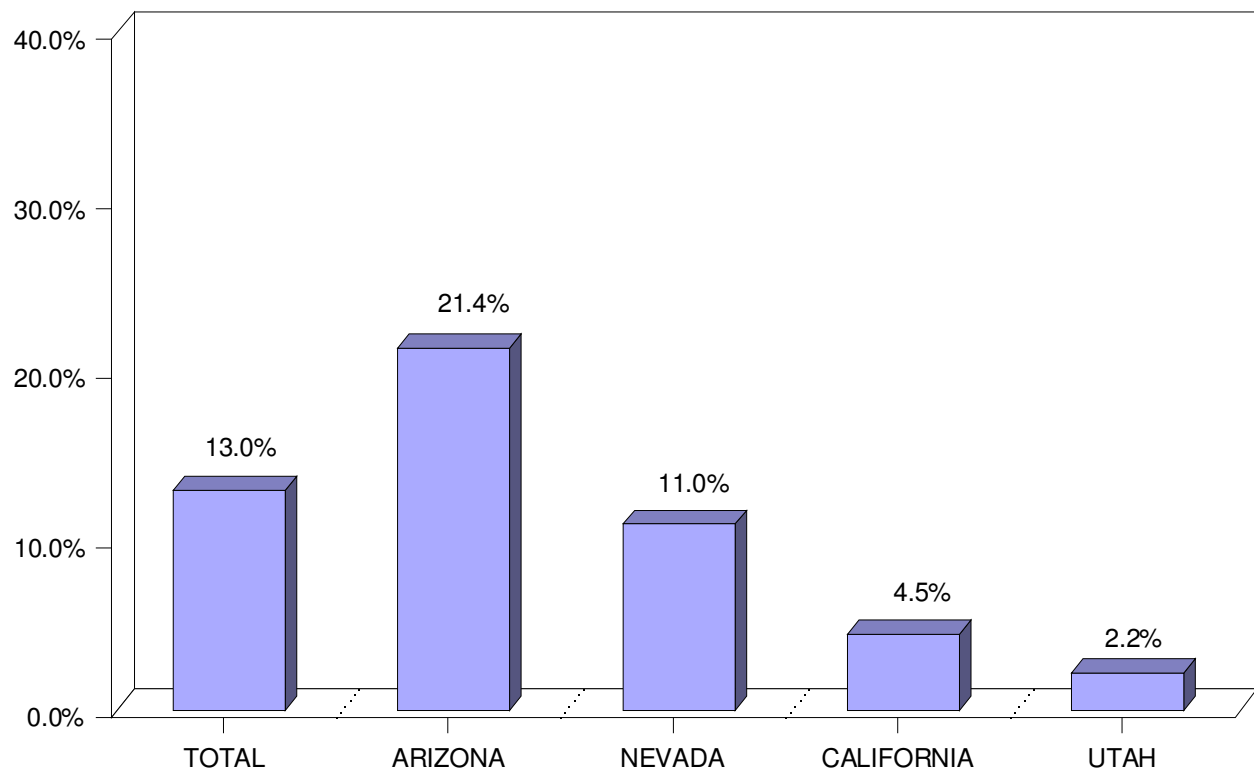
* Extrapolated using 1991 ADOT, AGFD and ASPB SLIF Allocation Protocol Method #1 (see page 36)

- The boating classifications which continue to account for the largest amount of non-marina consumption are Class 5 (16' to 25' inboard and in/out) with a reading of 38.9 percent and Class 2 (predominantly jet skis) with a reading of 34.0 percent.
- Gasoline is used to propel 98.9 percent of all boats, with the remainder utilizing diesel and aviation fuel.
- 95.1 percent of Arizona boaters purchase Arizona fuel compared to 80.2 percent of California boaters, 40.0 percent of Utah boaters and 29.3 percent of Nevada boaters.
- 91.3 percent of Arizona boaters purchase their Arizona fuel at a non-marina location compared to 90.4 percent of California boaters, 64.6 percent of Nevada boaters and 96.7 percent of Utah boaters.

USE OF WATERCRAFT IN ARIZONA

- 13.0 percent of registered watercraft owners in Arizona, California, Nevada and Utah use their boats in Arizona during any given 30 day period. Among Arizona watercraft owners, usage reaches 21.4 percent compared to 4.5 percent of California owners, 11.0 percent of Nevada owners and 2.2 percent of Utah owners.

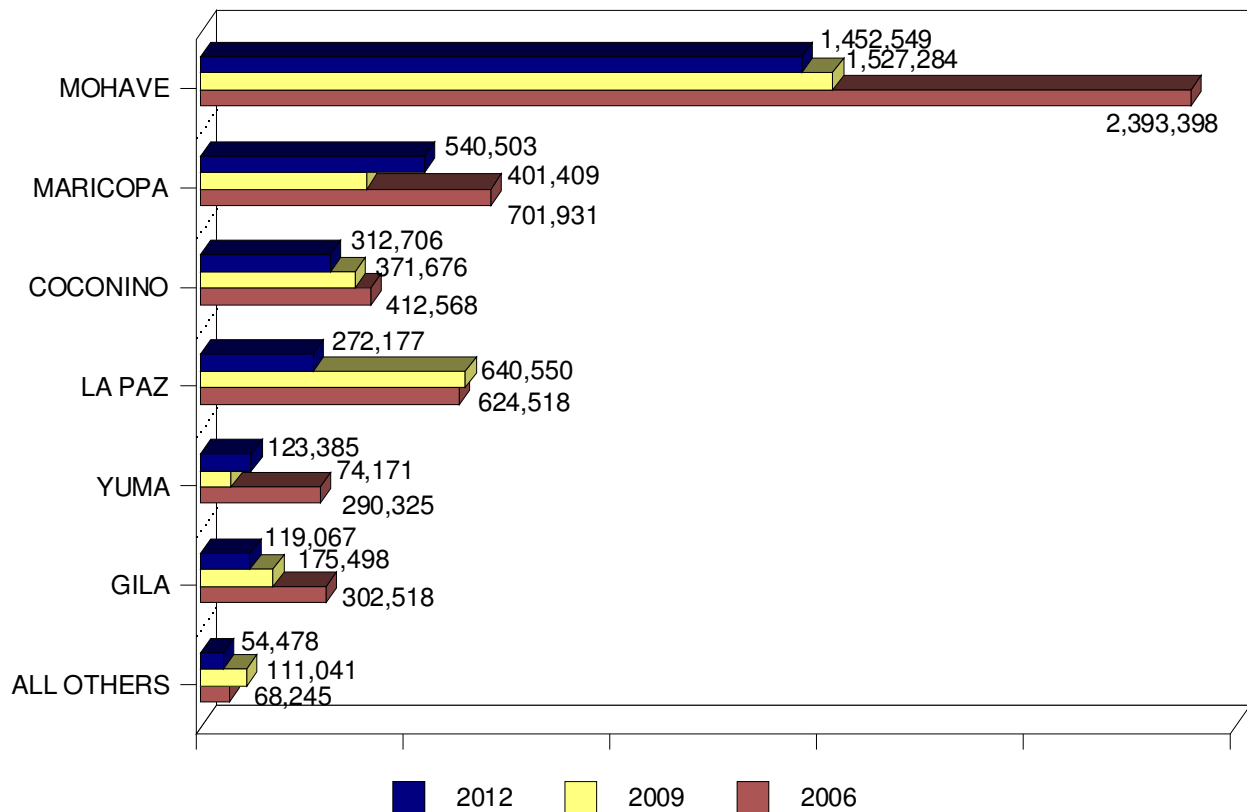
BOAT USE IN ARIZONA IN ANY GIVEN 30 DAY PERIOD



- 42.5 percent of all watercraft owners in the four-state survey universe utilized their boat in Arizona during the prior year which is up from 38.8 percent in 2009. Among Arizona users, the figure reaches 64.1 percent (up from 62.8%) compared to 19.9 percent among California owners (up from 16.2%), 41.1 percent among Nevada owners (up from 37.8%) and 14.9 percent among Utah owners (little changed from 14.9).
- Total boat use days in 2012 were 2,874,866 – a 13 percent decrease from 2009 and a 40 percent decrease from 2006. Similar to the prior studies, Mohave County is the dominant boating location in Arizona with 50.5 percent of total boat use days – a figure which is up from 46.3 percent in 2009. Also note the increased use of Maricopa County lakes since the prior study and the major decreased use of La Paz County lakes.

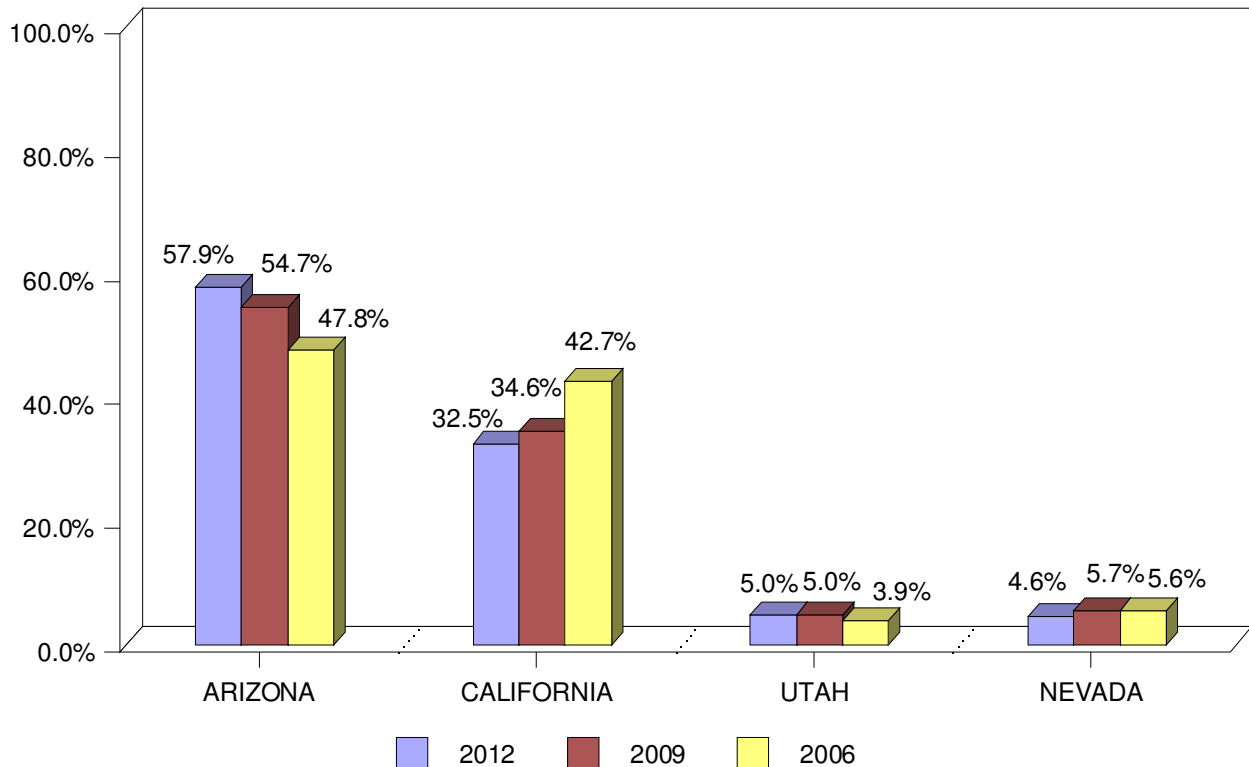
BOAT USE DAYS BY ARIZONA COUNTY

TOTAL BOAT USE DAYS: '09 = 3,301,629; '06 = 4,793,501; '03 = 3,229,153



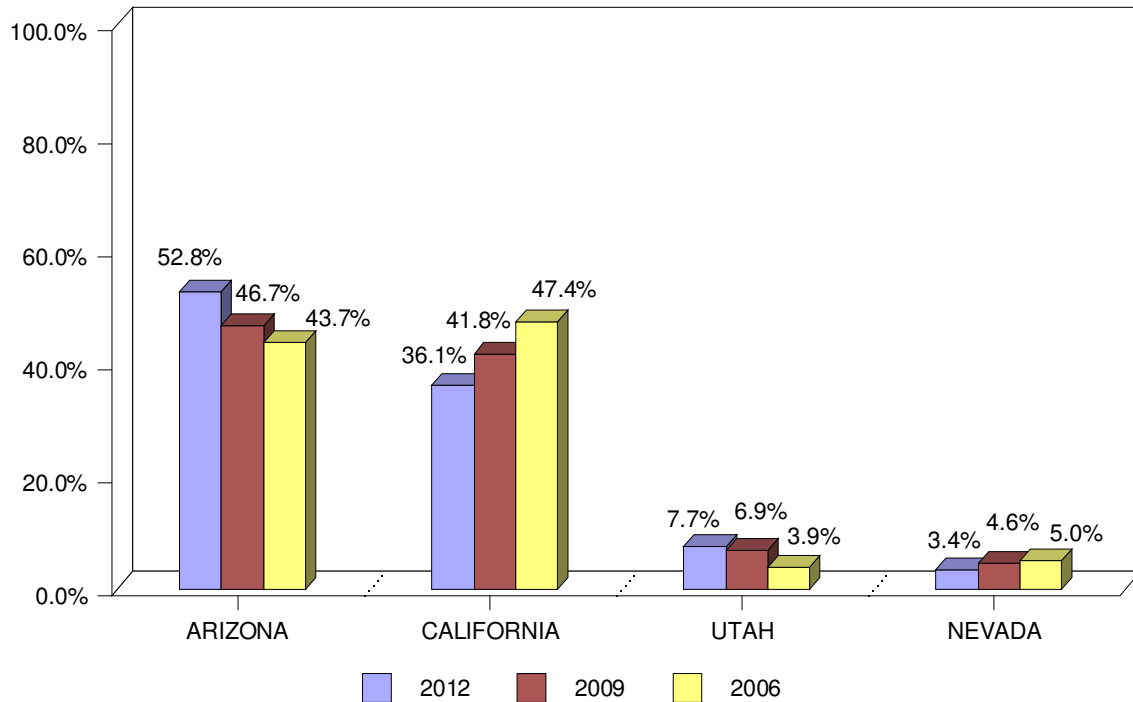
- Person use days also decreased from 15,941,792 in 2009 to 13,406,815 in 2012 – a 16 percent decrease. As is the case with boat use days, Mohave County is the dominant boating location in Arizona, accounting for 52.7 percent of all person use days.
- Arizona boaters account for 57.9 percent of boat use days followed by California boaters with 32.5 percent, Utah boaters with 5.0 percent and Nevada boaters with 4.6 percent. These figures represent a continuation of a pattern of increased boat use days among boaters from Arizona and decreased boat use days among boaters from California.

BOAT USE DAYS BY STATE GIVEN 30 DAY PERIOD



- Unlike the studies before 2009, California boaters no longer account for the largest share of person use days. Thus we find that California boaters account for 36.1 percent of person use days (down from 41.8% in 2009) compared to 52.8 percent for Arizona boaters (up from 46.7% in 2009). In the prior studies, the primary reason for California’s high percentage was the fact that California boaters tended to have very large boating parties which was not necessarily the case during the last two studies.
- Lake Havasu continues to be the state’s most utilized lake in terms of both boat use days (900,712) and person use days (4,386,115).

PERSON USE DAYS BY STATE GIVEN 30 DAY PERIOD



ADDITIONAL BOATING DATA

- The average daily expenditure for a boating trip in Arizona is \$316 – up slightly from \$302 in 2009. The typical Arizona boater spends \$235 per day compared to \$421 for California boaters, \$125 for Nevada boaters and \$238 for Utah boaters.
- Public restrooms (19%) and launch ramps (18%) continue to be the most frequently mentioned needed facilities at boaters' favorite lakes.
- When boaters are asked to evaluate each of 22 specific boating and water-based recreational facilities at their favorite lake, the facility registering the highest net positive reading is access roads (+53%) followed by parking facilities for boat trailers (+48%) and parking facilities for vehicles (+47%). Two items continue to register net negative readings from one-quarter of boaters or more: emergency telephones (-30%) and drinking water outlets (-25%).

- Six percent of boaters are aware of the SLIF program, similar to the seven percent recorded in 2009 and eight percent in 2006. As might be expected, awareness is highest in Arizona with a reading of nine percent. When boaters are asked how important they feel each of six SLIF funding functions are, four of the functions are rated very or somewhat important by over eight out of ten boaters or more: 1) the construction of recreation support facilities such as restrooms, campgrounds and picnic tables (82%); 2) the construction of water-based boating facilities such as marinas, launch ramps and piers (82%); 3) the construction of first-aid stations and other safety facilities (81%); and 4) the purchasing of law enforcement and safety equipment such as patrol boats, radios and lights (79%). These four functions have remained at the top of the importance list over the past five studies.
- Stopping people who are boating while drunk (48%) and stopping people who are boating recklessly (44%) continue to be the two law enforcement activities which boaters would most like to see increased at their favorite lake or river. Also relating to law enforcement and safety issues at Arizona lakes, roughly three out of four boaters or more agree with the following attitudes:
 - That boating law violators should be required to take a boating safety class, (86%)
 - That hands-on training should be required for boat rental customers (86%)
 - That laws and regulations are being adequately enforced (82%)
 - That the minimum age for boat operators should be 16 years old (75%)
- Seven out of ten boaters (71%) support boating safety educational centers at Arizona lakes.
- A majority of boaters (71%) do not believe their favorite lake is too crowded, while 25 percent do.
- A majority of boaters (57%) believe the number of people using a lake should not be restricted during high use periods, while 38 percent do.
- A majority of boaters (56%) do not believe the launch ramps at their favorite lake are too crowded, while 39 percent do.
- 53 percent of boaters would support designating special areas for use only by jet skis – 44 percent would not.
- 51 percent of boaters believe their favorite lake does not need additional developed campgrounds, while 40 percent do.
- 50 percent of boaters do not believe their favorite lake needs additional RV hookups, while 39 percent do.
- 48 percent of boaters do not believe their favorite lake needs additional primitive-type campgrounds, while 41 percent do.
- Boaters' top three single favorite boating activities continue to be fishing (27, general pleasure boating (26%) and water skiing (18%).

- Eighty-nine percent of boaters indicate that they are aware of the Quagga mussel with 53 percent indicating they know “a lot” – up from 46 percent in 2009. In addition, 60 percent of boaters who are aware of the mussel, believe it is a “major threat” to Arizona’s lakes and rivers.

3.0 RESEARCH METHODOLOGY

3.1 Introduction

To properly address the Departments' informational needs, it was necessary to collect information from a variety of population universes which either consume or sell Arizona fuel or utilize Arizona's lakes and rivers for recreational purposes. The specific universes studied during the course of this project were as follows:

Surveyed Universes:

- Arizona registered owners;
- Non-Arizona registered boat owners who utilize Arizona's lakes and rivers.

Audited/Surveyed Universes:

- Concessionaires, commercial boat operators and excursion operators who consume Arizona fuel;
- Public agencies which consume Arizona fuel; and
- Marinas servicing Arizona lakes and rivers which sell fuel.

The purpose of this section of the report is to address the procedures followed to collect the necessary information from these universes.

3.2 Boat Owner Survey – Sample Selection

In order to get an accurate picture of boaters' use of Arizona's lakes and rivers, this project component utilized a very large random sample of 6,803 Arizona, California, Nevada and Utah watercraft owners. A sample of this size is very unusual but was deemed necessary for this project due to its importance.

The sample of 6,803 watercraft owners utilized on this project component represents 1.27 percent of the 534,573 owners in the four-state region studied. As an example of how large this 1.27 percent sample of the total universe is, the typical statewide Arizona sample consists of approximately 800 respondents, or .00033 percent of Arizona's estimated 2,439,788 households, while the typical national United States sample consists of 1,500 respondents, or .00001 percent of the United States' estimated 118,582,568 households.

The following several pages of this report offer a detailed description on how the boat owner survey was conducted.

To determine the percentage of all fuel sold in Arizona attributable to propelling watercraft, it was first necessary to determine the total number of gallons sold to watercraft within the state. To arrive at this figure, the consumption patterns of two distinct user groups were studied: (1) Arizona registered boats for which gasoline is purchased in Arizona, and; (2) non-Arizona registered boats for which gasoline is purchased in Arizona.

A total of 534,573 Arizona and non-Arizona registered boat owners stratified by boat class were systematically random-sampled via telephone from current boat registration lists obtained from each state included in the study (Arizona Game & Fish Department, California Department of Motor Vehicles, Nevada Division of Wildlife and Utah Division of Motor Vehicles) to determine their fuel consumption and usage patterns during the study period. These figures were then projected to total boat registrations and the findings presented later in this report were calculated. The non-Arizona boaters' sample was drawn from the neighboring California counties of Imperial, Los Angeles, Orange, Riverside, San Diego and San Bernardino, the Nevada county of Clark and the state of Utah.

As may be seen on the following table, a total of 534,573 watercraft are registered in the sample universe. Of this total, 57.9 percent are located in California, while 24.6 percent are located in Arizona, 4.8 percent in Nevada and 12.7 percent in Utah.

In addition to the sheer volume of watercraft California contributes to the sample universe, several other interesting findings are also worth noting in Table 1:

Arizona Watercraft:

- High proportions of watercraft in class 4 (16' to 25' outboards).

California Watercraft:

- High proportion of class 2 watercraft (under 16' & in/out which is predominantly jet skis).

Nevada Watercraft:

- High proportion of watercraft in class 5 (16' to 25' in/out & in) and class 8 (over 25' in & in/out).

Utah Watercraft:

- High proportion of watercraft in class 5.

TABLE 1: WATERCRAFT POPULATION IN SAMPLE

STATE OF REGISTRATION

BOAT CLASS	ARIZONA		CALIFORNIA		NEVADA		UTAH		TOTAL	
	Number	%	Number	%	Number	%	Number	%	Number	%
1	24,990	19.1	44,295	14.3	2,820	11.0	11,712	17.2	83,817	15.7
2	27,412	20.9	101,568	32.8	7,599	29.7	11,242	16.5	147,821	27.6
3	626	.5	12,181	3.9	30	.1	900	1.3	13,737	2.6
4	30,049	22.9	38,480	12.4	3,408	13.4	12,135	17.8	84,072	15.7
5	38,357	29.3	88,429	28.6	9,386	36.7	28,048	41.2	164,220	30.7
6	841	.6	8,032	2.6	163	.6	953	1.4	9,989	1.9
7	1,756	1.3	1,409	.5	211	.8	773	1.1	4,149	.8
8	7,003	5.3	9,618	3.1	1,886	7.4	2,235	3.3	20,742	3.9
9	167	.1	5,671	1.8	72	.3	116	.2	6,026	1.1
TOTAL	131,201	100.0	309,683	100.0	25,575	100.0	68,114	100.0	534,573	100.0
CUMULATIVE TOTAL	57.9%		24.6%		4.8%		12.7%		100.0%	

To develop the most accurate data possible, the data collection effort was divided into 24 separate data collection segments spread over the 12-month period from March 29, 2011, to March 8, 2012. Using this format, a total of approximately 560 interviews were conducted each month with one-half being conducted between roughly the 1st and 5th of the month and one-half between roughly the 16th and 20th of the month. During each of the 24 interviewing segments, boaters were asked to recall their boating patterns for the 30 days prior to the interview. Under instructions from the TAC, this format varied from the prior studies which asked boaters to recall their boating patterns for only the prior two weeks.

At the beginning of this process, an analysis was made of the gasoline consumption variances that existed within each of the nine size/propulsion categories from the 2009 Arizona Watercraft Survey to determine the best method to stratify the current sample of boat owners to optimize sampling accuracy and efficiency. This analysis revealed that certain categories are very homogeneous and thus render relatively small standard deviations, while other classes are very heterogeneous and thus render relatively large standard deviations. This situation called for the use of a disproportional stratified sample in this segment of the study.

CLASS	LENGTH	PROPULSION
1	Under 16'	Outboard (prop)
2	Under 16'	Inboard & In/Out (prop & jet)
3	Under 16'	Other (sail, oar, electric)
4	16' to 25'	Outboard (prop)
5	16' to 25'	Inboard & In/Out (prop & jet)
6	16' to 25'	Other (sail, oar, electric)
7	Over 25'	Outboard (prop)
8	Over 25'	Inboard & In/Out (prop & jet)
9	Over 25'	Other (sail, oar, electric)

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In disproportional stratified sampling, disproportionate sampling fractions are used to manipulate the number of cases selected from each strata (in this case, the nine size/propulsion classes), with the strata's standard deviations being used as the basis for allocation of cases. Those classes with proportionately larger standard deviations receive a proportionately larger number of cases, while those with proportionately smaller standard deviations receive a proportionately smaller number of cases. In essence, this sampling method allows us to select fewer cases from homogeneous classes and more cases from heterogeneous classes, thereby increasing overall sampling efficiency and accuracy. As a result, the final gasoline consumption estimates are sensitive to variations in consumption within the size/propulsion classes, thereby increasing the accuracy of the final estimate. In addition, this methodology meets the contract-required minimum of a margin of error of less than five percent at a 95 percent confidence level.

TABLE 2: TOTAL SAMPLING DISTRIBUTION

2009 Watercraft Survey

| Boat Class | Length     | Propulsion                    | Avg. (Mean) Daily Fuel Consumption | Standard Deviation | % of 2011 Registrations | Proportional Sample Distribution | +/- Margin Of Error At 95% Confidence | Disproportional Stratified Sample | +/- Margin Of Error At 95% Confidence |
|------------|------------|-------------------------------|------------------------------------|--------------------|-------------------------|----------------------------------|---------------------------------------|-----------------------------------|---------------------------------------|
| 1          | Under 16'  | Outboard (prop)               | 4.0                                | 3.5                | 15.7%                   | 1,036                            | 3.1%                                  | 1,000                             | 3.2%                                  |
| 2          | Under 16'  | Inboard & In/Out (prop & jet) | 12.3                               | 10.7               | 27.6                    | 1,822                            | 2.3                                   | 1,650                             | 2.5                                   |
| 3          | Under 16'  | Other (sail, oar, electric)   | 5.0                                | 4.9                | 2.6                     | 172                              | 7.6                                   | 275                               | 6.0                                   |
| 4          | 16' to 25' | Outboard (prop)               | 10.3                               | 10.0               | 15.7                    | 1,036                            | 3.1                                   | 1,075                             | 3.0                                   |
| 5          | 16' to 25' | Inboard & In/Out (prop & jet) | 15.6                               | 10.5               | 30.7                    | 2,026                            | 2.2                                   | 1,780                             | 2.4                                   |
| 6          | 16' to 25' | Other (sail, oar, electric)   | 3.7                                | 4.4                | 1.9                     | 125                              | 8.9                                   | 175                               | 7.6                                   |
| 7          | Over 25'   | Outboard (prop)               | 13.3                               | 6.0                | 0.8                     | 53                               | 13.7                                  | 170                               | 7.7                                   |
| 8          | Over 25'   | Inboard & In/Out (prop & jet) | 20.1                               | 11.5               | 3.9                     | 257                              | 6.2                                   | 300                               | 5.8                                   |
| 9          | Over 25'   | Other (sail, oar, electric)   | 2.3                                | 2.3                | 1.1                     | 73                               | 11.7                                  | 175                               | 7.6                                   |
| TOTAL      |            |                               | 11.8                               | 10.5               | 100.0%                  | 6,600                            | 1.2%                                  | 6,600                             | 1.2%                                  |

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To properly address this study's informational needs, the total interview sampling base was distributed among Arizona, California, Nevada and Utah watercraft owners in the following fashion. This distribution does not exactly reflect the Boat Use Days distribution derived from the 2009 Watercraft Survey and was used because it allows for more sensitive county use data (since few Californians use any Arizona lakes except those adjacent to the Colorado River) without harming the ability to estimate the required fuel consumption data.

TABLE 3: SAMPLE DISTRIBUTION – BY STATE

STATE	BOAT USE DAYS 2009	SAMPLE PERCENT	SAMPLE NUMBER
Arizona	54.7%	47.5%	3,135
California	34.6	37.5	2,475
Nevada	5.7	7.5	495
Utah	<u>5.0</u>	<u>7.5</u>	<u>495</u>
TOTAL	100.0%	100.0%	6,600

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On the following table is presented a review of the total number of interviews conducted by state and boat class. As Table 4 reveal, a total of 6,787 interviews were conducted during the course of this study – 3,279 Arizona, 2,509 California, 518 Nevada, 497 Utah. This volume is higher than the 6,696 initially planned for because additional interviews were conducted during each of the 24 interviewing segments.

TABLE 4: NUMBER OF INTERVIEWS COMPLETED

| BOAT CLASS | TOTAL | STATE OF REGISTRATION |            |        |      |
|------------|-------|-----------------------|------------|--------|------|
|            |       | ARIZONA               | CALIFORNIA | NEVADA | UTAH |
| 1          | 1,015 | 615                   | 250        | 70     | 80   |
| 2          | 1,652 | 681                   | 750        | 140    | 81   |
| 3          | 280   | 24                    | 241        | 0      | 15   |
| 4          | 1,204 | 808                   | 196        | 100    | 100  |
| 5          | 1,821 | 870                   | 612        | 168    | 171  |
| 6          | 180   | 25                    | 140        | 5      | 10   |
| 7          | 176   | 96                    | 65         | 5      | 10   |
| 8          | 300   | 150                   | 100        | 25     | 25   |
| 9          | 175   | 10                    | 155        | 5      | 5    |
| TOTAL      | 6,803 | 3,279                 | 2,509      | 518    | 497  |

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3.3 Boat Owner Survey – Questionnaire Development

The survey questionnaire utilized on this project was developed by BRC in conjunction with the TAC (see Appendix B). The question areas were as follows:

Watercraft Use:

- Number of days watercraft used (prior 30 days, annually)
- Reasons for non-use
- Specific Arizona lakes and rivers visited (prior 30 days, prior 12 months)
- Number of boating trips made (prior 30 days)
- Presence of boat engine
- Horsepower of boat engine
- Types of fuel used
- Average daily fuel consumption
- Percent of fuel purchased in Arizona

Destination Information:

- Most frequently visited lakes or rivers
- Average dollar amount spent on typical boating trip

Recreational Use Data:

- Boating activities engaged in during the recreation day
- Number of people per boating party on a typical outing

Boater Opinion:

- Types of boating and water-based recreational facilities needed at lake or river most often visited
- Evaluation of water-based recreation facilities at lake or river most often visited
- Adequacy of boating law enforcement and the safety and education programs at lake or river most often visited
- Awareness of State Lake Improvement Fund (SLIF)
- SLIF program funding priorities
- General attitudes on selected boating issues

After approval of the preliminary draft questionnaire, it was pre-tested with a randomly selected cross-section of watercraft owners. The pre-test focused on the value and understandability of the questions, adequacy of response categories, questions for which probes were necessary and the like. No changes were made following the pre-test and the final form received TAC approval.

This survey utilized a “split” sample methodology. Using this methodology, selected survey questions were designated core questions and asked of all survey respondents while other survey questions were asked of only one-third of the survey respondents. This methodology is commonly used when the volume of information desired is particularly extensive and the number of interviews to be conducted is of adequate size to justify splitting. Questions 1 through 17a were designated core questions for the purpose of this survey and asked of all study respondents. The remaining questions were asked of approximately one-third of the study respondents.

3.4 Boat Owner Survey – Data Collection

All of the interviewing on this project was conducted at BRC's Computer-Assisted Telephone Interviewing (CATI) facility in Phoenix where each interviewer worked under the direct supervision of BRC supervisory personnel. All of the interviewers who worked on this project were professional interviewers of the Center. Each had prior experience with BRC and received a thorough briefing on the particulars of this study. During the briefing, the interviewers were trained on (a) the purpose of the study, (b) sampling procedures, (c) administration of the questionnaire, and; (d) other project-related factors. In addition, each interviewer completed a set of practice interviews to assure that all procedures were understood and followed.

As noted earlier, telephone interviewing on this study was conducted during 24 two-week time segments starting in March 2011 and ending in March 2012. During each segment, interviewing was restricted to Tuesdays, Wednesdays and Thursdays in order to avoid those days (Friday through Monday) on which the target universe (boat owners) was most likely to be away from home using their watercraft. Further, during the interviewing segment of this study, up to four separate attempts, on different days and during different times of day, were made to contact each selected boat owner. Only after four unsuccessful attempts was a selected boat owner substituted in the sample. Using this methodology, the full sample was completed and partially completed interviews were not accepted or counted toward fulfillment of the total sample quotas.

One hundred percent of the completed interviews were edited and any containing errors were pulled and the errors corrected. In addition, 15 percent of each interviewer's work was randomly selected for validation to ensure its authenticity and correctness. No problems were encountered during this phase of interviewing quality control.

As the data collection segment of this study was being undertaken, completed and validated interviews were turned over to BRC's in-house Coding Department. The Coding Department edited, validated and coded the interviews. Each interview that received final Coding Department approval was then transferred to the BRC Computer Department where a series of validity and logic checks were run on the data to ensure it was "clean."

The final step prior to running computer analysis of the survey data was to "weight" the data to reflect the actual distribution of watercraft found in the sample universe as revealed earlier in Table 1. This weighted data was only used in analyzing the attitudinal data collected in the survey, not in calculating the fuel consumption and boat use data.

3.5 Study Audits/Survey

The second major data collection component on this project consisted of conducting audits of: (1) concessionaires, commercial boat operators and excursion operators; (2) government agencies, and; (3) marinas.

Each of these groups was audited/surveyed to collect the following information:

- **Concessionaires, Commercial Boat Operators and Excursion Operators:** To determine the amount of non-marina, Arizona gasoline they purchased.
- **Government Agencies:** To determine the amount of non-marina, Arizona gasoline subject to tax they purchased.
- **Marinas:** To determine the amount of gasoline purchased from Arizona distributors they sold.

In order to conduct these audits/surveys, it was first necessary to generate lists of each subject group. This was accomplished: (a) by using the lists compiled in previous Water-craft Surveys; (b) by reviewing telephone and Internet directories from around the state; (c) by reviewing AGFD's watercraft registration data base; (d) through discussions with selected chambers of commerce; (e) by referrals from other operators, agencies and marinas, and; (f) through discussions with AGFD Regional Supervisors.

All those on the identified lists were mailed a self-administered questionnaire along with a postage-paid, return mail envelope. Respondents were given approximately two weeks to respond to the mailing before follow-up telephone contact was undertaken and continued until a response was achieved. The audit/survey forms utilized during this study component are included in Appendix B of this report.

TABLE 5: NUMBER OF AUDITS/SURVEYS COMPLETED

MARINAS

Total forms mailed	53
No fuel sold/no Arizona fuel sold	27
Sell Arizona gasoline	22
No longer in business	3
Did not respond after multiple attempts/refused	1

CONCESSIONAIRES

Total forms mailed	264
No longer in business	108
No fuel used/no qualified fuel used	81
Arizona fuel used	49
Did not respond after multiple attempts/ refused	26

GOVERNMENT AGENCIES

Total forms mailed	126
No fuel used/not qualified fuel used	87
Qualified Arizona fuel used	36
Office closed	2
Did not respond after multiple attempts/refused	1

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## **4.0 OVERALL USE OF ARIZONA LAKES AND RIVERS**

Watercraft owners were asked to indicate whether or not they utilized their boats on Arizona lakes and rivers during the 30 days prior to being interviewed or at any time during the prior 12 months.

Looking first at use during the prior two weeks, we find that 13.0 percent of registered watercraft owners in Arizona, California, Nevada and Utah used their boats during any given 30 day period. Among Arizona watercraft owners, usage reaches 21.4 percent compared to 4.5 percent of California owners, 11.0 percent of Nevada owners and 2.2 percent of Utah owners.

Looking next at the 12 month figures, we find that 42.5 percent of all watercraft owners in the four-state survey universe utilized their boats in Arizona during the prior year, which is up from 38.8 percent in 2009. Among Arizona users, the figure reaches 64.1 percent compared to 19.9 percent among California owners, 41.1 percent among Nevada owners and 14.9 percent among Utah owners.

TABLE 6: WATERCRAFT USE ON ARIZONA  
LAKES AND RIVERS – PAST 30 DAYS/PAST 12 MONTHS

“To start, was your boat used on Arizona lakes and rivers, including the Colorado River, during the (FIRST/LAST) two weeks of (MONTH)?”

“Did you use your boat on Arizona lakes and rivers including the Colorado River, any time during the past 12 months?”

|                           | <u>USED PAST 30 DAYS</u> |         |                 |        |      | <u>USED PAST 12 MONTHS</u> |         |                 |        |       |
|---------------------------|--------------------------|---------|-----------------|--------|------|----------------------------|---------|-----------------|--------|-------|
|                           | Total                    | Arizona | Cali-<br>fornia | Nevada | Utah | Total                      | Arizona | Cali-<br>fornia | Nevada | Utah  |
| <u>TOTAL</u> - 2012       | 13.0%                    | 21.4%   | 4.5%            | 11.0%  | 2.2% | 42.5%                      | 64.1%   | 19.9%           | 41.1%  | 14.9% |
| - 2009                    | –                        | –       | –               | –      | –    | 38.8                       | 62.8    | 16.2            | 37.8   | 14.5  |
| - 2006                    | –                        | –       | –               | –      | –    | 38.2                       | 57.5    | 32.7            | 42.6   | 13.3  |
| <u>SUMMARIZED CLASSES</u> |                          |         |                 |        |      |                            |         |                 |        |       |
| Under 16'                 |                          |         |                 |        |      |                            |         |                 |        |       |
| (1-3)                     | 10.9                     | 18.3    | 4.8             | 8.6    | 1.1  | 38.9                       | 58.5    | 22.5            | 36.7   | 10.2  |
| 16' to 25'                |                          |         |                 |        |      |                            |         |                 |        |       |
| (4-6)                     | 15.6                     | 24.0    | 5.1             | 12.5   | 2.8  | 47.5                       | 68.5    | 20.6            | 42.9   | 15.3  |
| 26" + (7-9)               | 9.8                      | 20.3    | 1.9             | 14.3   | 2.5  | 33.9                       | 63.7    | 8.1             | 54.3   | 32.5  |

TABLE NOTE: 30-day data based on 884 users (13.0% of 6,803), 12-month data based on 2,889 users (42.5% of 6,803)

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The main reasons Arizona watercraft owners give for not using their boats in the state is that they are either too busy (36%) or have lost interest (33%). The main reason among California, Nevada and Utah owners is that they only use their boats in their home state (California 29%, Nevada 23%, Utah 46%).

TABLE 7: MAIN REASONS FOR NOT USING BOAT
WITHIN LAST 12 MONTHS

“Was there any particular reason your boat wasn’t used in Arizona?”

	<u>STATE OF REGISTRATION</u>			
	<u>Arizona</u>	<u>California</u>	<u>Nevada</u>	<u>Utah</u>
Too busy, no time	36%	17%	24%	11%
Loss of interest, prefer other forms of recreation, medical	33	17	23	14
Boat is inoperable, broken down, in storage	12	9	12	2
Out-of-state resident, use only in other state	11	29	23	46
The expense is too much	8	7	12	6
Distance to Arizona lakes and rivers is too far	5	27	9	31
All other responses	8	6	9	5

Totals exceed 100% due to multiple responses

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On Table 8, data is presented on use days and trip frequency during the past 30 days and the past 12 months. The following patterns are revealed:

**USAGE PAST 30 DAYS**

- **NUMBER OF USE DAYS** – Owners who used their boats on Arizona lakes and rivers in the past 30 days did so an average of 4.0 days.
- **NUMBER OF TRIPS** – Forty percent of owners that used their boat in the past 30 days made one trip during the period, while 25 percent made two trips.

**USAGE PAST 12 MONTHS**

- **NUMBER OF USE DAYS** – Owners who used their boats on Arizona lakes and rivers in the past 12 months did so an average of 16.7 days – up from 14.6 days in 2009. Arizona owners’ use decreased from 16.8 days in 2006 to 15.7 days in 2009 and California owners’ from 13.6 days to 10.2 days.
- **NUMBER OF TRIPS** – Fifty-four percent of owners who used their boats in Arizona during the past 30 days made ten or more trips in the past 12 months – up from 44 percent in 2009.

**TABLE 8: USE DAYS AND NUMBER OF TRIPS –  
PAST 30 DAYS/PAST 12 MONTHS**

(AMONG OWNERS USING BOATS IN ARIZONA)

|                           | <u>STATE OF REGISTRATION</u> |                |                   |               |             |
|---------------------------|------------------------------|----------------|-------------------|---------------|-------------|
|                           | <u>TOTAL</u>                 | <u>Arizona</u> | <u>California</u> | <u>Nevada</u> | <u>Utah</u> |
| <b>Past 30 Days</b>       |                              |                |                   |               |             |
| <b>Number of Use Days</b> |                              |                |                   |               |             |
| 1                         | 23%                          | 23%            | 17%               | 30%           | 18%         |
| 2                         | 24                           | 24             | 25                | 23            | 18          |
| 3                         | 13                           | 13             | 16                | 9             | 9           |
| 4                         | 11                           | 10             | 15                | 16            | 9           |
| 5 to 6                    | 15                           | 15             | 15                | 9             | 18          |
| 7 or more                 | <u>14</u>                    | <u>15</u>      | <u>12</u>         | <u>13</u>     | <u>28</u>   |
|                           | 100%                         | 100%           | 100%              | 100%          | 100%        |
| MEAN                      | 4.0                          | 4.0            | 3.8               | 4.1           | 4.3         |
| <b>Number of Trips</b>    |                              |                |                   |               |             |
| 1                         | 40%                          | 36%            | 59%               | 49%           | 63%         |
| 2                         | 25                           | 27             | 17                | 18            | 25          |
| 3 or more                 | <u>35</u>                    | <u>37</u>      | <u>24</u>         | <u>33</u>     | <u>12</u>   |
|                           | 100%                         | 100%           | 100%              | 100%          | 100%        |

(CONTINUED)

(CONT.) TABLE 8: USE DAYS AND NUMBER OF TRIPS –  
PAST 30 DAYS/PAST 12 MONTHS

(AMONG OWNERS USING BOATS IN ARIZONA)

|                                    | <u>TOTAL</u> |          |          | <u>STATE OF REGISTRATION – 2011</u> |            |          |          |
|------------------------------------|--------------|----------|----------|-------------------------------------|------------|----------|----------|
|                                    | 2012         | 2009     | 2006     | Arizona                             | California | Nevada   | Utah     |
| <b>Past 12 Months</b>              |              |          |          |                                     |            |          |          |
| <b>Number of Use Days</b>          |              |          |          |                                     |            |          |          |
| 1 to 5                             | 35%          | 36%      | 34%      | 32%                                 | 42%        | 40%      | 46%      |
| 6 to 10                            | 23           | 25       | 24       | 22                                  | 27         | 23       | 38       |
| 11 to 15                           | 13           | 14       | 15       | 14                                  | 10         | 14       | 7        |
| 16 to 24                           | 10           | 9        | 11       | 11                                  | 9          | 9        | 7        |
| 25 to 49                           | 13           | 11       | 12       | 14                                  | 9          | 10       | 2        |
| 50 or over                         | <u>6</u>     | <u>5</u> | <u>4</u> | <u>7</u>                            | <u>3</u>   | <u>4</u> | <u>0</u> |
|                                    | 100%         | 100%     | 100%     | 100%                                | 100%       | 100%     | 100%     |
| MEAN - 2012                        | 16.7         | NA       | NA       | 18.1                                | 14.5       | 12.0     | 7.1      |
| - 2009                             | NA           | 14.6     | NA       | 15.7                                | 10.2       | 14.6     | 13.0     |
| - 2006                             | NA           | NA       | 15.1     | 16.8                                | 13.6       | 18.6     | 11.8     |
| <b>Number of Trips<sup>1</sup></b> |              |          |          |                                     |            |          |          |
| 1 to 4                             | 27%          | 35%      | 27%      | 23%                                 | 43%        | 33%      | 73%      |
| 5 to 9                             | 19           | 21       | 22       | 18                                  | 25         | 21       | 18       |
| 10 to 14                           | 14           | 15       | 17       | 15                                  | 17         | 7        | 9        |
| 15 to 24                           | 17           | 13       | 18       | 19                                  | 6          | 15       | 0        |
| 25 to 49                           | 14           | 11       | 9        | 15                                  | 7          | 15       | 0        |
| 50 or over                         | <u>9</u>     | <u>5</u> | <u>7</u> | <u>10</u>                           | <u>2</u>   | <u>9</u> | <u>0</u> |
|                                    | 100%         | 100%     | 100%     | 100%                                | 100%       | 100%     | 100%     |

<sup>1</sup>Only asked of those owners who also used their boat in past 30 days.

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5.0 FUEL CONSUMPTION

In this section of the report, we present an analysis of the percentage of total Arizona fuel consumed by watercraft within the state.

5.1 Boat Owner Survey

Looking first at general fuel consumption patterns, we present Table 9 which reveals the following findings:

- Gasoline is used to propel 98.9 percent of all boats, with the remainder utilizing diesel and aviation fuel.
- 95.1 percent of Arizona boaters purchase Arizona fuel compared to 80.2 percent of California boaters, 40.0 percent of Utah boaters and 29.3 percent of Nevada boaters.
- 91.3 percent of Arizona boaters purchase their Arizona fuel at a non-marina location compared to 90.4 percent of California boaters, 64.6 percent of Nevada boaters and 96.7 percent of Utah boaters.
- The typical Arizona boater who utilized their boat in Arizona in the prior 30 days purchased 46.2 gallons of Arizona fuel, while the typical California boater purchased 51.5 gallons, the typical Utah boater 39.9 gallons and the typical Nevada boater 12.6 gallons. These figures represent sizeable increases in each state: Arizona – 14.8 gallons; California – 21.1 gallons; Nevada – 8.1 gallons; Utah – 7.2 gallons.

TABLE 9: FUEL CONSUMPTION PATTERNS AMONG
BOATERS UTILIZING WATERCRAFT IN ARIZONA DURING
PRECEDING 30 DAY PERIOD

	<u>STATE OF REGISTRATION</u>			
	<u>Arizona</u>	<u>California</u>	<u>Nevada</u>	<u>Utah</u>
Type of Fuel Used				
Gasoline	99.3%	98.2%	96.4%	100.0%
Other	<u>.7</u>	<u>1.8</u>	<u>3.6</u>	<u>0.0</u>
	100.0%	100.0%	100.0%	100.0%
Percent of Fuel Purchased in Arizona				
2012	95.1%	80.2%	29.3%	40.0%
2009	94.5	65.0	17.0	55.7
2006	93.6	72.2	19.0	38.9
Location Arizona Fuel Purchased				
Non-Marina	91.3%	90.4%	64.6%	96.7%
Marina	<u>8.7</u>	<u>9.6</u>	<u>35.4</u>	<u>3.3</u>
	100.0%	100.0%	100.0%	100.0%
Arizona Purchased Gallons Used Preceding 30 Day Period – Mean				
2012	46.2	51.5	12.6	39.9
2009	31.4	30.4	4.5	32.7
2006	43.0	36.0	7.8	34.5
Non-Marina, Arizona Purchased Gallons Used Preceding 30 Day Period – Mean				
2012	42.2	46.6	8.1	38.6
2009	28.7	25.5	3.9	13.9
2006	38.7	31.9	6.9	24.2
Marina, Arizona Purchased Gallons Used Preceding 30 Day Period – Mean				
2012	4.0	4.9	4.5	1.3
2009	2.7	4.9	.6	18.8
2006	4.3	4.1	.9	10.3

Tables 10 through 19 present the gasoline consumption figures based on the results of the boat owner survey. These tables present fuel consumption for each state surveyed and for the total study universe.

Below is the formula used to develop the consumption figures presented in the tables. This formula is based on the following factors:

- A – Average number of days individual boat was used during two-week period.
- B – Average number of gallons of gasoline used per day by individual boat.
- C – Average number of gallons of gasoline used during two-week period by individual boat.
- D – Percent of gasoline purchased from Arizona suppliers by individual boat.
- E – Average number of gallons of Arizona gasoline purchased during two-week period by individual boat.
- F – Percent of gasoline purchased from non-marina sources by individual boat.
- G – Average number of gallons of non-marina, Arizona gasoline purchased during two-week period.
- H – Number of boats in class using Arizona lakes and rivers during two-week period.
- I – Total gallons of non-marina, Arizona gasoline purchased during two-week period by boat class.
- J – Total number of study segments – 12.
- K – Total gallons of non-marina, Arizona gasoline purchased by boat owners over 12-month period.

GASOLINE CONSUMPTION FORMULA

- 1st: $A \times B = C$
- 2nd: $C \times D = E$
- 3rd: $E \times F = G$
- 4th: $G \times H = I$
- 5th: $I \times J = K$

The following main findings from the boat owner survey are revealed in the fuel consumption summaries presented on Tables 10 and 11:

- A total of 24,460,416 gallons of non-marina gasoline was purchased to propel boats during the study period. This figure represents an 8.1 percent increase from the 22,626,056 gallons recorded during the 2009 study but is still well below the 51,943,296 recorded in pre-recession 2006.
- Total Arizona fuel consumption (non-marina plus marina) also increased from 2009 (26,865,920) to 2012 (27,206,640) but only by 1.3 percent. Increases were recorded in all states except Utah.
- The boating classifications which continue to account for the largest amount of non-marina consumption are Class 5 (16' to 25' inboard and in/out) with a reading of 38.9 percent and Class 2 (predominantly jet skis) with a reading of 34.0 percent.

TABLE 10: WATERCRAFT FUEL CONSUMPTION OF
ARIZONA, NON-MARINA GASOLINE (BOAT OWNER SURVEY)

BOAT CLASS	TOTAL	ARIZONA	CALIFORNIA	NEVADA	UTAH
1	1,721,376	1,297,656	364,944	24,936	33,840
2	8,322,888	4,104,732	4,143,840	58,116	16,200
3	8,664	8,664	0	0	0
4	2,949,696	2,652,036	275,160	22,500	0
5	9,523,356	4,867,800	3,883,344	62,652	709,560
6	52,800	19,440	33,360	0	0
7	193,284	193,284	0	0	0
8	1,686,312	1,312,776	258,024	115,512	0
9	2,040	408	1,632	0	0
TOTAL 2012	24,460,416	14,456,796	8,960,304	283,716	759,600
TOTAL 2009	22,626,056	14,243,400	7,852,680	299,136	230,840
TOTAL 2006	51,943,296	28,553,856	21,976,008	485,280	928,152

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TABLE 11: WATERCRAFT FUEL CONSUMPTION OF  
ARIZONA GASOLINE – ANY SOURCE (BOAT OWNER SURVEY)

| BOAT CLASS | TOTAL      | NON-MARINA | MARINA    |
|------------|------------|------------|-----------|
| 1          | 1,797,192  | 1,721,376  | 75,816    |
| 2          | 9,190,740  | 8,322,888  | 867,852   |
| 3          | 8,664      | 8,664      | 0         |
| 4          | 3,135,708  | 2,949,696  | 186,012   |
| 5          | 10,761,396 | 9,523,356  | 1,238,040 |
| 6          | 52,800     | 52,800     | 0         |
| 7          | 299,676    | 193,284    | 106,392   |
| 8          | 1,958,424  | 1,686,312  | 272,112   |
| 9          | 2,040      | 2,040      | 0         |
| TOTAL 2012 | 27,206,640 | 24,460,416 | 2,746,224 |
| TOTAL 2009 | 26,865,920 | 22,626,056 | 4,239,864 |
| TOTAL 2006 | 59,313,312 | 51,943,296 | 7,370,016 |

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TABLE 12: ARIZONA GASOLINE CONSUMPTION – NON-MARINA GALLONS – AZ BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 30 Days	Total AZ Registered Boats	% AZ Boats Used Past 30 Days	Number of AZ Boats Used Past 30 Days (2x3)	Total AZ Gallons Past 30 Days (1x4)	Total AZ Gallons Past 12 Months (5x12)
1	26.55	24,990	16.3	4,073	108,138	1,297,656
2	62.08	27,412	20.1	5,510	342,061	4,104,732
3	6.88	626	16.7	105	722	8,664
4	29.42	30,049	25.0	7,512	221,003	2,652,036
5	45.39	38,357	23.3	8,937	405,650	4,867,800
6	12.00	841	16.0	135	1,620	19,440
7	38.26	1,756	24.0	421	16,107	193,284
8	83.51	7,003	18.7	1,310	109,398	1,312,776
9	2.00	167	10.0	17	34	408
TOTAL						14,456,796

TABLE 13: ARIZONA GASOLINE CONSUMPTION – MARINA GALLONS – AZ BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 30 Days	Total AZ Registered Boats	% AZ Boats Used Past 30 Days	Number of AZ Boats Used Past 30 Days (2x3)	Total AZ Gallons Past 30 Days (1x4)	Total AZ Gallons Past 12 Months (5x12)
1	1.14	24,990	16.3	4,073	4,643	55,716
2	5.77	27,412	20.1	5,510	31,793	381,516
3	0.00	626	16.7	105	0	0
4	1.98	30,049	25.0	7,512	14,874	178,488
5	5.67	38,357	23.3	8,937	50,673	608,076
6	0.00	841	16.0	135	0	0
7	21.06	1,756	24.0	421	8,866	106,392
8	6.67	7,003	18.7	1,310	8,738	104,856
9	0.00	167	10.0	17	0	0
TOTAL						1,435,044

TABLE 14: ARIZONA GASOLINE CONSUMPTION – NON-MARINA GALLONS – CA BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 30 Days	Total CA Registered Boats	% CA Boats Used Past 30 Days	Number of CA Boats Used Past 30 Days (2x3)	Total AZ Gallons Past 30 Days (1x4)	Total AZ Gallons Past 12 Months (5x12)
1	28.61	44,295	2.4	1,063	30,412	364,944
2	47.22	101,568	7.2	7,313	345,320	4,143,840
3	0.00	12,181	0.0	0	0	0
4	19.22	38,480	3.1	1,193	22,930	275,160
5	56.30	88,429	6.5	5,748	323,612	3,883,344
6	24.60	8,032	1.4	113	2,780	33,360
7	0.00	1,409	3.1	44	0	0
8	74.40	9,618	3.0	289	21,502	258,024
9	4.00	5,671	.6	34	136	1,632
TOTAL						8,960,304

TABLE 15: ARIZONA GASOLINE CONSUMPTION – MARINA GALLONS – CA BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 30 Days	Total CA Registered Boats	% CA Boats Used Past 30 Days	Number of CA Boats Used Past 30 Days (2x3)	Total AZ Gallons Past 30 Days (1x4)	Total AZ Gallons Past 12 Months (5x12)
1	1.57	44,295	2.4	1,063	1,669	20,028
2	5.54	101,568	7.2	7,313	40,514	486,168
3	0.00	12,181	0.0	0	0	0
4	0.00	38,480	3.1	1,193	0	0
5	6.67	88,429	6.5	5,748	38,339	460,068
6	0.00	8,032	1.4	113	0	0
7	0.00	1,409	3.1	44	0	0
8	14.92	9,618	3.0	289	4,312	51,744
9	0.00	5,671	.6	34	0	0
TOTAL						1,018,008

TABLE 16: ARIZONA GASOLINE CONSUMPTION – NON-MARINA GALLONS – NV BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 30 Days	Total NV Registered Boats	% NV Boats Used Past 30 Days	Number of NV Boats Used Past 30 Days (2x3)	Total AZ Gallons Past 30 Days (1x4)	Total AZ Gallons Past 12 Months (5x12)
1	10.39	2,820	7.1	200	2,078	24,936
2	6.85	7,599	9.3	707	4,843	58,116
3	0.00	30	0.0	0	0	0
4	3.44	3,408	16.0	545	1,875	22,500
5	5.20	9,386	10.7	1,004	5,221	62,652
6	0.00	163	0.0	0	0	0
7	0.00	211	40.0	84	0	0
8	63.75	1,886	8.0	151	9,626	115,512
9	0.00	72	20.0	14	0	0
TOTAL						283,716

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**TABLE 17: ARIZONA GASOLINE CONSUMPTION – MARINA GALLONS – NV BOATS**

|              | (1)                               | (2)                       | (3)                          | (4)                                        | (5)                                 | (6)                                    |
|--------------|-----------------------------------|---------------------------|------------------------------|--------------------------------------------|-------------------------------------|----------------------------------------|
| Boat Class   | AZ Gallons Purchased Past 30 Days | Total NV Registered Boats | % NV Boats Used Past 30 Days | Number of NV Boats Used Past 30 Days (2x3) | Total AZ Gallons Past 30 Days (1x4) | Total AZ Gallons Past 12 Months (5x12) |
| 1            | 0.03                              | 2,820                     | 7.1                          | 200                                        | 6                                   | 72                                     |
| 2            | 0.02                              | 7,599                     | 9.3                          | 707                                        | 14                                  | 168                                    |
| 3            | 0.00                              | 30                        | 0.0                          | 0                                          | 0                                   | 0                                      |
| 4            | 1.15                              | 3,408                     | 16.0                         | 545                                        | 627                                 | 7,524                                  |
| 5            | 11.00                             | 9,386                     | 10.7                         | 1,004                                      | 11,044                              | 132,528                                |
| 6            | 0.00                              | 163                       | 0.0                          | 0                                          | 0                                   | 0                                      |
| 7            | 0.00                              | 211                       | 40.0                         | 84                                         | 0                                   | 0                                      |
| 8            | 63.75                             | 1,886                     | 8.0                          | 151                                        | 9,626                               | 115,512                                |
| 9            | 0.00                              | 72                        | 20.0                         | 14                                         | 0                                   | 0                                      |
| <b>TOTAL</b> |                                   |                           |                              |                                            |                                     | 255,804                                |

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TABLE 18: ARIZONA GASOLINE CONSUMPTION – NON-MARINA GALLONS – UT BOATS

	(1)	(2)	(3)	(4)	(5)	(6)
Boat Class	AZ Gallons Purchased Past 30 Days	Total UT Registered Boats	% UT Boats Used Past 30 Days	Number of UT Boats Used Past 30 Days (2x3)	Total AZ Gallons Past 30 Days (1x4)	Total AZ Gallons Past 12 Months (5x12)
1	20.00	11,712	1.2	141	2,820	33,840
2	10.00	11,242	1.2	135	1,350	16,200
3	0.00	900	0.0	0	0	0
4	0.00	12,135	3.0	364	0	0
5	72.73	28,048	2.9	813	59,130	709,560
6	0.00	953	0.0	0	0	0
7	0.00	773	0.0	0	0	0
8	0.00	2,235	4.0	89	0	0
9	0.00	116	0.0	0	0	0
TOTAL						759,600

~~~~~

**TABLE 19: ARIZONA GASOLINE CONSUMPTION – MARINA GALLONS – UT BOATS**

|              | (1)                               | (2)                       | (3)                          | (4)                                        | (5)                                 | (6)                                    |
|--------------|-----------------------------------|---------------------------|------------------------------|--------------------------------------------|-------------------------------------|----------------------------------------|
| Boat Class   | AZ Gallons Purchased Past 30 Days | Total UT Registered Boats | % UT Boats Used Past 30 Days | Number of UT Boats Used Past 30 Days (2x3) | Total AZ Gallons Past 30 Days (1x4) | Total AZ Gallons Past 12 Months (5x12) |
| 1            | 0.00                              | 11,712                    | 1.2                          | 141                                        | 0                                   | 0                                      |
| 2            | 0.00                              | 11,242                    | 1.2                          | 135                                        | 0                                   | 0                                      |
| 3            | 0.00                              | 900                       | 0.0                          | 0                                          | 0                                   | 0                                      |
| 4            | 0.00                              | 12,135                    | 3.0                          | 364                                        | 0                                   | 0                                      |
| 5            | 3.83                              | 28,048                    | 2.9                          | 813                                        | 3,114                               | 37,368                                 |
| 6            | 0.00                              | 953                       | 0.0                          | 0                                          | 0                                   | 0                                      |
| 7            | 0.00                              | 773                       | 0.0                          | 0                                          | 0                                   | 0                                      |
| 8            | 0.00                              | 2,235                     | 4.0                          | 89                                         | 0                                   | 0                                      |
| 9            | 0.00                              | 116                       | 0.0                          | 0                                          | 0                                   | 0                                      |
| <b>TOTAL</b> |                                   |                           |                              |                                            |                                     | 37,368                                 |

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5.2 Study Audits/Survey

- Concessionaires, Commercial Boat Operators and Excursion Operators

Total consumption of non-marina, Arizona gasoline among the operators surveyed is 237,893 gallons, down from 293,240 in 2009.

- Government Agencies

Total consumption of non-marina, Arizona gasoline subject to tax among the agencies surveyed is 49,020 gallons, down from 57,999 in 2009.

- Marinas

Total sales of Arizona gasoline among the marinas surveyed are 2,889,355, down from 3,211,321 in 2009.

5.3 Total Annual Gasoline Consumption Calculations

Presented in Table 20 is the summarized data on gasoline consumption from each of the various study components.

In 1991, ADOT, AGFD and ASPB signed an agreement (see Appendix) that established a protocol on how the SLIF allocation percentage was to be calculated in the later surveys. The specifics of this protocol are as follows:

Variables (in gallons)

A = Boaters' reports of marina fuel purchases

B = Marinas' reports of fuel sales

C = Boaters' reports of non-marina fuel purchases

D = Commercial and government reports of watercraft fuel purchases

E = Total statewide gasoline sales on which Arizona tax was paid

Step 1: Compare Variables A and B.

- If A divided by B is 1.25 or less, use Method #1,
- If A divided by B is more than 1.25, use Method #2.

Step 2: Calculate SLIF Percentage.

Method #1:

$$(A + C + D) \div E = \text{SLIF Percentage}$$

Method #2:

$$(B + D + [(C \times B/A)] \div E \times 1.25 = \text{SLIF Percentage}$$

As required by the protocol, the first step in calculating the SLIF allocation percentage is to compare the fuel estimates from the boater survey and the marina audits/surveys. This step indicates that the variation is .95.

	<u>MARINA FUEL SALES ESTIMATES</u>		
	<u>2011- 2012</u>	<u>2008 - 2009</u>	<u>2005 - 2006</u>
A. Marina Purchasing Estimate From Boat Owner Survey	2,746,224	4,239,864	7,370,016
B. Marina Fuel Sales Estimate From Marina Audit	2,889,355	3,211,321	4,508,813
Variation (A/B)	.95	1.32	1.63

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According to the protocol, the .95 variation calls for the use of method 1 for calculating the SLIF allocation. **Applying this formula to the collected data, we estimate the 2012 SLIF allocation at 1.0553 percent.**

$$\frac{\text{SLIF Using Method 1 } (A + C + D) \div E = \text{SLIF}}{(2,746,224 + 25,120,847 + 286,913) \div 2,667,803,481}$$

**1.0553**



TABLE 20: ANNUAL WATERCRAFT FUEL CONSUMPTION SUMMARY TOTALS

|                                                                                                                                                 | GALLONS       |               |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|
|                                                                                                                                                 | 2012          | 2009          | 2006          |
| Registered Boat Owner's Consumption<br>Of Non-Marina, Arizona Gasoline                                                                          |               |               |               |
| Arizona registered                                                                                                                              | 14,456,796    | 14,243,400    | 28,553,856    |
| California registered                                                                                                                           | 8,960,304     | 7,852,680     | 21,976,008    |
| Utah registered                                                                                                                                 | 759,600       | 230,840       | 928,152       |
| Nevada registered                                                                                                                               | 283,716       | 299,136       | 485,280       |
| Total from survey                                                                                                                               | 24,460,416    | 22,626,056    | 51,943,296    |
| Plus adjustment for non-surveyed boaters<br>(Other out-of-state) consumption – 2.7%                                                             | 660,431       | 610,904       | 1,402,469     |
| Total (C)                                                                                                                                       | 25,120,847    | 23,236,960    | 53,345,765    |
| Commercial Operators (Concessionaires,<br>Commercial Boat Operators, Excursion<br>Operators) Consumption of Non-Marina,<br>Arizona Gasoline (D) | 237,893       | 293,240       | 388,820       |
| Public Agencies Consumption of Taxable Non-<br>Marina, Arizona Gasoline (D)                                                                     | 49,020        | 57,999        | 42,994        |
| Marina Fuel Sales – Total From Boat Owner<br>Survey (A)                                                                                         | 2,746,224     | 4,239,864     | 7,370,016     |
| Marina Fuel Sales – From Marina Audits/Surveys<br>(B)                                                                                           | 2,889,355     | 3,211,321     | 4,508,813     |
| Total Gallons Of Taxable Gasoline Sold In<br>Arizona Between March 1, 2011, and February<br>29, 2012 (E)                                        | 2,667,803,481 | 2,617,686,915 | 2,737,702,381 |

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6.0 RECREATIONAL WATERCRAFT USE BY COUNTY

In this section of the report, we present data on watercraft usage in each Arizona county by Arizona, California, Nevada and Utah boat owners. Watercraft usage in this section is calculated and presented using two different data sets. The first data set is based on lake utilization during the 30 days prior to being interviewed and is identical to the format followed since the 1994 Watercraft Survey except that respondents are asked about their use in the prior 30 days as opposed to the prior two weeks as in the previous studies. This change was made at the request of the TAC. The second data set is based on lake utilization during the 12 months prior to being interviewed and excludes any boater who utilized their boat in the 30 days prior to being interviewed. This data set was first included in the 2000 Watercraft Survey at the request of the Arizona State Parks Board in order to get a broader representation of lake/river use in Arizona. This process again proved successful in that 58 lakes/ivers are represented when the data is calculated using the 12-month data set compared to 52 when the 30 day data set is used.

6.1 30 Day Data Set

The total number of days of use for each lake by boat class was obtained by summing days of use for all respondents in the sample for each class at each lake. In order to assure that each boat class was proportionately represented in the final calculation of boat usage at each lake, the total number of boats in a class was divided by the total number of respondents in each class. As a result of this division, a survey sample factor was generated for each class.

$$\begin{aligned}
 \text{Sample Factor} &= \frac{\text{Arizona Boats in Class 1}}{\text{Survey Respondents in Class 1}} \\
 &= \frac{24,990}{615} \\
 &= 40.63
 \end{aligned}$$

Days of usage at each lake or river from each boat class were then multiplied by the respective class sample factor and number of study segments (12) to obtain the total usage days for the lake or river for the respective class. By aggregating the calculated usage days over all classes, the total boat usage for each lake was determined.

$$\boxed{\begin{array}{c} \text{Sample Use Days} \\ \text{by Boat Class at} \\ \text{Each Lake} \end{array}} \times \boxed{\begin{array}{c} \text{Sample} \\ \text{Factor} \end{array}} \times \boxed{\begin{array}{c} \text{Study} \\ \text{Segments} \end{array}} = \boxed{\begin{array}{c} \text{Boat Use} \\ \text{Days at} \\ \text{Each Lake} \end{array}}$$

Person use days for each lake were then calculated by multiplying the boat use days at each lake by the average boating party size for that lake.

$$\boxed{\begin{array}{c} \text{Boat Use} \\ \text{Days at} \\ \text{Each Lake} \end{array}} \times \boxed{\begin{array}{c} \text{Mean Party} \\ \text{Size at} \\ \text{Each Lake} \end{array}} = \boxed{\begin{array}{c} \text{Person Use} \\ \text{Days at} \\ \text{Each Lake} \end{array}}$$

TABLE 21: SURVEY SAMPLE FACTOR

BOAT CLASS	TOTAL BOATS IN CLASS	RESPONDENTS IN CLASS	SAMPLE FACTOR
ARIZONA			
1	24,990	615	40.63
2	27,412	681	40.25
3	626	24	26.08
4	30,049	808	37.19
5	38,357	870	44.09
6	841	25	33.64
7	1,756	96	18.29
8	7,003	150	46.69
9	<u>167</u>	10	16.70
	131,201		
CALIFORNIA			
1	44,295	250	177.18
2	101,568	750	135.42
3	12,181	241	50.54
4	38,480	196	196.33
5	88,429	612	144.49
6	8,032	140	57.37
7	1,409	65	21.68
8	9,618	100	96.18
9	<u>5,671</u>	155	36.59
	309,683		
NEVADA			
1	2,820	70	40.29
2	7,599	140	54.28
3	30	0	0
4	3,408	100	34.08
5	9,386	168	55.87
6	163	5	32.60
7	211	5	42.20
8	1,886	25	75.44
9	<u>72</u>	5	14.40
	25,575		
UTAH			
1	11,712	80	146.40
2	11,242	81	138.79
3	900	15	60.00
4	12,135	100	121.35
5	28,048	171	164.02
6	953	10	95.30
7	773	10	77.30
8	2,235	25	89.40
9	<u>116</u>	5	23.20
	68,114		

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The next two tables provide summaries of boat use days (Table 22) and person use days (Table 23). Looking first at boat use days, we find that total boat use days in 2012 were 2,874,866 – a 13 percent decrease from 2009 and a 40 percent decrease from 2006. Similar to the prior studies, Mohave County is the dominant boating location in Arizona with 50.5 percent of total boat use days – a figure which is up from 46.3 percent in 2009. Also note the major increased use of Maricopa County lakes since the prior study (18.8% 2012, 12.2% 2009) and the major decreased use of La Paz County lakes (9.5% 2012, 19.4% 2009).

TABLE 22: BOAT USE DAYS BY COUNTY –  
OVERALL SUMMARY (30 DAY DATA)

|            | <u>2012</u> |          | <u>2009</u> |          | <u>2006</u> |          |
|------------|-------------|----------|-------------|----------|-------------|----------|
|            | Total       | %        | Total       | %        | Total       | %        |
| Mohave     | 1,452,549   | 50.5%    | 1,527,284   | 46.3%    | 2,393,398   | 49.9%    |
| Maricopa   | 540,503     | 18.8     | 401,409     | 12.2     | 701,931     | 14.6     |
| Coconino   | 312,706     | 10.9     | 371,676     | 11.2     | 412,568     | 8.6      |
| La Paz     | 272,177     | 9.5      | 640,550     | 19.4     | 624,518     | 13.0     |
| Yuma       | 123,385     | 4.3      | 74,171      | 2.2      | 290,325     | 6.1      |
| Gila       | 119,067     | 4.1      | 175,498     | 5.3      | 302,518     | 6.3      |
| Apache     | 15,161      | .5       | 22,392      | .7       | 34,766      | .7       |
| Santa Cruz | 14,144      | .5       | 16,021      | .5       | 13,241      | .3       |
| Navajo     | 12,342      | .4       | 34,284      | 1.0      | 2,920       | .1       |
| Cochise    | 4,683       | .2       | 33,335      | 1.0      | 8,363       | .2       |
| Pinal      | 4,306       | .1       | 0           | 0        | 8,374       | .2       |
| Pima       | 1,946       | .1       | 0           | 0        | 0           | 0        |
| Graham     | 1,408       | .1       | 0           | 0        | 0           | 0        |
| Yavapai    | 488         | *        | 5,009       | .2       | 581         | *        |
| Greenlee   | <u>0</u>    | <u>0</u> | <u>0</u>    | <u>0</u> | <u>0</u>    | <u>0</u> |
| TOTAL      | 2,874,866   | 100.0%   | 3,301,629   | 100.0%   | 4,793,501   | 100.0%   |

NOTE: 2012, 2009 and 2006 data differs from the prior studies in the following ways: 1) all use on Alamo Lake attributed to La Paz County, not divided equally between La Paz and Mohave; 2) all use on San Carlos Lake attributed to Gila County, not divided equally between Gila, Graham and Pinal; 3) 10% of Lake Havasu use attributed to La Paz County, not all to Mohave; 4) new category Ehrenberg to north end of Martinez Lake attributed to La Paz County.

\* Indicates % less than .1

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Looking next at person use days, Table 23 reveals that person use days decreased from 15,941,792 in 2009 to 13,406,815 in 2012 – a 16 percent decrease. As in the case with boat use days, Mohave County is the dominant boating location in Arizona accounting for 52.7 percent of all person use days.

TABLE 23: PERSON USE DAYS BY COUNTY –
OVERALL SUMMARY (30 DAY DATA)

	<u>2012</u>		<u>2009</u>		<u>2006</u>	
	Total	%	Total	%	Total	%
Mohave	7,062,918	52.7%	7,593,709	47.6%	12,232,373	52.2%
Maricopa	2,038,014	15.2	1,526,984	9.6	2,928,754	12.5
Coconino	1,826,240	13.6	2,247,649	14.1	2,339,770	10.0
La Paz	1,329,296	9.9	3,212,827	20.2	3,165,071	13.5
Yuma	566,989	4.2	381,512	2.4	1,417,070	6.1
Gila	414,218	3.1	551,248	3.5	1,110,862	4.7
Apache	56,933	.4	58,663	.4	92,508	.4
Santa Cruz	48,022	.4	65,539	.4	32,824	.1
Navajo	31,253	.2	129,302	.8	5,840	*
Cochise	13,713	.1	161,574	1.0	66,902	.3
Pinal	9,830	.1	0	0	16,747	.1
Pima	4,379	*	0	0	0	0
Graham	4,034	*	0	0	0	0
Yavapai	975	*	12,785	*	581	*
Greenlee	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	13,406,815	100.0%	15,941,792	100.0%	23,409,303	100.0%

*Indicates % less than .1

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Boat and person use days are analyzed by state of registration in the next two tables (Tables 24 and 25). The following key findings are evident in these tables:

- Arizona boaters account for 57.9 percent of boat use days (up from 54.7% in 2009) followed by California boaters with 32.5 percent (down from 34.6% in 2009), Utah boaters with 5.0 percent and Nevada boaters with 4.6 percent.
- Unlike the studies before 2009, California boaters no longer account for the largest share of person use days. Thus we find that California boaters account for 36.1 percent of person use days (down from 41.8% in 2009) compared to 52.8 percent for Arizona boaters (up from 46.7% in 2009). In the prior studies, the primary reason for California's high percentage was the fact that California boaters tended to have very large boating parties which was not necessarily the case during the last two studies.

TABLE 24: BOAT USE DAYS BY COUNTY AND STATE (30 DAY DATA)

| COUNTY       | TOTAL     | BOAT USE DAYS |           |         |         |
|--------------|-----------|---------------|-----------|---------|---------|
|              |           | AZ            | CA        | NV      | UT      |
| Mohave       | 1,452,549 | 656,748       | 665,280   | 119,485 | 11,035  |
| Maricopa     | 540,503   | 539,200       | 0         | 1303    | 0       |
| Coconino     | 312,706   | 119,195       | 51,431    | 10,708  | 131,372 |
| La Paz       | 272,177   | 137,558       | 133,354   | 914     | 351     |
| Yuma         | 123,385   | 43,243        | 80,143    | 0       | 0       |
| Gila         | 119,067   | 119,067       | 0         | 0       | 0       |
| Apache       | 15,161    | 15,161        | 0         | 0       | 0       |
| Santa Cruz   | 14,144    | 8,943         | 5,202     | 0       | 0       |
| Navajo       | 12,342    | 12,342        | 0         | 0       | 0       |
| Cochise      | 4,683     | 4,683         | 0         | 0       | 0       |
| Pinal        | 4,306     | 4,306         | 0         | 0       | 0       |
| Pima         | 1,946     | 1,946         | 0         | 0       | 0       |
| Graham       | 1,408     | 1,408         | 0         | 0       | 0       |
| Yavapai      | 488       | 488           | 0         | 0       | 0       |
| TOTAL – 2012 | 2,874,866 | 1,664,288     | 935,409   | 132,410 | 142,758 |
| TOTAL – 2009 | 3,301,629 | 1,807,042     | 1,143,734 | 186,641 | 164,212 |
| TOTAL – 2006 | 4,793,501 | 2,292,239     | 2,046,187 | 267,316 | 187,759 |

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TABLE 25: PERSON USE DAYS BY COUNTY AND STATE (30 DAY DATA)

COUNTY	TOTAL	PERSON USE DAYS			UT
		AZ	CA	NV	
Mohave	7,062,918	3,178,601	3,436,249	396,055	52,014
Maricopa	2,038,014	2,031,500	0	6,514	0
Coconino	1,826,240	573,021	2,167,63	52,237	984,219
La Paz	1,329,296	586,955	737,723	3,213	1,405
Yuma	566,989	139,791	427,198	0	0
Gila	414,218	414,218	0	0	0
Apache	56,933	56,933	0	0	0
Santa Cruz	48,022	27,216	20,807	0	0
Navajo	31,253	31,253	0	0	0
Cochise	13,713	13,713	0	0	0
Pinal	9,830	9,830	0	0	0
Pima	4,379	4,379	0	0	0
Graham	4,034	4,034	0	0	0
Yavapai	975	975	0	0	0
TOTAL – 2012	13,406,815	7,072,419	4,838,740	458,018	1,037,638
TOTAL – 2009	15,941,792	7,436,496	6,659,836	738,884	1,106,576
TOTAL – 2006	23,409,303	10,223,606	11,086,338	1,170,978	928,381

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On the next table, it may be seen that Lake Havasu continues to be the state's most utilized lake in terms of both boat use days (900,712) and person use days (4,386,115). Each of these figures is up from 2009 (688,576 boat use days/3,403,973 person use days) but still well below in 2006 figures (1,324,161 boat use days/6,636,491 person use days).

TABLE 26: WATERCRAFT USE BY SPECIFIC LAKES/RIVERS (30 DAY DATA)

| <u>LAKE</u>                | <u>BOAT USE DAYS</u> | <u>PERSON USE DAYS</u> |
|----------------------------|----------------------|------------------------|
| Lake Havasu                | 900,712              | 4,386,115              |
| Lake Mohave                | 326,925              | 1,436,180              |
| Lake Powell                | 262,206              | 1631,471               |
| Lake Mead                  | 191,163              | 980,607                |
| Saguaro                    | 168,166              | 610,289                |
| Pleasant                   | 151,571              | 555,025                |
| Parker Strip               | 135,632              | 734,290                |
| Roosevelt                  | 117,660              | 410,183                |
| Canyon                     | 104,880              | 434,475                |
| Bartlett                   | 81,541               | 268,531                |
| Martinez Lake              | 80,086               | 425,000                |
| Davis Dam/Topock           | 70,635               | 450,312                |
| Topock Gorge               | 45,206               | 229,683                |
| Apache                     | 32,394               | 167,298                |
| Ehrenberg                  | 27,428               | 90,018                 |
| Squaw Lake                 | 22,533               | 96,225                 |
| Mittry                     | 20,767               | 45,765                 |
| Lees Ferry                 | 17,242               | 88,133                 |
| Alamo                      | 14,021               | 33,398                 |
| Long                       | 13,835               | 55,339                 |
| Ehrenberg - North Martinez | 12,036               | 49,678                 |
| Patagonia                  | 10,763               | 31,117                 |
| Willow Springs             | 6,502                | 15,118                 |
| Big                        | 5,851                | 21,940                 |
| Fools Hollow               | 5,336                | 17,687                 |
| Dogtown                    | 4,712                | 9,424                  |
| Parker Canyon              | 4,683                | 13,713                 |
| San Carlos                 | 4,223                | 12,103                 |
| Show Low                   | 3,882                | 7,764                  |
| Pena Blanca                | 3,381                | 16,905                 |
| Cresent                    | 2,898                | 18,837                 |
| Picacho Reservoir          | 2,898                | 5,796                  |
| Hawley                     | 2,438                | 7,313                  |
| Blue Ridge                 | 2,422                | 4,844                  |
| Knoll                      | 2,415                | 12,075                 |
| Reservation                | 2,024                | 4,048                  |
| Black Canyon               | 1,785                | 1,785                  |
| Rainbow                    | 1,339                | 4,017                  |
| Upper Lake Mary            | 1,339                | 2,678                  |
| Cataract                   | 1,058                | 4,233                  |
| Nelson Reservoir           | 1,058                | 2,116                  |
| Salt River                 | 975                  | 975                    |
| Silverbell                 | 975                  | 2,925                  |
| Arivaca                    | 971                  | 1,454                  |
| Grand Canyon               | 967                  | 1,934                  |
| Tempe Town                 | 529                  | 529                    |
| Goldwater                  | 488                  | 975                    |
| Kaibab                     | 488                  | 1,950                  |
| Woods Canyon               | 488                  | 975                    |
| Becker                     | 446                  | 893                    |
| Horseshoe                  | 446                  | 893                    |
| Sunrise                    | 446                  | 1,785                  |
| TOTAL                      | 2,874,866            | 13,406,815             |

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On the following pages are presented detailed tables on watercraft usage in Arizona. These tables are presented on a state-by-state basis.

TABLE 27: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (30 DAY DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
	1	2	3	4	5	6	7	8	9			
Lake												
Becker	0	0	0	446	0	0	0	0	0	446	2.00	893
Big	5851	0	0	0	0	0	0	0	0	5851	3.75	21940
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	2898	0	0	0	0	0	0	0	2898	6.50	18837
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	2438	0	0	0	0	0	0	0	0	2438	3.00	7313
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	1058	0	0	0	0	1058	2.00	2116
Reservation	0	966	0	0	1058	0	0	0	0	2024	2.00	4048
Sunrise	0	0	0	446	0	0	0	0	0	446	4.00	1785
TOTAL	8289	3864	0	893	2116	0	0	0	0	15161		56933
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	0	2898	0	1785	0	0	0	0	0	4683	2.93	13713
TOTAL	0	2898	0	1785	0	0	0	0	0	4683		13713
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	2422	0	0	0	2422	2.00	4844
Cataract	0	0	0	0	1058	0	0	0	0	1058	4.00	4233
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	488	0	0	0	0	0	0	0	0	488	4.00	1950
Knoll	0	2415	0	0	0	0	0	0	0	2415	5.00	12075
Lake Powell	16089	7728	0	19636	13227	0	4829	19050	0	80559	5.16	415631
Lees Ferry	0	6279	0	4463	0	0	0	0	0	10742	5.78	62133
Long	0	0	0	13835	0	0	0	0	0	13835	4.00	55339
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	1339	0	0	0	0	0	1339	2.00	2678
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	5851	0	0	0	0	0	0	0	0	5851	2.25	13164
Woods Canyon	488	0	0	0	0	0	0	0	0	488	2.00	975
TOTAL	22915	16422	0	39273	14285	2422	4829	19050	0	119195		573021

TABLE 27: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (30 DAY DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	18040	14973	0	71851	11111	807	878	0	0	117660	3.49	410183
San Carlos	813	0	0	595	0	0	0	0	0	1408	2.87	4034
TOTAL	18852	14973	0	72446	11111	807	878	0	0	119067		414218
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	813	0	0	595	0	0	0	0	0	1408	2.87	4034
TOTAL	813	0	0	595	0	0	0	0	0	1408		4034
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	1706	0	0	3570	0	0	0	0	0	5277	2.51	13231
Ehrenberg	0	3864	0	0	6878	0	0	0	0	10742	3.72	39961
Ehrenberg - North Martinez	488	0	0	0	5291	0	0	0	0	5778	2.83	16360
Lake Havasu	634	12123	0	6025	22433	0	1273	5379	0	47867	4.53	216774
Parker Strip	5851	16422	0	6248	33332	0	439	5603	0	67894	4.43	300629
TOTAL	8679	32409	0	15843	67934	0	1712	10981	0	137558		586955
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	7313	16905	1565	1785	2645	0	878	0	0	31092	5.17	160784
Bartlett	11214	5313	0	45967	19047	0	0	0	0	81541	3.29	268531
Canyon	21453	23667	0	22314	35448	0	878	1121	0	104880	4.14	434475
Horseshoe	0	0	0	446	0	0	0	0	0	446	2.00	893
Pleasant	26816	16422	1565	49983	44443	5652	0	1681	5010	151571	3.66	555025
Saguaro	35104	21735	313	65603	44972	0	439	0	0	168166	3.63	610289
Salt River	975	0	0	0	0	0	0	0	0	975	1.00	975
Tempe Town	0	0	0	0	529	0	0	0	0	529	1.00	529
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	102875	84042	3443	186099	147084	5652	2195	2801	5010	539200		2031500
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	1706	0	0	3570	0	0	0	0	0	5277	2.51	13231
Davis Dam/Topock	0	2415	0	14281	6878	0	0	16808	0	40382	7.83	316138
Grand Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Havasu	5704	109110	0	54223	201897	0	11457	48408	0	430799	4.53	1950965
Lake Mead	3413	15456	0	3570	21692	0	0	6723	0	50855	6.59	335004
Lake Mohave	16089	20769	0	12050	43385	807	5487	7844	0	106431	4.06	432161
Topock Gorge	0	15939	0	0	3704	0	0	3362	0	23004	5.70	131103

TABLE 27: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (30 DAY DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
TOTAL	26913	163689	0	87694	277555	807	16944	83146	0	656748		3178601
COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	1785	0	0	0	0	0	1785	1.00	1785
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	2438	2898	0	0	0	0	0	0	0	5336	3.31	17687
Rainbow	0	0	0	1339	0	0	0	0	0	1339	3.00	4017
Show Low	1950	1932	0	0	0	0	0	0	0	3882	2.00	7764
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	4388	4830	0	3124	0	0	0	0	0	12342		31253
COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	488	483	0	0	0	0	0	0	0	971	1.50	1454
Silverbell	975	0	0	0	0	0	0	0	0	975	3.00	2925
TOTAL	1463	483	0	0	0	0	0	0	0	1946		4379
COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	0	2898	0	0	0	0	0	0	0	2898	2.00	5796
San Carlos	813	0	0	595	0	0	0	0	0	1408	2.87	4034
TOTAL	813	2898	0	595	0	0	0	0	0	4306		9830
COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	2438	0	0	3124	0	0	0	0	0	5562	1.85	10311
Pena Blanca	0	3381	0	0	0	0	0	0	0	3381	5.00	16905
TOTAL	2438	3381	0	3124	0	0	0	0	0	8943		27216
COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	488	0	0	0	0	0	0	0	0	488	2.00	975
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	488	0	0	0	0	0	0	0	0	488		975

TABLE 27: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (30 DAY DATA)

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
	1	2	3	4	5	6	7	8	9			
Lake												
Martinez Lake	488	966	0	2231	5820	0	1097	1121	0	11723	3.63	42565
Mittry	0	11592	0	4463	0	0	0	0	0	16055	2.26	36341
Squaw Lake	975	14490	0	0	0	0	0	0	0	15465	3.94	60885
TOTAL	1463	27048	0	6694	5820	0	1097	1121	0	43243		139791

TABLE 28: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (30 DAY DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	4712	0	0	0	0	0	4712	2.00	9424
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	0	26001	0	0	12137	0	2081	0	0	40219	4.51	181339
Lees Ferry	0	6500	0	0	0	0	0	0	0	6500	4.00	26001
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	0	0	0	0	0	0	0	0	0	0.00	0
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	32501	0	4712	12137	0	2081	0	0	51431		216763

TABLE 28: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (30 DAY DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	1734	0	0	0	0	1734	2.00	3468
Ehrenberg	0	9750	0	0	6936	0	0	0	0	16686	3.00	50057
Ehrenberg - North Martinez	0	3250	0	2356	0	0	0	0	0	5606	5.48	30713
Lake Havasu	850	15600	0	2120	20460	482	0	2077	0	41590	5.29	219825
Parker Strip	0	11375	0	0	55484	0	0	0	878	67738	6.40	433661
TOTAL	850	39976	0	4476	84613	482	0	2077	878	133354		737723
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	0	0	0	0	0	0	0	0	0	0	0.00	0
Bartlett	0	0	0	0	0	0	0	0	0	0	0.00	0
Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Horseshoe	0	0	0	0	0	0	0	0	0	0	0.00	0
Pleasant	0	0	0	0	0	0	0	0	0	0	0.00	0
Saguaro	0	0	0	0	0	0	0	0	0	0	0.00	0
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	1734	0	0	0	0	1734	2.00	3468
Davis Dam/Topock	4252	26001	0	0	0	0	0	0	0	30253	4.44	134174
Grand Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Havasu	7654	140403	0	19083	184138	4337	0	18697	0	374314	5.29	1978423
Lake Mead	0	30876	0	0	15605	0	0	0	0	46481	6.66	309760
Lake Mohave	34019	86127	0	0	78025	0	0	0	0	198170	4.80	951209
Topock Gorge	4252	4875	0	0	5202	0	0	0	0	14329	4.13	59215

TABLE 28: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (30 DAY DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
TOTAL	50177	288282	0	19083	284703	4337	0	18697	0	665280		3436249
COUNTY: NAVAJO												
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: PIMA												
Lake	1	2	3	4	5	6	7	8	9	BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: PINAL												
Lake	1	2	3	4	5	6	7	8	9	BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: SANTA CRUZ												
Lake	1	2	3	4	5	6	7	8	9	BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Patagonia	0	0	0	0	5202	0	0	0	0	5202	4.00	20807
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	5202	0	0	0	0	5202		20807
COUNTY: YAVAPAI												
Lake	1	2	3	4	5	6	7	8	9	BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 28: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (30 DAY DATA)

COUNTY: YUMA Lake	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
	1	2	3	4	5	6	7	8	9			
Martinez Lake	6378	6500	0	0	55484	0	0	0	0	68363	5.59	382435
Mittry	0	0	0	4712	0	0	0	0	0	4712	2.00	9424
Squaw Lake	0	0	0	7068	0	0	0	0	0	7068	5.00	35339
TOTAL	6378	6500	0	11780	55484	0	0	0	0	80143		427198

TABLE 29: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (30 DAY DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS	
Lake	1	2	3	4	5	6	7	8	9				
Becker	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS	
Lake	1	2	3	4	5	6	7	8	9				
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS	
Lake	1	2	3	4	5	6	7	8	9				
Ashurst	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	0	0	0	0	10057	0	0	0	0	0	10057	5.00	50283
Lees Ferry	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Long	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	651	0	0	0	0	0	0	0	0	651	3.00	1954
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	651	0	0	10057	0	0	0	0	0	10708		52237

TABLE 29: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (30 DAY DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg - North Martinez	0	651	0	0	0	0	0	0	0	651	4.00	2605
Lake Havasu	0	0	0	82	0	0	0	181	0	263	2.31	607
Parker Strip	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	651	0	82	0	0	0	181	0	914		
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	0	1303	0	0	0	0	0	0	0	1303	5.00	6514
Bartlett	0	0	0	0	0	0	0	0	0	0	0.00	0
Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Horseshoe	0	0	0	0	0	0	0	0	0	0	0.00	0
Pleasant	0	0	0	0	0	0	0	0	0	0	0.00	0
Saguaro	0	0	0	0	0	0	0	0	0	0	0.00	0
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	1303	0	0	0	0	0	0	0	1303	6514	
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9	DAYS	SIZE	DAYS
Alamo	0	0	0	0	0	0	0	0	0	0	0.00	0
Davis Dam/Topock	0	0	0	0	0	0	0	0	0	0	0.00	0
Grand Canyon	967	0	0	0	0	0	0	0	0	967	2.00	1934
Lake Havasu	0	0	0	736	0	0	0	1630	0	2366	2.31	5467
Lake Mead	967	8468	0	26173	38886	0	5064	13579	691	93828	3.58	335843
Lake Mohave	6769	6514	0	4499	2011	0	2532	0	0	22324	2.37	52810
Topock Gorge	0	0	0	0	0	0	0	0	0	0	0.00	0

TABLE 29: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (30 DAY DATA)

COUNTY: MOHAVE										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
BOAT CLASS												
Lake	1	2	3	4	5	6	7	8	9			
TOTAL	8703	14981	0	31408	40897	0	7596	15209	691	119485		396055
COUNTY: NAVAJO										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
BOAT CLASS												
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: PIMA										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
BOAT CLASS												
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: PINAL										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
BOAT CLASS												
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: SANTA CRUZ										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
BOAT CLASS												
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: YAVAPAI										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
BOAT CLASS												
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 29: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (30 DAY DATA)

COUNTY: YUMA Lake	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
	1	2	3	4	5	6	7	8	9			
Martinez Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
Mittry	0	0	0	0	0	0	0	0	0	0	0.00	0
Squaw Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 30: WATERCRAFT USAGE: UTAH REGISTERED BOATS (30 DAY DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	0	9993	0	14562	100380	0	0	6437	0	131372	7.49	984219
Lees Ferry	0	0	0	0	0	0	0	0	0	0	0.00	0
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	0	0	0	0	0	0	0	0	0	0.00	0
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	9993	0	14562	100380	0	0	6437	0	131372		984219

TABLE 30: WATERCRAFT USAGE: UTAH REGISTERED BOATS (30 DAY DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	0	0	0	0	0	0	0	0	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0	0
Ehrenberg	0	0	0	0	0	0	0	0	0	0	0	0
Ehrenberg - North Martinez	0	0	0	0	0	0	0	0	0	0	0	0
Lake Havasu	351	0	0	0	0	0	0	0	0	0	351	4.00
Parker Strip	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	351	0	0	0	0	0	0	0	0	0	351	1405
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	0	0	0	0	0	0	0	0	0	0	0	0
Bartlett	0	0	0	0	0	0	0	0	0	0	0	0
Canyon	0	0	0	0	0	0	0	0	0	0	0	0
Horseshoe	0	0	0	0	0	0	0	0	0	0	0	0
Pleasant	0	0	0	0	0	0	0	0	0	0	0	0
Saguaro	0	0	0	0	0	0	0	0	0	0	0	0
Salt River	0	0	0	0	0	0	0	0	0	0	0	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0	0
Verde River	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0	0
Davis Dam/Topock	0	0	0	0	0	0	0	0	0	0	0	0
Grand Canyon	0	0	0	0	0	0	0	0	0	0	0	0
Lake Havasu	3162	0	0	0	0	0	0	0	0	0	3162	4.00
Lake Mead	0	0	0	0	0	0	0	0	0	0	0	0
Lake Mohave	0	0	0	0	0	0	0	0	0	0	0	0
Topock Gorge	0	0	0	0	7873	0	0	0	0	0	7873	5.00

TABLE 30: WATERCRAFT USAGE: UTAH REGISTERED BOATS (30 DAY DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
TOTAL	3162	0	0	0	7873	0	0	0	0	11035		52014
COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 30: WATERCRAFT USAGE: UTAH REGISTERED BOATS (30 DAY DATA)

COUNTY: YUMA	BOAT CLASS										BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9				
Martinez Lake	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Mittry	0	0	0	0	0	0	0	0	0	0	0	0.00	0
Squaw Lake	0	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	

6.2 12 Month Data Set

The next series of tables (Table 31 to Table 39) present the boat and person use data on the 12 month data set.

TABLE 31: BOAT USE DAYS BY COUNTY –
OVERALL SUMMARY (12 MONTH DATA)

	<u>2012</u>		<u>2009</u>		<u>2006</u>	
	Total	%	Total	%	Total	%
Mohave	853,242	53.8%	526,846	46.3%	294,486	47.4%
La Paz	229,792	14.5	168,485	14.8	277,188	14.6
Maricopa	221,262	14.0	152,534	13.4	294,486	15.5
Coconino	134,991	8.5	158,600	14.0	209,855	11.1
Gila	58,873	3.7	55,291	4.9	89,784	4.7
Yuma	38,634	2.4	32,053	2.8	72,509	3.8
Apache	20,174	1.3	18,011	1.6	23,767	1.3
Cochise	10,563	.7	7,782	.7	9,968	.5
Navajo	6,715	.4	10,332	.9	8,523	.4
Santa Cruz	4,792	.3	4,983	.4	7,497	.4
Pinal	2,234	.2	0	0	638	*
Pima	1,993	.1	1,812	.2	1,379	.1
Graham	1,118	.1	0	0	1,675	.1
Yavapai	0	0	871	*	678	*
Greenlee	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	1,584,291	100.0%	1,137,600	100.0%	1,896,383	100.0%

*Indicates % less than .1

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TABLE 32: PERSON USE DAYS BY COUNTY –  
OVERALL SUMMARY (12 MONTH DATA)

|            | <u>2012</u>  |          | <u>2009</u>  |          | <u>2006</u>  |          |
|------------|--------------|----------|--------------|----------|--------------|----------|
|            | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> | <u>Total</u> | <u>%</u> |
| Mohave     | 4,411,497    | 55.3%    | 2,921,133    | 47.6%    | 4,788,074    | 51.8%    |
| La Paz     | 1,246,498    | 15.6     | 984,457      | 16.0     | 1,170,867    | 12.7     |
| Coconino   | 907,902      | 11.4     | 1,140,934    | 18.6     | 1,325,507    | 14.3     |
| Maricopa   | 830,714      | 10.4     | 610,799      | 10.0     | 1,159,392    | 12.5     |
| Gila       | 237,838      | 3.0      | 210,884      | 3.4      | 307,145      | 3.3      |
| Yuma       | 152,860      | 1.9      | 113,664      | 1.9      | 292,870      | 3.2      |
| Apache     | 76,912       | 1.0      | 64,268       | 1.0      | 86,435       | .9       |
| Cochise    | 51,800       | .7       | 41,148       | .7       | 45,300       | .5       |
| Navajo     | 23,637       | .3       | 25,026       | .4       | 24,219       | .3       |
| Santa Cruz | 19,327       | .2       | 15,405       | .3       | 29,300       | .3       |
| Pima       | 7,085        | .1       | 4,969        | .1       | 3,578        | *        |
| Pinal      | 5,043        | .1       | 0            | 0        | 1,277        | *        |
| Graham     | 2,812        | *        | 0            | 0        | 4,187        | *        |
| Yavapai    | 0            | 0        | 2,676        | *        | 1,555        | *        |
| Greenlee   | <u>0</u>     | <u>0</u> | <u>0</u>     | <u>0</u> | <u>0</u>     | <u>0</u> |
| TOTAL      | 7,973,925    | 100.0%   | 6,135,364    | 100.0%   | 9,239,705    | 100.0%   |

\*Indicates % less than .1

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TABLE 33: BOAT USE DAYS BY COUNTY AND STATE (12 MONTH DATA)

COUNTY	TOTAL	Arizona	California	Nevada	Utah
Mohave	853,242	377,347	38,5601	86,246	4,048
La Paz	229,702	105,924	121,683	1,866	230
Maricopa	221,262	201,569	19,323	369	0
Coconino	134,991	56,542	21,956	5,758	50,734
Gila	58,873	56,341	2,253	279	0
Yuma	38,634	25,048	13,586	0	0
Apache	20,174	19,307	867	0	0
Cochise	10,563	2,970	7,593	0	0
Navajo	6,715	3,434	0	0	3,280
Santa Cruz	4,792	4,792	0	0	0
Pinal	2,234	2,234	0	0	0
Pima	1,993	548	1,445	0	0
Graham	1,118	1,118	0	0	0
Yavapai	0	0	0	0	0
TOTAL – 2012	1,584,291	857,173	574,307	94,519	58,292
TOTAL – 2009	1,137,600	598,987	409,616	54,341	74,656
TOTAL – 2006	1,896,383	982,614	766,523	56,445	90,801

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TABLE 34: PERSON USE DAYS BY COUNTY AND STATE (12 MONTH DATA)

| COUNTY       | TOTAL     | Arizona   | California | Nevada  | Utah    |
|--------------|-----------|-----------|------------|---------|---------|
| Mohave       | 4,411,497 | 1,846,862 | 2,187,768  | 360360  | 16,507  |
| La Paz       | 1246,498  | 521,853   | 710,619    | 13223   | 804     |
| Maricopa     | 830,714   | 796,817   | 32,522     | 1375    | 0       |
| Coconino     | 907,902   | 321,438   | 204,015    | 24786   | 357,663 |
| Gila         | 237,838   | 230,959   | 5,761      | 1117    | 0       |
| Yuma         | 152,860   | 115,786   | 37,075     | 0       | 0       |
| Apache       | 76,912    | 71,710    | 5,202      | 0       | 0       |
| Cochise      | 51,800    | 14,055    | 37,745     | 0       | 0       |
| Navajo       | 23,637    | 10,516    | 0          | 0       | 13,122  |
| Santa Cruz   | 19,327    | 19,327    | 0          | 0       | 0       |
| Pinal        | 5,043     | 5,043     | 0          | 0       | 0       |
| Pima         | 7,085     | 1,306     | 5,780      | 0       | 0       |
| Graham       | 2,812     | 2,812     | 0          | 0       | 0       |
| Yavapai      | 0         | 0         | 0          | 0       | 0       |
| TOTAL – 2012 | 7,973,925 | 3,958,483 | 3,226,486  | 400,861 | 388,096 |
| TOTAL – 2009 | 6,135,364 | 2,680,873 | 2,547,494  | 256,873 | 650,123 |
| TOTAL – 2006 | 9,239,705 | 4,226,066 | 4,090,959  | 226,185 | 696,496 |

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TABLE 35: WATERCRAFT USE BY SPECIFIC
LAKES/RIVERS (12 MONTH DATA)

LAKE	BOAT USE DAYS	PERSON USE DAYS
Lake Havasu	574,877	2,923,667
Lake Mohave	160,308	925,569
Parker Strip	132,789	791,602
Lake Powell	119,697	863,447
Lake Mead	119,311	605,593
Canyon	70,587	244,420
Roosevelt	57,755	235,026
Pleasant	52,132	205,757
Saguaro	43,536	173,139
Bartlett	42,073	154,903
Davis Dam/Topock	36,241	160,569
Martinez Lake	26,885	123,147
Ehrenberg	19,687	78,326
Ehrenberg North Martinez	15,158	69,947
Topock Gorge	14,158	67,615
Mittry	10,889	25,056
Apache	10,729	46,401
Parker Canyon	10,563	51,800
Alamo	9,159	28,515
Big	7,449	23,285
Woods Canyon	4,324	11,884
Concho	3,727	14,803
Willow Springs	3,707	9,424
Patagonia	3,676	12,632
Rainbow	3,564	13,823
San Carlos	3,355	8,436
Blue Ridge	3,191	8,884
Crescent	3,062	13,109
Lees Ferry	1,665	4,813
Sunrise	1,655	8,147
Silverbell	1,445	5,780
Grand Canyon	1,256	6,592
Picacho Reservoir	1,116	2,231
Pena Blanca	1,116	6694
Cooley	1,102	4,409
Tempe Town	1,087	3,372
Mexican Hay	1,028	5,524
Becker	975	5,201
Cataract	882	5,291
Squaw Lake	860	4,657
Show Low	773	1,824
Reservation	772	3,088
Luna	765	2,221
Horseshoe	670	1,421

(CONTINUED)

(CONT.) TABLE 35: WATERCRAFT USE BY SPECIFIC
LAKES/RIVERS (12 MONTH DATA)

Upper Lake Mary	599	954
Arivaca	548	1,306
Nelson Reservoir	528	1,056
Black Canyon	521	1,340
Salt River	447	1,300
White Mtn	389	778
Fools Hollow	366	1,463
Bear Canyon	289	1,445
Kaibab	223	893
Hawley	214	478
Knoll	163	325
Dogtown	129	298
Mormon	122	244
Clear Creek	<u>0</u>	<u>0</u>
TOTAL	1,584,291	7,973,925

TABLE 36: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Becker	975	0	0	0	0	0	0	0	0	975	5.33	5201
Big	4794	0	0	2566	88	0	0	0	0	7449	3.13	23285
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	3623	104	0	0	0	0	0	0	3727	3.97	14803
Crescent	1016	0	261	1785	0	0	0	0	0	3062	4.28	13109
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	81	0	0	0	132	0	0	0	0	214	2.24	478
Luna	691	0	0	74	0	0	0	0	0	765	2.90	2221
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	161	0	0	0	0	0	0	0	161	2.00	322
Nelson Reservoir	528	0	0	0	0	0	0	0	0	528	2.00	1056
Reservation	772	0	0	0	0	0	0	0	0	772	4.00	3088
Sunrise	813	805	0	37	0	0	0	0	0	1655	4.92	8147
TOTAL	9670	4589	365	4463	220	0	0	0	0	19307		71710
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	488	1650	0	74	617	0	0	140	0	2970	4.73	14055
TOTAL	488	1650	0	74	617	0	0	140	0	2970		14055
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	2763	0	0	186	0	0	0	0	0	2949	2.77	8156
Cataract	0	0	0	0	882	0	0	0	0	882	6.00	5291
Dogtown	41	0	0	0	88	0	0	0	0	129	2.32	298
Kaibab	0	0	0	223	0	0	0	0	0	223	4.00	893
Knoll	163	0	0	0	0	0	0	0	0	163	2.00	325
Lake Powell	1828	9378	0	5318	11463	0	3969	11906	0	43863	6.52	286113
Lees Ferry	81	121	0	0	0	0	0	0	0	202	2.00	404
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	122	0	0	0	0	0	0	0	0	122	2.00	244
Upper Lake Mary	488	0	0	112	0	0	0	0	0	599	1.59	954
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	2560	161	0	372	265	0	0	0	0	3357	2.53	8502
Woods Canyon	2885	0	574	595	0	0	0	0	0	4054	2.53	10259
TOTAL	10929	9660	574	6806	12698	0	3969	11906	0	56542		321438

TABLE 36: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	6338	3904	156	32653	6129	34	219	5790	0	55223	4.13	228147
San Carlos	555	67	0	496	0	0	0	0	0	1118	2.51	2812
TOTAL	6894	3971	156	33149	6129	34	219	5790	0	56341		230959
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	555	67	0	496	0	0	0	0	0	1118	2.51	2812
TOTAL	555	67	0	496	0	0	0	0	0	1118		2812
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	1016	20	0	1525	0	0	0	0	0	2561	2.87	7360
Ehrenberg	122	684	0	5579	1499	0	0	0	0	7884	3.39	26747
Ehrenberg - North Martinez	0	403	0	2752	1411	0	0	0	0	4565	4.37	19963
Parker Strip	203	27491	104	6620	21119	0	219	700	0	56457	5.31	299666
TOTAL	1341	28598	104	16475	24029	0	219	700	0	71467		353736
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	DAYS	SIZE	DAYS	6	7	8	9			
Apache	650	3180	652	4537	1190	0	384	0	0	10594	4.33	45859
Bartlett	3982	3623	0	14504	13977	0	549	4202	0	40836	3.67	149667
Canyon	3129	25357	0	9446	11860	168	2926	327	0	53214	4.14	220275
Horseshoe	325	81	0	0	265	0	0	0	0	670	2.12	1421
Pleasant	8004	5675	782	20417	13492	1312	201	1541	50	51475	3.94	202939
Saguaro	4754	2978	339	16884	17856	202	0	233	0	43247	3.98	171983
Salt River	41	0	0	186	220	0	0	0	0	447	2.91	1300
Tempe Town	975	0	0	112	0	0	0	0	0	1087	3.10	3372
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	21859	40894	1773	66087	58860	1682	4060	6303	50	201569		796817
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	DAYS	SIZE	DAYS	6	7	8	9			
Alamo	1016	20	0	1525	0	0	0	0	0	2561	2.87	7360
Davis Dam/Topock	0	2777	0	669	10758	0	0	0	0	14205	4.64	65930
Grand Canyon	284	81	0	149	309	0	0	0	0	822	6.43	5291
Lake Havasu	20396	110084	0	36521	142543	202	3493	31329	0	344568	4.88	1681169
Lake Mead	163	1650	0	558	7892	101	585	233	0	11182	5.29	59189
Lake Mohave	528	11270	0	2083	15431	101	348	2615	0	32375	5.25	169942
Topock Gorge	1219	1610	0	0	2293	0	969	0	0	6091	4.28	26097

TABLE 36: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
TOTAL	23606	127492	0	41504	179226	404	5396	34177	0	411804		2014978
COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	DAYS	SIZE	DAYS	6	7	8	9	DAYS	SIZE	DAYS
Black Canyon	447	0	0	74	0	0	0	0	0	521	2.57	1340
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	1102	0	0	0	0	1102	4.00	4409
Fools Hollow	366	0	0	0	0	0	0	0	0	366	4.00	1463
Rainbow	0	0	0	149	0	135	0	0	0	283	2.47	701
Show Low	163	0	52	558	0	0	0	0	0	773	2.36	1824
White Mtn	203	0	0	186	0	0	0	0	0	389	2.00	778
TOTAL	1178	0	52	967	1102	135	0	0	0	3434		10516
COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	DAYS	SIZE	DAYS	6	7	8	9			
Arivaca	163	0	0	298	88	0	0	0	0	548	2.38	1306
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	163	0	0	298	88	0	0	0	0	548		1306
COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	DAYS	SIZE	DAYS	6	7	8	9			
Picacho Reservoir	0	0	0	1116	0	0	0	0	0	1116	2.00	2231
San Carlos	555	67	0	496	0	0	0	0	0	1118	2.51	2812
TOTAL	555	67	0	1612	0	0	0	0	0	2234		5043
COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	1300	604	104	1227	441	0	0	0	0	3676	3.44	12632
Pena Blanca	0	0	0	1116	0	0	0	0	0	1116	6.00	6694
TOTAL	1300	604	104	2343	441	0	0	0	0	4792		19327
COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 36: WATERCRAFT USAGE: ARIZONA REGISTERED BOATS (12 MONTH DATA)

COUNTY: YUMA Lake	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
	1	2	3	4	5	6	7	8	9			
Martinez Lake	2438	2375	0	2715	12169	0	0	2801	0	22498	4.64	104469
Mittry	81	0	0	595	1014	0	0	0	0	1690	3.94	6660
Squaw Lake	41	81	0	298	441	0	0	0	0	860	5.42	4657
TOTAL	2560	2455	0	3607	13624	0	0	2801	0	25048		115786

TABLE 37: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	867	0	0	0	0	867	6.00	5202
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	867	0	0	0	0	867		5202
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			DAYS
Parker Canyon	0	5281	0	0	2312	0	0	0	0	7593	4.97	37745
TOTAL	0	5281	0	0	2312	0	0	0	0	7593		37745
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	DAYS
Lake	1	2	3	4	5	6	7	8	9			DAYS
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	289	0	0	0	0	289	5.00	1445
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	0	6906	0	393	11415	229	932	481	0	20356	9.75	198500
Lees Ferry	0	271	404	0	0	229	0	0	0	905	2.40	2174
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	135	0	0	0	0	0	0	0	135	2.00	271
Woods Canyon	0	271	0	0	0	0	0	0	0	271	6.00	1625
TOTAL	0	7584	404	393	11704	459	932	481	0	21956		204015

TABLE 37: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	1571	0	574	108	0	0	2253	2.56	5761
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	1571	0	574	108	0	0	2253		5761
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	1329	0	101	589	0	0	0	0	0	2019	3.42	6898
Ehrenberg	0	7313	0	589	3901	0	0	0	0	11803	4.37	51579
Ehrenberg - North Martinez	0	948	0	0	9536	0	0	0	0	10484	4.73	49549
Parker Strip	2303	34803	657	0	37278	0	0	0	0	75042	6.41	481374
TOTAL	3632	43064	758	1178	50716	0	0	0	0	99348		589401
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Apache	0	135	0	0	0	0	0	0	0	135	4.00	542
Bartlett	0	948	0	0	289	0	0	0	0	1237	4.23	5237
Canyon	15946	1354	0	0	0	0	0	0	73	17374	1.39	24145
Horseshoe	0	0	0	0	0	0	0	0	0	0	0.00	0
Pleasant	0	0	0	0	0	0	0	289	0	289	5.00	1443
Saguaro	0	0	0	0	289	0	0	0	0	289	4.00	1156
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	15946	2438	0	0	578	0	0	289	73	19323		32522
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Alamo	1329	0	101	589	0	0	0	0	0	2019	3.42	6898
Davis Dam/Topock	2658	14896	0	0	2745	0	0	0	0	20299	4.53	92033
Grand Canyon	0	0	0	0	433	0	0	0	0	433	3.00	1300
Lake Havasu	3898	111992	1769	17277	78025	1434	1474	6636	842	223347	5.43	1212182
Lake Mead	0	19771	708	5301	9681	115	0	385	0	35960	6.76	242988
Lake Mohave	2658	51324	0	5301	55340	631	152	2405	0	117810	6.04	712067
Topock Gorge	0	3250	556	393	578	3098	0	192	0	8067	5.15	41518

TABLE 37. WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
TOTAL	10542	201234	3133	28861	146802	5278	1626	9618	842	407936		2308986
COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	1445	0	0	0	0	1445	4.00	5780
TOTAL	0	0	0	0	1445	0	0	0	0	1445		5780
COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 37: WATERCRAFT USAGE: CALIFORNIA REGISTERED BOATS (12 MONTH DATA)

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Martinez Lake	2658	271	303	0	1156	0	0	0	0	4388	4.26	18678
Mittry	0	0	9198	0	0	0	0	0	0	9198	2.00	18397
Squaw Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	2658	271	9502	0	1156	0	0	0	0	13586		37075

TABLE 38: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	0	0	0	0	0	0	0	0.00	0
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	0	1194	0	1568	1620	0	0	604	0	4986	4.39	21900
Lees Ferry	0	0	0	0	559	0	0	0	0	559	4.00	2235
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	0	0	102	112	0	0	0	0	214	3.04	651
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	1194	0	1670	2291	0	0	604	0	5758		24786

TABLE 38: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Roosevelt	0	0	0	0	279	0	0	0	0	279	4.00	1117
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	279	0	0	0	0	279		1117
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg - North Martinez	0	109	0	0	0	0	0	0	0	109	4.00	434
Parker Strip	0	1140	0	0	0	0	0	151	0	1291	8.18	10561
TOTAL	0	1248	0	0	0	0	0	151	0	1399		10995
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Apache	0	0	0	0	0	0	0	0	0	0	0.00	0
Bartlett	0	0	0	0	0	0	0	0	0	0	0.00	0
Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Horseshoe	0	0	0	0	0	0	0	0	0	0	0.00	0
Pleasant	0	0	0	34	335	0	0	0	0	369	3.72	1375
Saguaro	0	0	0	0	0	0	0	0	0	0	0.00	0
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	34	335	0	0	0	0	369		1375
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0.00	0
Davis Dam/Topock	0	1737	0	0	0	0	0	0	0	1737	1.50	2605
Grand Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Havasu	0	1791	0	307	1285	0	0	1282	0	4665	4.78	22279
Lake Mead	1531	24046	0	5044	29108	163	0	10788	0	70680	4.18	295619
Lake Mohave	524	6296	0	1022	1788	0	0	0	0	9630	4.37	42084
Topock Gorge	0	0	0	0	0	0	0	0	0	0	0.00	0

TABLE 38: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
TOTAL	2055	33871	0	6373	32181	163	0	12070	0	86713		362588
COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	0	0	0	0	0	0	0.00	0
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9	DAYS	SIZE	DAYS
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 38: WATERCRAFT USAGE: NEVADA REGISTERED BOATS (12 MONTH DATA)

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1				5	6	7	8	9			
Martinez Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
Mittry	0	0	0	0	0	0	0	0	0	0	0.00	0
Squaw Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 39: WATERCRAFT USAGE: UTAH REGISTERED BOATS (12 MONTH DATA)

COUNTY: APACHE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Becker	0	0	0	0	0	0	0	0	0	0	0.00	0
Big	0	0	0	0	0	0	0	0	0	0	0.00	0
Bunch	0	0	0	0	0	0	0	0	0	0	0.00	0
Concho	0	0	0	0	0	0	0	0	0	0	0.00	0
Crescent	0	0	0	0	0	0	0	0	0	0	0.00	0
Drift Fence	0	0	0	0	0	0	0	0	0	0	0.00	0
Hawley	0	0	0	0	0	0	0	0	0	0	0.00	0
Luna	0	0	0	0	0	0	0	0	0	0	0.00	0
Lyman	0	0	0	0	0	0	0	0	0	0	0.00	0
Mexican Hay	0	0	0	0	0	0	0	0	0	0	0.00	0
Nelson Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
Reservation	0	0	0	0	0	0	0	0	0	0	0.00	0
Sunrise	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: COCHISE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Parker Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: COCONINO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Ashurst	0	0	0	0	0	0	0	0	0	0	0.00	0
Bear Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Blue Ridge	0	0	0	243	0	0	0	0	0	243	3.00	728
Cataract	0	0	0	0	0	0	0	0	0	0	0.00	0
Dogtown	0	0	0	0	0	0	0	0	0	0	0.00	0
Kaibab	0	0	0	0	0	0	0	0	0	0	0.00	0
Knoll	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Powell	2342	13046	0	6917	19682	572	3015	4917	0	50492	7.07	356935
Lees Ferry	0	0	0	0	0	0	0	0	0	0	0.00	0
Long	0	0	0	0	0	0	0	0	0	0	0.00	0
Mormon	0	0	0	0	0	0	0	0	0	0	0.00	0
Upper Lake Mary	0	0	0	0	0	0	0	0	0	0	0.00	0
Whitehorse	0	0	0	0	0	0	0	0	0	0	0.00	0
Willow Springs	0	0	0	0	0	0	0	0	0	0	0.00	0
Woods Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	2342	13046	0	7160	19682	572	3015	4917	0	50734		357663

TABLE 39: WATERCRAFT USAGE: UTAH REGISTERED BOATS (12 MONTH DATA)

COUNTY: GILA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roosevelt	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: GRAHAM	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Roper	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: LA PAZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg	0	0	0	0	0	0	0	0	0	0	0.00	0
Ehrenberg - North Martinez	0	0	0	0	0	0	0	0	0	0	0.00	0
Parker Strip	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: MARICOPA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Apache	0	0	0	0	0	0	0	0	0	0	0.00	0
Bartlett	0	0	0	0	0	0	0	0	0	0	0.00	0
Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Horseshoe	0	0	0	0	0	0	0	0	0	0	0.00	0
Pleasant	0	0	0	0	0	0	0	0	0	0	0.00	0
Saguaro	0	0	0	0	0	0	0	0	0	0	0.00	0
Salt River	0	0	0	0	0	0	0	0	0	0	0.00	0
Tempe Town	0	0	0	0	0	0	0	0	0	0	0.00	0
Verde River	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Alamo	0	0	0	0	0	0	0	0	0	0	0.00	0
Davis Dam/Topock	0	0	0	0	0	0	0	0	0	0	0.00	0
Grand Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Lake Havasu	0	0	0	0	2296	0	0	0	0	2296	3.50	8037
Lake Mead	0	833	0	0	656	0	0	0	0	1489	5.24	7797
Lake Mohave	0	0	0	0	492	0	0	0	0	492	3.00	1476
Topock Gorge	0	0	0	0	0	0	0	0	0	0	0.00	0

TABLE 39: WATERCRAFT USAGE: UTAH REGISTERED BOATS (12 MONTH DATA)

COUNTY: MOHAVE	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
TOTAL	0	833	0	0	3444	0	0	0	0	4277		17311
COUNTY: NAVAJO	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Black Canyon	0	0	0	0	0	0	0	0	0	0	0.00	0
Cholla	0	0	0	0	0	0	0	0	0	0	0.00	0
Clear Creek	0	0	0	0	0	0	0	0	0	0	0.00	0
Cooley	0	0	0	0	0	0	0	0	0	0	0.00	0
Fools Hollow	0	0	0	0	0	0	0	0	0	0	0.00	0
Rainbow	0	0	0	0	3280	0	0	0	0	3280	4.00	13122
Show Low	0	0	0	0	0	0	0	0	0	0	0.00	0
White Mtn	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	3280	0	0	0	0	3280		13122
COUNTY: PIMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Arivaca	0	0	0	0	0	0	0	0	0	0	0.00	0
Silverbell	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: PINAL	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Picacho Reservoir	0	0	0	0	0	0	0	0	0	0	0.00	0
San Carlos	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: SANTA CRUZ	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Patagonia	0	0	0	0	0	0	0	0	0	0	0.00	0
Pena Blanca	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0
COUNTY: YAVAPAI	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
Lake	1	2	3	4	5	6	7	8	9			
Goldwater	0	0	0	0	0	0	0	0	0	0	0.00	0
Lynx	0	0	0	0	0	0	0	0	0	0	0.00	0
Watson	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

TABLE 39: WATERCRAFT USAGE: UTAH REGISTERED BOATS (12 MONTH DATA)

COUNTY: YUMA	BOAT CLASS									BOAT USE DAYS	MEAN PARTY SIZE	PERSON USE DAYS
	1	2	3	4	5	6	7	8	9			
Lake												
Martinez Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
Mitry	0	0	0	0	0	0	0	0	0	0	0.00	0
Squaw Lake	0	0	0	0	0	0	0	0	0	0	0.00	0
TOTAL	0	0	0	0	0	0	0	0	0	0		0

6.3 Combined Data Set

The next series of tables (Table 40 to Table 41) present the boat and person use days based on the combined two-week data and 12-month data sets. As may be seen, Mohave, Maricopa, La Paz and Counties generate the highest boat use and person use figures.

TABLE 40: BOAT USE DAYS AND PERSON USE DAYS
BY COUNTY (COMBINED 30 DAY/12 MONTH DATA)

	<u>BOAT USE DAYS</u>		<u>PERSON USE DAYS</u>	
	<u>Total</u>	<u>%</u>	<u>Total</u>	<u>%</u>
Mohave	2,305,791	52	11,474,415	54
Maricopa	761,765	17	2,868,728	13
La Paz	501,879	11	2,575,795	12
Coconino	447,697	10	2,734,142	13
Gila	177,941	4	652,055	3
Yuma	162,019	4	719,850	3
Apache	35,335	1	133,845	1
Navajo	19,057	*	54,890	*
Santa Cruz	18,936	*	67,349	*
Cochise	15,246	*	65,513	*
Pinal	6,540	*	14,873	*
Pima	3,939	*	11,464	*
Graham	2,526	*	6,846	*
Yavapai	<u>488</u>	<u>*</u>	<u>975</u>	<u>*</u>
TOTAL	4,459,157	100%	21,380,740	100%

*Indicates % less than .5

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TABLE 41: WATERCRAFT USE BY SPECIFIC LAKES/RIVERS  
(COMBINED 30 DAY/12 MONTH DATA)

| <u>Lake</u>                | <u>Boat Use<br/>Days</u> | <u>Person Use<br/>Days</u> |
|----------------------------|--------------------------|----------------------------|
| Lake Havasu                | 1,475,589                | 7,309,783                  |
| Lake Mohave                | 487,233                  | 2,361,749                  |
| Lake Powell                | 381,903                  | 2,494,918                  |
| Lake Mead                  | 310,475                  | 1,586,200                  |
| Parker Strip               | 268,422                  | 1,525,892                  |
| Saguaro                    | 211,702                  | 783,428                    |
| Pleasant<br>Canyon         | 203,704                  | 760,782                    |
| Roosevelt                  | 175,468                  | 678,895                    |
| Bartlett                   | 175,415                  | 645,209                    |
| Martinez Lake              | 123,613                  | 423,434                    |
| Davis Dam/Topock           | 106,971                  | 548,147                    |
| Topock Gorge               | 106,876                  | 610,881                    |
| Ehrenberg                  | 59,364                   | 297,298                    |
| Apache                     | 47,114                   | 168,344                    |
| Mittry                     | 43,123                   | 213,699                    |
| Ehrenberg - North Martinez | 31,655                   | 70,821                     |
| Squaw Lake                 | 27,194                   | 119,625                    |
| Alamo                      | 23,393                   | 100,882                    |
| Lees Ferry                 | 23,180                   | 61,913                     |
| Parker Canyon              | 18,907                   | 92,946                     |
| Patagonia                  | 15,246                   | 65,513                     |
| Long                       | 14,440                   | 43,750                     |
| Big                        | 13,835                   | 55,339                     |
| Willow Springs             | 13,299                   | 45,225                     |
| San Carlos                 | 10,209                   | 24,542                     |
| San Carlos                 | 7,578                    | 20,538                     |
| San Carlos                 | 7,578                    | 20,538                     |
| Cresent                    | 5,960                    | 31,946                     |
| Fools Hollow               | 5,701                    | 19,149                     |
| Blue Ridge                 | 5,614                    | 13,728                     |
| Rainbow                    | 4,903                    | 17,839                     |
| Dogtown                    | 4,841                    | 9,722                      |
| Woods Canyon               | 4,812                    | 12,859                     |
| Show Low                   | 4,655                    | 9,588                      |
| Pena Blanca                | 4,497                    | 23,599                     |
| Picacho Reservoir          | 4,014                    | 8,027                      |

(CONTINUED)

(CONT'D) TABLE 41: WATERCRAFT USE BY SPECIFIC LAKES/RIVERS

(COMBINED 30 DAY/12 MONTH DATA)

| <u>Lake</u>      | <u>Boat Use<br/>Days</u> | <u>Person Use<br/>Days</u> |
|------------------|--------------------------|----------------------------|
| Concho           | 3,727                    | 14,803                     |
| Reservation      | 2,796                    | 7,136                      |
| Hawley           | 2,651                    | 7,791                      |
| Knoll            | 2,578                    | 12,400                     |
| Silverbell       | 2,420                    | 8,705                      |
| Black Canyon     | 2,306                    | 3,126                      |
| Grand Canyon     | 2,223                    | 8,525                      |
| Sunrise          | 2,101                    | 9,932                      |
| Cataract         | 1,940                    | 9,523                      |
| Upper Lake Mary  | 1,938                    | 3,632                      |
| Tempe Town       | 1,616                    | 3,901                      |
| Nelson Reservoir | 1,586                    | 3,173                      |
| Arivaca          | 1,519                    | 2,759                      |
| Salt River       | 1,422                    | 2,276                      |
| Becker           | 1,421                    | 6,093                      |
| Horseshoe        | 1,116                    | 2,314                      |
| Cooley           | 1,102                    | 4,409                      |
| Mexican Hay      | 1,028                    | 5,524                      |
| Luna             | 765                      | 2,221                      |
| Kaibab           | 711                      | 2,843                      |
| Goldwater        | 488                      | 975                        |
| White Mtn        | 389                      | 778                        |
| Bear Canyon      | 289                      | 1,445                      |
| Mormon           | 122                      | 244                        |
| Watson           | <u>0</u>                 | <u>0</u>                   |
| TOTAL            | 4,459,157                | 21,380,740                 |

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7.0 ADDITIONAL BOATING DATA

This final section of the report presents a variety of attitudinal and behavioral data regarding boat usage. When reading this section, keep in mind that all of the data presented has been computer weighted so that each state and boat classification properly represents its proportional contribution to overall boat registrations in the four-state sample universe.

7.1 Trip Expenditures

The average expenditure for a boating trip in Arizona is \$316 – up slightly from \$302 in 2009. The typical Arizona boater spends \$235 per trip compared to \$421 for California boaters, \$125 for Nevada boaters and \$238 for Utah boaters.

TABLE 42: TRIP EXPENDITURES

“On your last boating trip in Arizona during the (FIRST/LAST) two weeks of (MONTH), how much money did you and the other members of your boating party spend on the following items?”

	% SPENDING MONEY ON ITEM	MEDIAN DAILY EXPENDITURE (AMONG THOSE SPENDING ON ITEM)
For food and beverages purchased at retail stores	79%	\$110
For equipment rental, tackle, bait and gasoline	77	105
At restaurants and bars	57	135
For entry fees or permits	55	32
For overnight lodging at hotels and motels	23	238
For gifts, souvenirs, clothing and other personal items	20	105
For any other items directly related to your boating trip which I haven't mentioned	18	142
TOTAL SPENDING ¹	94%	\$316
Arizona	96	235
California	94	421
Nevada	74	125
Utah	100	238

¹Note: Total is an independent, combined expenditure figure, not a total for the 7 selected items.

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## 7.2 Boating and Water-Based Recreational Facilities Most Needed

Boat owners were asked to indicate the most needed facilities and the most needed services at their favorite lake. Response to these two questions was very similar so they were combined on the following table for analysis. As may be seen, public restrooms (19%) and launch ramps (18%) continue to receive the greatest mention from boaters. Also receiving sizeable response are increased law enforcement (8%), marinas (7%), restaurants/bars (7%), gas stations (6%) and concessions that sell food, drinks, tackle and the like (6%). Forty-three percent of boaters indicate there are no additional facilities or services needed at their favorite lake.

TABLE 43: BOATING AND WATER-BASED  
RECREATIONAL FACILITIES/SERVICES NEEDED

“What would you say are the two or three most needed facilities at (LAKE/RIVER)?”

“And what would you say are the two or three most needed services at (LAKE/RIVER)?”

|                                        | <u>TOTAL</u> |            |            |
|----------------------------------------|--------------|------------|------------|
|                                        | 2012         | 2009       | 2006       |
| <b>None</b>                            | <b>43%</b>   | <b>32%</b> | <b>31%</b> |
| Public restrooms                       | 19           | 23         | 21         |
| Launch ramps                           | 18           | 20         | 24         |
| More law enforcement                   | 8            | 10         | 10         |
| Marinas                                | 7            | 9          | 10         |
| Restaurants/bars                       | 7            | 7          | 7          |
| Gas stations                           | 6            | 8          | 9          |
| Concessions                            | 6            | 8          | 9          |
| Parking facilities                     | 5            | 6          | 6          |
| Courtesy docks                         | 5            | 5          | 6          |
| Boat gas dock                          | 4            | 3          | 5          |
| First aid stations/emergency personnel | 4            | 1          | *          |
| Campgrounds                            | 3            | 4          | 8          |
| Hotel/motel                            | 2            | 2          | 4          |
| Beaches                                | 2            | 2          | 4          |
| Trash dumpsters                        | 2            | 2          | 2          |
| Less litter/cleaner                    | 1            | 2          | 2          |
| Improved access roads                  | 1            | 2          | 3          |
| Picnic areas and facilities            | 1            | 2          | 1          |
| Sanitary dump stations                 | 1            | 1          | 2          |
| RV park/hookups                        | 1            | 1          | 2          |
| Showers                                | 1            | 1          | 1          |

(CONTINUED)

(CONT.) TABLE 43: BOATING AND WATER-BASED  
RECREATIONAL FACILITIES/SERVICES NEEDED

|                          | <u>Total</u> |             |             |
|--------------------------|--------------|-------------|-------------|
|                          | <u>2012</u>  | <u>2009</u> | <u>2006</u> |
| Drinking water outlets   | 1%           | 1%          | 1%          |
| Stock fish               | 1            | 1           | 1           |
| Fish cleaning station    | 1            | 1           | 1           |
| Towing service           | 1            | 1           | *           |
| Marker buoys             | 1            | 1           | *           |
| Phone service            | 1            | *           | *           |
| Campsites for boats only | *            | 1           | 1           |
| Speed limits             | *            | 1           | *           |
| Jet ski area             | *            | *           | 2           |
| Emergency phones         | *            | 2           | 1           |
| Ramadas/shaded areas     | *            | 1           | 1           |
| All others               | 11           | 7           | 8           |

\*Indicates response level of less than .5 percent  
Totals exceed 100% due to multiple responses

### 7.3 Evaluation of Water-Based Recreation Facilities

Continuing with this line of questioning, boaters were next asked to evaluate each of 22 specific boating and water-based recreational facilities at their favorite lake. As Table 44 reveals, the facility registering the highest net positive reading is access roads (+53%) followed by parking facilities for boat trailers (+48%) and parking facilities for vehicles (+47%). Two items continue to register net negative readings from one-quarter of boaters or more: emergency telephones (-30%) and drinking water outlets (-25%).

Listed below are the items that showed the greatest positive change since the last survey in 2009. Overall, improved readings are recorded on 17 items, while lower readings are recorded on only three.

LARGEST POSITIVE CHANGES

- Picnic areas and facilities – 20-point net improvement;
- Courtesy docks – 15-point net improvement;
- Concessions – 15-point net improvement;
- Sanitary dump facilities – 14-point net improvement.

TABLE 44: EVALUATION OF WATER-BASED RECREATION FACILITIES

“Now I’d like to read you a list of various boating and water-based recreational facilities. As I do, please just tell me if you would rate each as excellent, good, only fair or poor at (LAKE/RIVER)? If any of the facilities I mention aren’t located at (LAKE/RIVER), please just say so.”

|                                                                                         | Excel-<br>lent | Good | Only<br>Fair | Poor | Not<br>Sure | 2012 | 2009 | 2006 |
|-----------------------------------------------------------------------------------------|----------------|------|--------------|------|-------------|------|------|------|
| Access roads                                                                            | 16%            | 59%  | 14%          | 8%   | 3%          | 53%  | 44%  | 44%  |
| Parking facilities for boat<br>trailers                                                 | 21             | 52   | 18           | 7    | 2           | 48   | 37   | 24   |
| Parking facilities for vehicles                                                         | 17             | 56   | 20           | 6    | 1           | 47   | 39   | 28   |
| Launching ramps                                                                         | 18             | 54   | 19           | 8    | 1           | 45   | 39   | 27   |
| Campgrounds                                                                             | 16             | 48   | 14           | 8    | 14          | 42   | 33   | 28   |
| Picnic areas and facilities                                                             | 17             | 50   | 19           | 7    | 7           | 41   | 21   | 25   |
| Informational signs                                                                     | 16             | 53   | 19           | 10   | 2           | 40   | 45   | 32   |
| Swimming beaches                                                                        | 16             | 46   | 22           | 10   | 6           | 30   | 22   | 19   |
| Courtesy docks                                                                          | 12             | 48   | 22           | 13   | 5           | 25   | 10   | (1)  |
| Concessions that sell food,<br>bait, drinks, tackle, etc.                               | 13             | 46   | 22           | 14   | 5           | 23   | 8    | 10   |
| Boat gas docks                                                                          | 10             | 47   | 23           | 14   | 6           | 20   | 22   | 13   |
| Sanitary dump facilities                                                                | 11             | 39   | 17           | 13   | 20          | 20   | 6    | 1    |
| Campsites accessible by<br>boat only                                                    | 15             | 35   | 18           | 15   | 17          | 17   | 12   | 6    |
| Public restrooms                                                                        | 12             | 44   | 26           | 14   | 4           | 16   | 23   | 7    |
| Marinas with overnight<br>docking spaces, boat<br>rental, fuel and boat<br>repair, etc. | 12             | 39   | 22           | 16   | 11          | 13   | 4    | 0    |
| Picnic areas accessible by<br>boat only                                                 | 14             | 35   | 20           | 17   | 14          | 12   | 1    | (2)  |
| Fish cleaning stations                                                                  | 9              | 30   | 16           | 14   | 31          | 9    | 12   | 7    |
| Fishing piers                                                                           | 9              | 32   | 17           | 19   | 23          | 5    | (1)  | (12) |
| Trash dumpsters accessible<br>by boat                                                   | 8              | 29   | 18           | 29   | 16          | (10) | (19) | (24) |
| First-aid stations                                                                      | 6              | 21   | 15           | 27   | 31          | (15) | (12) | (16) |
| Drinking water outlets                                                                  | 4              | 22   | 22           | 29   | 23          | (25) | (27) | (28) |
| Emergency telephones                                                                    | 3              | 16   | 14           | 35   | 32          | (30) | (32) | (29) |

<sup>1</sup> Net Pos/Neg: the difference between scores for excellent/good and only fair/poor.

The next table reveals boaters' evaluations of recreation facilities by state of registration. As has been observed in the past, there is considerable variation in boaters' evaluations from state to state.

TABLE 45: EVALUATION OF WATER-BASED RECREATION FACILITIES BY STATE

|                                             | NET POSITIVE/(NEGATIVE)      |      |      |      |      |
|---------------------------------------------|------------------------------|------|------|------|------|
|                                             | <u>STATE OF REGISTRATION</u> |      |      |      |      |
|                                             | TOTAL                        | AZ   | CA   | NV   | UT   |
| Access roads                                | 53%                          | 50%  | 58%  | 32%  | 58%  |
| Parking facilities for boat trailers        | 48                           | 40   | 54   | 40   | 77   |
| Parking facilities for vehicles             | 47                           | 42   | 55   | 33   | 59   |
| Launching ramps                             | 45                           | 43   | 48   | 19   | 84   |
| Campgrounds                                 | 42                           | 37   | 50   | 20   | 53   |
| Picnic areas and facilities                 | 41                           | 42   | 46   | 20   | 27   |
| Informational signs                         | 40                           | 47   | 31   | 39   | 44   |
| Swimming beaches                            | 30                           | 17   | 46   | (2)  | 66   |
| Courtesy docks                              | 25                           | 21   | 26   | 26   | 52   |
| Concessions for food, etc.                  | 23                           | 10   | 32   | 31   | 48   |
| Boat gas docks                              | 20                           | 16   | 20   | 27   | 40   |
| Sanitary dump facilities                    | 20                           | 10   | 25   | 33   | 44   |
| Campsites accessible by boat only           | 17                           | 10   | 25   | 18   | 20   |
| Public restrooms                            | 16                           | 13   | 13   | 21   | 48   |
| Marinas with overnight docking spaces, etc. | 13                           | 5    | 16   | 29   | 48   |
| Picnic areas accessible by boat only        | 12                           | 9    | 26   | (8)  | (15) |
| Fish cleaning stations                      | 9                            | 3    | 5    | 21   | 44   |
| Fishing piers                               | 5                            | 9    | (3)  | (1)  | 28   |
| Trash dumpsters accessible by boat          | (10)                         | (13) | 0    | (9)  | (33) |
| First-aid stations                          | (15)                         | (21) | (10) | (19) | (5)  |
| Drinking water outlets                      | (25)                         | (27) | (29) | (22) | 5    |
| Emergency telephones                        | (30)                         | (34) | (27) | (36) | (25) |

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7.4 Awareness of SLIF Program

Awareness of the SLIF program has remained relatively steady at about six to eight percent over the past three studies.

TABLE 46: AWARENESS OF SLIF PROGRAM

“Next, the Arizona State Lake Improvement Fund, or SLIF, is a program designed to assist state and local governments in improving boating-related resources and facilities. Were you aware of this program before I mentioned it just now?”

	% YES		
	2012	2009	2006
<u>TOTAL</u>	6%	7%	8%
Arizona	9	10	12
California	4	5	3
Nevada	5	2	6
Utah	5	0	12

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**7.5 Utilization of SLIF Funds**

After boaters had indicated their awareness of the SLIF program, they were asked to indicate how important they felt each of its six funding functions is. As Table 47 reveals, four of the six functions continue to receive very or somewhat important readings from roughly eight out of ten boaters or more.

- The construction of recreation support facilities such as restrooms, campgrounds and picnic tables (82%);
- The construction of water-based boating facilities such as marinas, launch ramps and piers (82%);
- The construction of first-aid stations and other safety facilities (81%);
- The purchasing of law enforcement and safety equipment such as patrol boats, radios and lights (79%).

The remaining two functions – purchasing shoreline property (65%) and the development of new lakes for boating (62%) – are considered to be somewhat less important, but still are considered very or somewhat important by over six out of ten residents. These readings are down slightly from the prior studies.

TABLE 47: UTILIZATION OF SLIF FUNDS

“The SLIF program is funded with revenues from boat registration fees and motor fuel taxes and there are six water-based boating functions for which these funds might be used. As I read them to you, please just tell me if you feel each one is very important, somewhat important, not very important or not at all important.”

% VERY/SOMEWHAT

|                                                                                                    | Very | Some-<br>what | Not<br>Very | Not<br>At All | Not<br>Sure | 2012 | 2009 | 2006 |
|----------------------------------------------------------------------------------------------------|------|---------------|-------------|---------------|-------------|------|------|------|
| The construction of recreation support facilities such as restrooms, campgrounds and picnic tables | 49%  | 33%           | 12%         | 5%            | 1%          | 82%  | 86%  | 85%  |
| The construction of water-based boating facilities such as marinas, launch ramps and piers         | 47   | 35            | 12          | 5             | 1           | 82   | 83   | 86   |
| The construction of first-aid stations and other safety facilities                                 | 46   | 35            | 13          | 4             | 2           | 81   | 83   | 88   |
| The purchasing of law enforcement and safety equipment such as patrol boats, radios and lights     | 47   | 32            | 12          | 7             | 2           | 79   | 80   | 87   |
| The purchasing of shoreline property at lakes which can be used for boating access                 | 30   | 35            | 21          | 11            | 3           | 65   | 69   | 75   |
| The development of new lakes for boating use                                                       | 32   | 30            | 22          | 13            | 3           | 62   | 68   | 72   |
| ~~~~~                                                                                              |      |               |             |               |             |      |      |      |

## 7.6 Law Enforcement Priorities

Stopping people who are boating while drunk (48%) and stopping people who are boating recklessly (44%) continue to be the two law enforcement activities which boaters would most like to see increased at their favorite lake or river. The percent of boaters indicating more should be done in each of the 14 categories studied is little changed from 2009.

**TABLE 48: LAW ENFORCEMENT ACTIVITIES NEEDED**

“As you know, agencies such as the Game & Fish Department, county sheriffs’ offices and other agencies patrol Arizona’s lakes and rivers. For each of the following, please tell me whether you think at (LAKE/RIVER) these agencies should be doing more than they are now, about what they are doing now or less than they are doing now regarding. . .”

% INDICATING “SHOULD BE DOING MORE”

|                                                                            | <u>TOTAL</u> |      |      | <u>STATE OF REGISTRATION</u> |     |     |     |
|----------------------------------------------------------------------------|--------------|------|------|------------------------------|-----|-----|-----|
|                                                                            | 2012         | 2009 | 2006 | AZ                           | CA  | NV  | UT  |
| Stopping people who are boating while drunk                                | 48%          | 49%  | 50%  | 46%                          | 51% | 44% | 58% |
| Stopping people who are boating recklessly                                 | 44           | 48   | 52   | 44                           | 44  | 46  | 50  |
| Providing first-aid stations                                               | 43           | 42   | 48   | 40                           | 47  | 40  | 42  |
| Marking submerged rocks and other hazards                                  | 43           | 42   | 43   | 36                           | 48  | 55  | 50  |
| Educating boaters on safe boating operations and procedures                | 38           | 40   | 40   | 37                           | 40  | 35  | 39  |
| Providing safety information on special hazards and conditions on the lake | 36           | 36   | 38   | 34                           | 37  | 48  | 39  |
| Stopping people who overload their boat                                    | 35           | 37   | 42   | 35                           | 36  | 45  | 15  |
| Providing weather warnings                                                 | 29           | 31   | 33   | 29                           | 28  | 31  | 27  |
| Stopping boats with excessive noise                                        | 27           | 29   | 35   | 27                           | 28  | 24  | 23  |
| Patrolling active use areas                                                | 26           | 28   | 29   | 27                           | 24  | 32  | 19  |
| Checking safety equipment on boats                                         | 24           | 27   | 26   | 22                           | 25  | 28  | 23  |
| Keeping boaters out of swimming or other restricted areas                  | 21           | 24   | 23   | 19                           | 22  | 16  | 31  |
| Providing rescue and emergency services                                    | 21           | 24   | 22   | 19                           | 22  | 30  | 19  |
| Providing navigational aids                                                | 27           | 23   | 29   | 24                           | 27  | 34  | 35  |

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In a related question, boaters were asked whether they agreed or disagreed with nine statements relating to law enforcement and safety issues at Arizona lakes. This line of questioning indicates that roughly three out of four boaters or more agree with the following attitudes:

- That boating law violators should be required to take a boating safety class: 86 percent.
- That hands-on training should be required for boat rental customers: 84 percent.
- That laws and regulations are being adequately enforced: 82 percent.
- That the minimum age for boat operators should be 16 years of age, not the current 12 years of age: 75 percent.

The data also reveals that boaters are split on whether or not operators should be required to complete a mandatory class prior to operating a motorized watercraft (56% agree, 42% disagree), and whether or not Arizona should have a maximum speed limit on lakes (45% agree, 50% disagree). Less than four out of ten boaters believe operators should be required to obtain a license similar to that required to drive a car (37% agree, 60% disagree), that all occupants should be required to wear a life jacket (24% agree, 75% disagree) or that they often experience conflicts with others at their favorite lake (12% agree, 86% disagree). The 2009 readings are little changed from those recorded since 2006.

TABLE 49: ATTITUDES ON SELECTED LAW
ENFORCEMENT AND SAFETY ISSUES

“Next, do you strongly agree, agree, disagree or strongly disagree with each of the following statements?”

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure	<u>TOTAL AGREE</u>		
						2012	2009	2006
Violators of Arizona boating laws should be required to take a boating safety class	31%	55%	11%	1%	2%	86%	85%	82%
Rental boat operators in Arizona should be required to provide hands-on training for their customers	30	54	10	2	4	84	88	86
Laws and regulations are being adequately enforced at my favorite Arizona lake	18	64	10	3	5	82	81	79
The minimum age for boat operators in Arizona should be 16 years of age, not the current 12 years of age	32	43	19	3	3	75	77	73
All boat operators in AZ should be required to complete a mandatory boating education class prior to operating a motorized watercraft	17	39	36	6	2	56	58	56
I would support a maximum speed limit on Arizona lakes	9	36	40	10	5	45	49	NA
Boat operators in Arizona should be required to obtain a license similar to the drivers license required for automobile drivers	11	26	48	12	3	37	38	38
All occupants of a boat should be required to wear a life jacket at all times while underway, not just persons 12 years of age or under which is the current law	8	16	56	19	1	24	24	23
I often experience conflicts with other lake users at my favorite Arizona lake	3	9	64	22	2	12	17	17

NA = Not asked

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## 7.7 Attitudes on Various Water-Based Recreation Issues

Boaters were asked a variety of agree/disagree questions on various water-based recreation issues. As may be seen in Table 50 the volume of “agree” responses are down slightly from 2009:

- Seven out of ten boaters (71%) support boating safety educational centers at Arizona lakes.
- A majority of boaters (71%) do not believe their favorite lake is too crowded, while 25 percent do.
- A majority of boaters (57%) believe the number of people using a lake should not be restricted during high use periods, while 38 percent do.
- A majority of boaters (56%) do not believe the launch ramps at their favorite lake are too crowded, while 39 percent do.
- 53 percent of boaters would support designating special areas for use only by jet skis – 44 percent would not.
- 51 percent of boaters believe their favorite lake does not need additional developed campgrounds, while 40 percent do.
- 50 percent of boaters do not believe their favorite lake needs additional RV hookups, while 39 percent do.
- 48 percent of boaters do not believe their favorite lake needs additional primitive-type campgrounds, while 41 percent do.

TABLE 50: ATTITUDES ON MISCELLANEOUS  
WATER-BASED RECREATION ISSUES

“Next, do you strongly agree, agree, disagree or strongly disagree with each of the following statements?”

|                                                                                                                      | Strongly Agree | Agree | Disagree | Strongly Disagree | Not Sure | <u>TOTAL AGREE</u> |      |      |
|----------------------------------------------------------------------------------------------------------------------|----------------|-------|----------|-------------------|----------|--------------------|------|------|
|                                                                                                                      |                |       |          |                   |          | 2012               | 2009 | 2006 |
| Arizona lakes should have education centers to provide the public with opportunities to learn about boating safety   | 16%            | 55%   | 23%      | 3%                | 3%       | 71%                | 79%  | 80%  |
| I would support designating special areas for use only by jet skis                                                   | 21             | 32    | 36       | 8                 | 3        | 53                 | 50   | 55   |
| My favorite Arizona lake needs additional primitive-type campgrounds with only drinking water and pit toilets        | 6              | 35    | 43       | 5                 | 11       | 41                 | 47   | 52   |
| My favorite Arizona lake needs additional developed campgrounds with flush toilets and hot showers                   | 10             | 30    | 44       | 7                 | 9        | 40                 | 45   | 51   |
| The launch ramps at my favorite lake are too crowded when I want to use them                                         | 11             | 28    | 50       | 6                 | 5        | 39                 | 47   | 49   |
| My favorite Arizona lake needs additional full hookup campsites with water and electricity for recreational vehicles | 8              | 31    | 44       | 6                 | 11       | 39                 | 42   | 50   |
| The number of people using a lake should be restricted during high use periods                                       | 8              | 30    | 47       | 10                | 5        | 38                 | 41   | 48   |
| My favorite Arizona lake is too crowded when I want to use it                                                        | 6              | 19    | 65       | 6                 | 4        | 25                 | 32   | 36   |

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7.8 Recreational Activities Participated In

Boaters were next asked to indicate their single favorite boating activity. As was the case in 2006 and 2009, fishing (27%), general pleasure boating (26%) and water skiing (18%) remain the top three activities. Note, however, that the readings vary greatly by state.

TABLE 51: RECREATIONAL ACTIVITIES – SINGLE FAVORITE

“Next, what is your single favorite boating activity on a typical boating trip?”

	<u>TOTAL</u>			<u>STATE OF REGISTRATION</u>			
	2012	2009	2006	AZ	CA	NV	UT
Fishing	27%	31%	30%	36%	15%	35%	11%
General pleasure boating	26	26	26	25	26	27	26
Water skiing	18	18	19	14	22	11	26
Jet skiing	11	7	8	6	20	10	8
Knee boarding	6	5	6	6	6	3	4
Tubing or rafting	5	5	4	7	3	7	4
Swimming	2	2	2	1	2	3	8
Sailing	2	1	1	2	3	1	4
Sunbathing	1	1	1	1	1	1	4
Camping	1	1	*	1	1	1	4
Other	<u>1</u>	<u>3</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	100%	100%	100%	100%	100%	100%	100%

*Indicates % less than .5

~~~~~

TABLE 52: RECREATIONAL ACTIVITIES – TOTAL

“And, what other boating activities do you enjoy on a typical boating trip?”

|                          | <u>TOTAL</u> |      |      | <u>STATE OF REGISTRATION</u> |     |     |     |
|--------------------------|--------------|------|------|------------------------------|-----|-----|-----|
|                          | 2012         | 2009 | 2006 | AZ                           | CA  | NV  | UT  |
| General pleasure boating | 50%          | 51%  | 46%  | 48%                          | 52% | 56% | 50% |
| Fishing                  | 41           | 38   | 41   | 48                           | 26  | 52  | 54  |
| Water skiing             | 32           | 37   | 40   | 28                           | 35  | 25  | 50  |
| Jet skiing               | 22           | 20   | 18   | 15                           | 32  | 18  | 31  |
| Tubing or rafting        | 18           | 18   | 17   | 17                           | 18  | 16  | 23  |
| Knee boarding            | 14           | 12   | 14   | 12                           | 15  | 6   | 27  |
| Swimming                 | 13           | 9    | 8    | 11                           | 11  | 17  | 31  |
| Camping                  | 7            | 6    | 3    | 5                            | 9   | 11  | 11  |
| Sunbathing               | 5            | 2    | 2    | 2                            | 7   | 6   | 12  |
| Picnicking               | 4            | 4    | 2    | 5                            | 3   | 4   | 4   |
| Sailing                  | 3            | 1    | 2    | 3                            | 4   | 3   | 4   |
| Canoeing/kayaking        | 2            | 1    | *    | 2                            | 2   | 1   | 0   |
| Personal transportation  | 1            | 1    | 2    | 1                            | 1   | 1   | 0   |
| Other                    | 1            | 4    | 3    | 1                            | 1   | 0   | 0   |

\*Indicates % less than .5

Note: totals exceed 100% due to multiple responses

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7.9 Awareness of Quagga Mussel Threat

Eighty-nine percent of boaters indicate that they are aware of the Quagga mussel with 53 percent indicating they know “a lot” – up from 46 percent in 2009. In addition, 60 percent of boaters who are aware of the mussel, believe it is a “major threat” to Arizona’s lakes and rivers.

TABLE 53: AWARENESS OF QUAGGA MUSSEL THREAT

“Next, there has been discussion lately about the appearance of the Quagga (qwa-ga) mussel in Arizona and its negative impact on the state’s lakes and rivers. Would you say you have heard or read a lot, some, only a little or nothing at all about the Quagga mussel?”

	<u>TOTAL</u>		<u>STATE OF REGISTRATION -- 2012</u>			
	2012	2009	AZ	CA	NV	UT
A lot	53%	46%	52%	52%	67%	59%
Some	23	22	22	24	17	22
Only a little	13	17	14	13	8	15
Nothing at all	<u>11</u>	<u>15</u>	<u>12</u>	<u>11</u>	<u>8</u>	<u>4</u>
	100%	100%	100%	100%	100%	100%

(AMONG THOSE AWARE)

“Do you feel the Quagga mussel is a major threat, a minor threat or not a threat to Arizona’s lakes and rivers?”

Major	60%	64%	57%	58%	67%	79%
Minor	22	21	23	23	18	16
Not a threat	4	2	4	5	3	1
Not sure	<u>14</u>	<u>13</u>	<u>16</u>	<u>14</u>	<u>12</u>	<u>4</u>
	100%	100%	100%	100%	100%	100%

~~~~~

## **8.0 APPENDIX**

- 8.1 Survey Questionnaire
- 8.2 Audit Forms
- 8.3 Agreement of the Agencies



Hello, my name is \_\_\_\_\_ and I'm calling for Behavior Research Center of Arizona. We're conducting a study for the Arizona Game and Fish Department on boating on Arizona lakes and rivers, and I'd like to talk to you for a few minutes about your \_\_\_\_\_ boat. Are you or is someone else in your household the primary user of your boat?

Arizona...1  
California...2  
Nevada...3  
Utah...4

IF RESPONDENT: CONTINUE.

IF SOMEONE ELSE: ASK TO SPEAK WITH THAT PERSON.

1. To start, was your boat used on Arizona lakes and rivers, including the Colorado River, during the past 30 days? For the purpose of this study, any location on the Colorado River or its various lakes is considered Arizona. (GO TO Q3) Yes...1  
(GO TO Q2) No...2  
(GO TO Q2) Don't know/Refused...3
2. Did you use your boat on Arizona lakes and rivers including the Colorado River, any time during the past 12 months? (GO TO Q2a) Yes...1  
(GO TO Q2b) No...2  
(GO TO Q2B) Don't know/Refused...3
- 2a. And on how many total days was your boat used on Arizona lakes and rivers including the Colorado River during the past 12 months? NUMBER \_\_\_\_/\_\_\_\_/\_\_\_\_
- (GO TO Q15)
- 2b. Was there any particular reason your boat wasn't used in Arizona? (RECORD ALL MENTIONS; DO NOT READ LIST) Boat inoperable, broken down...01  
Expense, could not afford...02  
Too busy, no time...03  
Lost interest, prefer other recreational forms...04  
Out-of-state resident, use only in other state...05  
Don't know where to go...06  
Too far to go...07  
Too crowded...08  
\_\_\_\_\_ Other (PROBE & RECORD)...09  
Don't know/Refused...10

THANK RESPONDENT AND TERMINATE

3. How many days was your boat used on Arizona lakes and rivers, including the Colorado River, during the past 30 days? NUMBER \_\_\_\_/\_\_\_\_/\_\_\_\_
- (IF DON'T KNOW/REFUSED, GO TO Q16)
4. And on how many total days was your boat used on Arizona lakes and rivers including the Colorado River during the past 12 months? NUMBER \_\_\_\_/\_\_\_\_/\_\_\_\_
5. Does your boat have a gas powered motor on it? (GO TO Q6) Yes...1  
(GO TO Q11) No...2  
(GO TO Q11) Don't know/Refused...3
6. What type of fuel does your boat use -- gasoline, diesel or aviation? Gasoline...1  
Diesel...2  
Aviation...3  
Don't know/Not sure...4

7. And what is the horsepower of your boat engine? HORSEPOWER \_\_\_\_/\_\_\_\_/\_\_\_\_
8. On a typical day boating in Arizona during the past 30 days, how many gallons of fuel did you use in your boat per day? GALLONS \_\_\_\_/\_\_\_\_/\_\_\_\_
9. What percentage of the fuel you used in your boat did you buy in Arizona? PERCENT \_\_\_\_/\_\_\_\_/\_\_\_\_
10. And what percentage of your Arizona fuel did you buy... (READ EACH; MAKE SURE THE TOTAL EQUALS 100%)
- AT ARIZONA GAS STATIONS \_\_\_\_/\_\_\_\_/\_\_\_\_
- AT ARIZONA GAS MARINAS \_\_\_\_/\_\_\_\_/\_\_\_\_
- AT OTHER ARIZONA LOCATIONS  
\_\_\_\_/\_\_\_\_/\_\_\_\_
- 100%

11. Earlier you mentioned that you used your boat a total of (Q3 TOTAL) days in Arizona during the past 30 days. What I'd like you to tell me now is first, at which lakes or rivers, including the Colorado River you spent this time, and then second, how many days you spent at each lake or river you visited.

11a. (FOR EACH LAKE/RIVER VISITED, ASK): When you visited (LAKE/RIVER) during the past 30 days, how many people, including yourself, were usually in your immediate boating party?

Colorado River and its lakes... (IF PERSON SIMPLY SAYS "COLORADO RIVER", PROBE FOR SPECIFIC LOCATION)

|                                                                   | Q11<br>DAYS | Q11a<br>SIZE |                                  | Q11<br>DAYS |
|-------------------------------------------------------------------|-------------|--------------|----------------------------------|-------------|
| 01. Lake Powell .....                                             | _____       | _____        | 43. Horseshoe .....              | ....        |
| 02. Glen Canyon Dam to Lees Ferry .....                           | _____       | _____        | 44. Horsethief Basin .....       | ....        |
| 03. Grand Canyon .....                                            | _____       | _____        | 45. Kaibab .....                 | ....        |
| 04. Lake Mead .....                                               | _____       | _____        | 46. Kennedy .....                | ....        |
| 05. Lake Mohave ( <b>Hoover Dam to Davis Dam</b> ) .....          | _____       | _____        | 47. Kinnikinick .....            | _____       |
| 06. Davis Dam to Topock.....                                      | _____       | _____        | 48. Knoll .....                  | ....        |
| 07. Topock Gorge .....                                            | _____       | _____        | 49. Lakeside .....               | ....        |
| 08. Lake Havasu.....                                              | _____       | _____        | 50. Lee Valley .....             | ....        |
| 09. Parker Strip ( <b>Parker Dam to Headgate Rock Dam</b> ) ..... | _____       | _____        | 51. Little Bog .....             | ....        |
| 10. Headgate Rock Dam to Ehrenberg.....                           | _____       | _____        | 52. Long .....                   | ....        |
| 11. <b>Ehrenberg to the North End of Martinez Lake</b> .....      | _____       | _____        | 53. Luna .....                   | ....        |
| 12. Martinez Lake to <b>Imperial Dam</b> .....                    | _____       | _____        | 54. Lyman .....                  | ....        |
| 13. Mittry Lake ( <b>Imperial Dam to Morels Dam</b> ) .....       | _____       | _____        | 55. Lynx .....                   | ....        |
|                                                                   |             |              | 56. Mexican Hay .....            | ....        |
|                                                                   |             |              | 57. Mittry .....                 | ....        |
|                                                                   |             |              | 58. Mormon .....                 | ....        |
|                                                                   |             |              | 59. McCormick .....              | ....        |
|                                                                   |             |              | 60. Nelson Reservoir .....       | ....        |
|                                                                   |             |              | 61. Painted Rocks .....          | ....        |
|                                                                   |             |              | 62. Parker Canyon .....          | ....        |
|                                                                   |             |              | 63. Patagonia .....              | ....        |
|                                                                   |             |              | 64. Pena Blanca .....            | ....        |
|                                                                   |             |              | 65. Picacho Reservoir .....      | ....        |
|                                                                   |             |              | 66. Pleasant .....               | ....        |
|                                                                   |             |              | 67. Rainbow .....                | ....        |
|                                                                   |             |              | 68. Reservation .....            | ....        |
|                                                                   |             |              | 69. Roosevelt .....              | ....        |
|                                                                   |             |              | 70. Roper .....                  | ....        |
|                                                                   |             |              | 71. Saguaro .....                | ....        |
|                                                                   |             |              | 72. Salt River .....             | ....        |
|                                                                   |             |              | 73. San Carlos .....             | ....        |
|                                                                   |             |              | 74. Scotts Reservoir .....       | ....        |
|                                                                   |             |              | 75. Show Low .....               | ....        |
|                                                                   |             |              | 76. Silverbell .....             | ....        |
|                                                                   |             |              | 77. Squaw Lake .....             | ....        |
|                                                                   |             |              | 78. Stoneman .....               | ....        |
|                                                                   |             |              | 79. Sunrise .....                | ....        |
|                                                                   |             |              | 80. Tempe Town .....             | ....        |
|                                                                   |             |              | 81. Upper Lake Mary .....        | ....        |
|                                                                   |             |              | 82. Verde River .....            | ....        |
|                                                                   |             |              | 83. Watson .....                 | ....        |
|                                                                   |             |              | 84. Whitehorse .....             | ....        |
|                                                                   |             |              | 85. White Mountain .....         | ....        |
|                                                                   |             |              | 86. Willow Springs .....         | ....        |
|                                                                   |             |              | 87. Woods Canyon .....           | ....        |
|                                                                   |             |              | 88. Other (PROBE & RECORD) ..... | ....        |

Other Arizona Lakes

|                         |       |       |
|-------------------------|-------|-------|
| 14. Alamo.....          | _____ | _____ |
| 15. Alford .....        | _____ | _____ |
| 16. Apache.....         | _____ | _____ |
| 17. Arivaca.....        | _____ | _____ |
| 18. Ashurst.....        | _____ | _____ |
| 19. Bartlett .....      | _____ | _____ |
| 20. Bear Canyon.....    | _____ | _____ |
| 21. Becker.....         | _____ | _____ |
| 22. Big.....            | _____ | _____ |
| 23. Black Canyon.....   | _____ | _____ |
| 24. Blue Ridge .....    | _____ | _____ |
| 25. Bunch Lake.....     | _____ | _____ |
| 26. Canyon .....        | _____ | _____ |
| 27. Cataract .....      | _____ | _____ |
| 28. Chapparal .....     | _____ | _____ |
| 29. Cheylon.....        | _____ | _____ |
| 30. Cholla.....         | _____ | _____ |
| 31. Concho .....        | _____ | _____ |
| 32. Cooley.....         | _____ | _____ |
| 33. Clear Creek.....    | _____ | _____ |
| 34. Crescent .....      | _____ | _____ |
| 35. Dobson .....        | _____ | _____ |
| 36. Dog Town .....      | _____ | _____ |
| 37. Drift Fence .....   | _____ | _____ |
| 38. Fire Bird .....     | _____ | _____ |
| 39. Fool's Hollow ..... | _____ | _____ |
| 40. Goldwater .....     | _____ | _____ |
| 41. Greer.....          | _____ | _____ |
| 42. Hawley .....        | _____ | _____ |

12. Next, on how many separate trips was your boat used in Arizona during the past 30 days?

NUMBER: \_\_\_\_/\_\_\_\_/\_\_\_\_

13. And on approximately how many total trips was your boat used in Arizona during the past 12 months?

NUMBER: \_\_\_\_/\_\_\_\_/\_\_\_\_

14. On your last boating trip in Arizona during the past 30 days, how much money did you and the other members of your boating party spend on the following items?  
(READ EACH)

- A. For overnight lodging at hotels and motels.....AMOUNT: / / / /
- B. At restaurants and bars .....AMOUNT: / / / /
- C. For food and beverages purchased at retail stores .....AMOUNT: / / / /
- D. For equipment rental, tackle, bait and gasoline.....AMOUNT: / / / /
- E. For entry fees or permits.....AMOUNT: / / / /
- F. For gifts, souvenirs, clothing and other personal items .....AMOUNT: / / / /
- G. For any other items directly related to your boating trip which I haven't mentioned .....AMOUNT: / / / /

(GO TO Q16)

15. You mention that you used your boat a total of (Q2a TOTAL) days in Arizona during the past 12 months. What I'd like you to tell me now is first, at which lakes or rivers, including the Colorado River, you spent this time, and then second, how many days you spent at each lake or river you visited.

15a. (FOR EACH LAKE/RIVER VISITED, ASK): When you visited (LAKE/RIVER) during the past 12 months, how many people, including yourself, were usually in your immediate boating party?

Colorado River and its lakes... (IF PERSON SIMPLY SAYS "COLORADO RIVER", PROBE FOR SPECIFIC LOCATION)

|                                                                             | <u>Q11</u><br><u>DAYS</u> | <u>Q11a</u><br><u>SIZE</u> |                             | <u>Q11</u><br><u>DAYS</u> | <u>Q11a</u><br><u>SIZE</u> |
|-----------------------------------------------------------------------------|---------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|
| 01. Lake Powell .....                                                       | _____                     | _____                      | 43. Horseshoe.....          | _____                     | _____                      |
| 02. Glen Canyon Dam to Lees Ferry .....                                     | _____                     | _____                      | 44. Horsethief Basin.....   | _____                     | _____                      |
| 03. Grand Canyon .....                                                      | _____                     | _____                      | 45. Kaibab.....             | _____                     | _____                      |
| 04. Lake Mead.....                                                          | _____                     | _____                      | 46. Kennedy.....            | _____                     | _____                      |
| 05. Lake Mohave ( <b>Hoover Dam to</b><br><b>Davis Dam</b> ) .....          | _____                     | _____                      | 47. Kinnikinick .....       | _____                     | _____                      |
| 06. Davis Dam to Topock.....                                                | _____                     | _____                      | 48. Knoll .....             | _____                     | _____                      |
| 07. Topock Gorge.....                                                       | _____                     | _____                      | 49. Lakeside.....           | _____                     | _____                      |
| 08. Lake Havasu.....                                                        | _____                     | _____                      | 50. Lee Valley .....        | _____                     | _____                      |
| 09. Parker Strip ( <b>Parker Dam to</b><br><b>Headgate Rock Dam</b> ) ..... | _____                     | _____                      | 51. Little Bog .....        | _____                     | _____                      |
| 10. Headgate Rock Dam to Ehrenberg.....                                     | _____                     | _____                      | 52. Long .....              | _____                     | _____                      |
| <b>11. Ehrenberg to the North End of</b><br><b>Martinez Lake</b> .....      | _____                     | _____                      | 53. Luna .....              | _____                     | _____                      |
| 12. Martinez Lake to <b>Imperial Dam</b> .....                              | _____                     | _____                      | 54. Lyman .....             | _____                     | _____                      |
| 13. Mitrtry Lake ( <b>Imperial Dam to</b><br><b>Morels Dam</b> ) .....      | _____                     | _____                      | 55. Lynx.....               | _____                     | _____                      |
|                                                                             |                           |                            | 56. Mexican Hay .....       | _____                     | _____                      |
|                                                                             |                           |                            | 57. Mittry .....            | _____                     | _____                      |
|                                                                             |                           |                            | 58. Mormon.....             | _____                     | _____                      |
|                                                                             |                           |                            | 59. McCormick .....         | _____                     | _____                      |
|                                                                             |                           |                            | 60. Nelson Reservoir.....   | _____                     | _____                      |
|                                                                             |                           |                            | 61. Painted Rocks .....     | _____                     | _____                      |
|                                                                             |                           |                            | 62. Parker Canyon .....     | _____                     | _____                      |
|                                                                             |                           |                            | 63. Patagonia .....         | _____                     | _____                      |
|                                                                             |                           |                            | 64. Pena Blanca.....        | _____                     | _____                      |
|                                                                             |                           |                            | 65. Picacho Reservoir ..... | _____                     | _____                      |
|                                                                             |                           |                            | 66. Pleasant .....          | _____                     | _____                      |
|                                                                             |                           |                            | 67. Rainbow .....           | _____                     | _____                      |
|                                                                             |                           |                            | 68. Reservation .....       | _____                     | _____                      |
|                                                                             |                           |                            | 69. Roosevelt .....         | _____                     | _____                      |
|                                                                             |                           |                            | 70. Roper .....             | _____                     | _____                      |
|                                                                             |                           |                            | 71. Saguaro.....            | _____                     | _____                      |
|                                                                             |                           |                            | 72. Salt River.....         | _____                     | _____                      |
|                                                                             |                           |                            | 73. San Carlos .....        | _____                     | _____                      |
|                                                                             |                           |                            | 74. Scotts Reservoir.....   | _____                     | _____                      |
|                                                                             |                           |                            | 75. Show Low.....           | _____                     | _____                      |
|                                                                             |                           |                            | 76. Silverbell.....         | _____                     | _____                      |
|                                                                             |                           |                            | 77. Squaw Lake .....        | _____                     | _____                      |
|                                                                             |                           |                            | 78. Stoneman.....           | _____                     | _____                      |
|                                                                             |                           |                            | 79. Sunrise.....            | _____                     | _____                      |
|                                                                             |                           |                            | 80. Tempe Town .....        | _____                     | _____                      |
|                                                                             |                           |                            | 81. Upper Lake Mary.....    | _____                     | _____                      |
|                                                                             |                           |                            | 82. Verde River .....       | _____                     | _____                      |
|                                                                             |                           |                            | 83. Watson .....            | _____                     | _____                      |
|                                                                             |                           |                            | 84. Whitehorse .....        | _____                     | _____                      |
|                                                                             |                           |                            | 85. White Mountain .....    | _____                     | _____                      |
|                                                                             |                           |                            | 86. Willow Springs.....     | _____                     | _____                      |
|                                                                             |                           |                            | 87. Woods Canyon.....       | _____                     | _____                      |
|                                                                             |                           |                            | 88. Other (PROBE & RECORD)  | _____                     | _____                      |

Other Arizona Lakes

|                         |       |       |
|-------------------------|-------|-------|
| 14. Alamo.....          | _____ | _____ |
| 15. Alford.....         | _____ | _____ |
| 16. Apache.....         | _____ | _____ |
| 17. Arivaca.....        | _____ | _____ |
| 18. Ashurst.....        | _____ | _____ |
| 19. Bartlett .....      | _____ | _____ |
| 20. Bear Canyon.....    | _____ | _____ |
| 21. Becker.....         | _____ | _____ |
| 22. Big.....            | _____ | _____ |
| 23. Black Canyon.....   | _____ | _____ |
| 24. Blue Ridge .....    | _____ | _____ |
| 25. Bunch Lake.....     | _____ | _____ |
| 26. Canyon .....        | _____ | _____ |
| 27. Cataract .....      | _____ | _____ |
| 28. Chapparal .....     | _____ | _____ |
| 29. Cheylon.....        | _____ | _____ |
| 30. Cholla.....         | _____ | _____ |
| 31. Concho .....        | _____ | _____ |
| 32. Cooley.....         | _____ | _____ |
| 33. Clear Creek.....    | _____ | _____ |
| 34. Cresent .....       | _____ | _____ |
| 35. Dobson .....        | _____ | _____ |
| 36. Dog Town .....      | _____ | _____ |
| 37. Drift Fence .....   | _____ | _____ |
| 38. Fire Bird .....     | _____ | _____ |
| 39. Fool's Hollow ..... | _____ | _____ |
| 40. Goldwater .....     | _____ | _____ |
| 41. Greer.....          | _____ | _____ |
| 42. Hawley .....        | _____ | _____ |

16. To which one Arizona lake or river, including the Colorado River, did you go most often during the past 12 months?

NAME/CODE: \_\_\_\_\_

17. Next, what would you say are the two or three most needed facilities at (LAKE/RIVER MENTIONED IN Q16)?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

17a. And what would you say are the two or three most needed services at (LAKE/RIVER MENTIONED IN Q16)?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

18. (SQ-1) Now I'd like to read you a list of various boating and water-based recreational facilities. As I do, please just tell me if you would rate each as excellent, good, only fair, or poor at (LAKE/RIVER MENTIONED IN Q16) If any of the facilities I mention aren't located at (LAKE/RIVER MENTIONED IN Q16), please just say so. (ROTATE)

|                                                                                         | Excel-<br>lent | Good | Only<br>Fair | Poor | Not<br>Sure | NA/Are<br>None |
|-----------------------------------------------------------------------------------------|----------------|------|--------------|------|-------------|----------------|
| A. Launching ramps.....                                                                 | 1              | 2    | 3            | 4    | 5           | 6              |
| B. Marinas with overnight docking spaces, boat rental, fuel, and boat repair, etc. .... | 1              | 2    | 3            | 4    | 5           | 6              |
| C. First aid stations .....                                                             | 1              | 2    | 3            | 4    | 5           | 6              |
| D. Campgrounds.....                                                                     | 1              | 2    | 3            | 4    | 5           | 6              |
| E. Swimming beaches .....                                                               | 1              | 2    | 3            | 4    | 5           | 6              |
| F. Drinking water outlets.....                                                          | 1              | 2    | 3            | 4    | 5           | 6              |
| G. Parking facilities for boat trailers .....                                           | 1              | 2    | 3            | 4    | 5           | 6              |
| H. Sanitary dump facilities .....                                                       | 1              | 2    | 3            | 4    | 5           | 6              |
| I. Informational signs .....                                                            | 1              | 2    | 3            | 4    | 5           | 6              |
| J. Picnic areas accessible by boat only .....                                           | 1              | 2    | 3            | 4    | 5           | 6              |
| K. Boat gas docks.....                                                                  | 1              | 2    | 3            | 4    | 5           | 6              |
| L. concessions that sell food, bait, drinks, tackle, etc. ....                          | 1              | 2    | 3            | 4    | 5           | 6              |
| M. Public restrooms.....                                                                | 1              | 2    | 3            | 4    | 5           | 6              |
| N. Campsites accessible by boat only .....                                              | 1              | 2    | 3            | 4    | 5           | 6              |
| O. Picnic areas and facilities .....                                                    | 1              | 2    | 3            | 4    | 5           | 6              |
| P. Parking facilities for vehicles .....                                                | 1              | 2    | 3            | 4    | 5           | 6              |
| Q. Access roads.....                                                                    | 1              | 2    | 3            | 4    | 5           | 6              |
| R. Courtesy docks.....                                                                  | 1              | 2    | 3            | 4    | 5           | 6              |
| S. Trash dumpsters accessible by boat.....                                              | 1              | 2    | 3            | 4    | 5           | 6              |
| T. Fish cleaning station.....                                                           | 1              | 2    | 3            | 4    | 5           | 6              |
| U. Emergency telephones.....                                                            | 1              | 2    | 3            | 4    | 5           | 6              |
| V. Fishing piers .....                                                                  | 1              | 2    | 3            | 4    | 5           | 6              |

19. (SQ-1) As you know, agencies such as the Game & Fish Department, County Sheriff's offices and other agencies patrol Arizona's lakes and rivers. For each of the following, please tell me whether you think at (LAKE/RIVER MENTIONED IN Q16) these agencies should be doing more than they are now, about what they are doing now, or less than they are doing now regarding... (ROTATE)

|                                                                                    | More | Same | Less | Not Sure |
|------------------------------------------------------------------------------------|------|------|------|----------|
| A. Providing weather warnings .....                                                | 1    | 2    | 3    | 4        |
| B. Stopping people who are boating while drunk .....                               | 1    | 2    | 3    | 4        |
| C. Marking submerged rocks and other hazards.....                                  | 1    | 2    | 3    | 4        |
| D. Checking safety equipment on boats .....                                        | 1    | 2    | 3    | 4        |
| E. Stopping boats with excessive noise .....                                       | 1    | 2    | 3    | 4        |
| F. Patrolling active use areas .....                                               | 1    | 2    | 3    | 4        |
| G. Providing rescue and emergency services .....                                   | 1    | 2    | 3    | 4        |
| H. Providing navigational aids.....                                                | 1    | 2    | 3    | 4        |
| I. Providing safety information on special hazards and conditions on the lake..... | 1    | 2    | 3    | 4        |
| J. Keeping boaters out of swimming or other restricted areas.....                  | 1    | 2    | 3    | 4        |
| K. Stopping people who overload their boat.....                                    | 1    | 2    | 3    | 4        |
| L. Stopping people who are boating recklessly.....                                 | 1    | 2    | 3    | 4        |
| M. Providing first-aid stations .....                                              | 1    | 2    | 3    | 4        |
| N. Educating boaters on safe boating operations and procedures.....                | 1    | 2    | 3    | 4        |

20. (SQ-2) Next, the Arizona State Lake Improvement Fund, or SLIF, is a program designed to assist state and local governments in improving boating related resources and facilities. Were you aware of this program before I mentioned it just now? Yes...1  
No...2  
Don't know/Unsure...3

20a. (SQ-2) The SLIF program is funded with revenues from boat registration fees and motor fuel taxes and there are six water-based boating functions for which these funds might be used. As I read them to you, please just tell me if you feel each one is very important, somewhat important, not very important or not at all important. (ROTATE).

|                                                                                                            | Very | Some-what | Not Very | Not At All | Not Sure |
|------------------------------------------------------------------------------------------------------------|------|-----------|----------|------------|----------|
| A. The construction of water-based boating facilities such as marinas, launch ramps and piers .....        | 1    | 2         | 3        | 4          | 5        |
| B. The purchasing of law enforcement and safety equipment such as patrol boats, radios and lights.....     | 1    | 2         | 3        | 4          | 5        |
| C. The construction of recreation support facilities such as restrooms, campgrounds and picnic tables..... | 1    | 2         | 3        | 4          | 5        |
| D. The purchasing of shoreline property at lakes which can be used for boating access .....                | 1    | 2         | 3        | 4          | 5        |
| E. The construction of first-aid stations and other safety facilities.....                                 | 1    | 2         | 3        | 4          | 5        |
| F. The development of new lakes for boating use.....                                                       | 1    | 2         | 3        | 4          | 5        |

21. (SQ-3) Next, do you strongly agree, agree, disagree or strongly disagree with each of the following statements? (ROTATE)

|                                                                                                                                                                         | Strongly Agree | Agree | Dis-agree | Strongly Disagree | Not Sure |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|-----------|-------------------|----------|
| A. My favorite Arizona lake is too crowded when I want to use it.....                                                                                                   | 1              | 2     | 3         | 4                 | 5        |
| B. My favorite Arizona lake needs additional primitive type campgrounds with only drinking water and pit toilets.....                                                   | 1              | 2     | 3         | 4                 | 5        |
| C. Laws and regulations are being adequately enforced at my favorite Arizona lake.....                                                                                  | 1              | 2     | 3         | 4                 | 5        |
| D. The launch ramps at my favorite lake are too crowded when I want to use them.....                                                                                    | 1              | 2     | 3         | 4                 | 5        |
| E. My favorite Arizona lake needs additional developed campgrounds with flush toilets and hot showers.....                                                              | 1              | 2     | 3         | 4                 | 5        |
| F. All occupants of a boat should be required to wear life jackets at all times while underway, not just persons 12 years of age or under which is the current law..... | 1              | 2     | 3         | 4                 | 5        |
| G. I would support designating special areas for use only by jet skis.....                                                                                              | 1              | 2     | 3         | 4                 | 5        |
| H. Arizona lakes should have education centers to provide the public with opportunities to learn about boating safety.....                                              | 1              | 2     | 3         | 4                 | 5        |
| I. My favorite Arizona lake needs additional full hookup campsites with water and electricity for recreational vehicles.....                                            | 1              | 2     | 3         | 4                 | 5        |
| J. Boat operators in Arizona should be required to obtain a license similar to the drivers license required for auto-mobile drivers.....                                | 1              | 2     | 3         | 4                 | 5        |
| K. Violators of Arizona boating laws should be required to take a boating safety class.....                                                                             | 1              | 2     | 3         | 4                 | 5        |
| L. All boat operators in Arizona should be required to complete a mandatory boating education class prior to operating a motorized watercraft.....                      | 1              | 2     | 3         | 4                 | 5        |
| M. The minimum age for motorized boat operators in Arizona should be 16 years of age, not the current 12 years of age.....                                              | 1              | 2     | 3         | 4                 | 5        |
| N. Rental boat operators in Arizona should be required to provide hands on training for their customers.....                                                            | 1              | 2     | 3         | 4                 | 5        |
| O. I often experience conflicts with other lake users at my favorite Arizona lake.....                                                                                  | 1              | 2     | 3         | 4                 | 5        |
| P. The number of people using a lake should be restricted during high use periods.....                                                                                  | 1              | 2     | 3         | 4                 | 5        |
| Q. I would support a maximum speed limit on Arizona lakes.....                                                                                                          | 1              | 2     | 3         | 4                 | 5        |



22. (SQ-3) Next, what is your single favorite boating activity on a typical boating trip?

- Water skiing...01
- Fishing...02
- General pleasure boating...03
- Jet skiing...04
- Swimming...05
- Knee boarding...06
- Tubing or rafting...07
- Picnicking...08
- Camping...09
- Personal transportation...10
- Sailing...11
- Sunbathing...12
- Canoeing/Kayaking...13
- Other (PROBE)...14
- Don't know/Not sure...15

22a. (SQ-3) And what other boating activities do you enjoy on a typical boating trip?

23. Next, there has been discussion lately about the appearance of the Quagga (QWA-GA) mussel in Arizona and its negative impact on the State's lakes and rivers. Would you say you have heard or read a lot, some, only a little or nothing at all about the Quagga mussel?

- A lot...1
- (GO TO 23a) Some...2
- Only a little...3
- (GO TO Q24) Nothing at all...4
- Not sure...5

23a. Do you feel the Quagga mussel is a major threat, a minor threat or not a threat to Arizona's lakes and rivers?

- Major threat...1
- Minor threat...2
- Not a threat...3
- Not sure...4

24. And finally, what county do you live in?

COUNTY: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Thank you very much, that completes this interview. My supervisor may want to call you to verify that I conducted this interview so may I have your first name so that they may do so? (VERIFY PHONE NUMBER)

NAME: \_\_\_\_\_ PHONE: (\_\_\_\_\_) \_\_\_\_\_

ADMINISTRATIVE DATA:

INTERVIEWER NAME: \_\_\_\_\_ #: \_\_\_\_\_

VALIDATED BY: \_\_\_\_\_ #: \_\_\_\_\_

CODED BY: \_\_\_\_\_ #: \_\_\_\_\_

FROM SAMPLE: \_\_\_\_\_

BOAT CLASS: \_\_\_\_\_

## 8.2 Audit Forms

- Marina Audit/Survey Forms
- Public Agency Forms
- Excursion/Livery Forms



THE STATE OF ARIZONA  
**GAME AND FISH DEPARTMENT**

5000 W. CAREFREE HIGHWAY  
PHOENIX, AZ 85086-5000  
(602) 942-3000 • WWW.AZGFD.GOV

**GOVERNOR**  
JANICE K. BREWER  
**COMMISSIONERS**  
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JACK F. HUSTED, SPRINGVILLE  
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ROBERT E. MANSELL, WINSLOW  
**DIRECTOR**  
LARRY D. VOYLES  
**DEPUTY DIRECTORS**  
GARY R. HOVATTER  
BOB BROSCHEID



Winter/Spring 2012

Dear Marina Owner/Operator:

The Arizona Game and Fish Department, the Arizona Department of Transportation, and the State Parks Board are required by law to complete an Arizona Watercraft Survey every three years for the purpose of determining the amount of fuel sold within Arizona that is used for propelling watercraft. This percentage is then used in determining the amount of fuel tax revenue to be allocated to the State Lake Improvement Fund for water-based recreation improvements.

We need specific information from you to be able to complete this survey. Please take a few minutes to complete the enclosed forms and promptly return them to Behavior Research Center in the postage-paid envelope provided for your convenience. Behavior Research Center has been contracted to complete the Arizona Watercraft Survey.

The information you provide will remain strictly confidential and will only be used for statistical purposes. **Please return this form even if your facility did not sell any Arizona fuel during 2011.** Your information is critical to the successful completion of the study. If you have any questions about this project, please call Bruce Hernandez of Behavior Research Center, (602) 258-4554.

Thank you for your cooperation and information.

Sincerely,

Larry D. Voyles  
Director

Enclosures

**2012 ARIZONA WATERCRAFT SURVEY**

MARINA INVENTORY FORM

**Confidential Information**

Name of Facility: \_\_\_\_\_

Owner/Operator/Contact: \_\_\_\_\_

Person filling out form: \_\_\_\_\_  
(If same, please indicate)

Telephone number: \_\_\_\_\_

1. Please answer the following two questions in the table provided below. If you do not have an exact number or percentage, please give your best estimate. Your information is strictly confidential and will be used for statistical purposes only.

1a. How many gallons of marine fuel did your facility sell during each month of 2011?

1b. What percentage of this fuel was sold to non-Arizona boaters each month? Please note that this information will be strictly confidential and used only for statistical purposes.

| MONTH/YEAR     | NUMBER OF GALLONS SOLD | <u>Q1b</u><br>PERCENT SOLD TO<br>NON-ARIZONA<br>BOATERS |
|----------------|------------------------|---------------------------------------------------------|
| January 2011   | _____                  | _____                                                   |
| February 2011  | _____                  | _____                                                   |
| March 2011     | _____                  | _____                                                   |
| April 2011     | _____                  | _____                                                   |
| May 2011       | _____                  | _____                                                   |
| June 2011      | _____                  | _____                                                   |
| July 2011      | _____                  | _____                                                   |
| August 2011    | _____                  | _____                                                   |
| September 2011 | _____                  | _____                                                   |
| October 2011   | _____                  | _____                                                   |
| November 2011  | _____                  | _____                                                   |
| December 2011  | _____                  | _____                                                   |
| TOTAL GALLONS  | _____                  | _____                                                   |

(over please)

2. What percentage of total gallons mentioned in Q.1a was purchased from Arizona gasoline distributors? \_\_\_\_\_ %

3. Does your facility have watercraft (i.e., boats, jet skis, houseboats, etc.) available on a rental basis? (Check one of the following)

\_\_\_\_ Yes      \_\_\_\_ No

3a. (IF YES) How many gallons of marine fuel were used by your rental watercraft during 2011? (Please do not report any fuel that was included in Q.1a.)

No. of gallons

Please complete the above information and the enclosed referral form and promptly return to Behavior Research Center, Inc. 45 East Monterey Way, Phoenix, AZ 85012, in the postage paid envelope provided.

Thank you for your assistance.

## REFERRAL FORM

The following is a list of marinas who have been contacted in past Watercraft Surveys. To help survey all possible marinas, please review those marinas shown in your area. If we have overlooked any, please indicate their names, addresses, and telephone numbers in the space provided below. If we have not overlooked any, please indicate so by writing "NONE" below. Please return this form to us along with your completed Marina Inventory Form. Thank you for your assistance.

### Colorado River Marinas

Antelope Point Marina, Page, AZ  
 Big Bend Resort, Parker Dam, CA  
 Black Meadow Landing, Parker Dam, CA  
 Blue Water Marina, Parker, AZ  
 Buckskin Mountain State Park, Parker, AZ  
 Bullfrog Resort & Marina, Lake Powell, UT  
 Callville Bay Resort & Marina, Las Vegas, NV  
 Cottonwood Cove Marina, Cottonwood Cove, NV  
 Echo Bay Resort, Overton, NV  
 Echo Lodge Resort, Parker Dam, CA  
 Emerald Cove Resort, Parker, AZ  
 Fisher's Landing, Yuma, AZ  
 Five Mile Landing, Topock, AZ  
 Fox's RV Park & Tavern, Parker, AZ  
 Golden Shores Marina, Topock, AZ  
 Halls Crossing Marina, Lake Powell, UT  
 Havasu Landing Resort, Havasu Lake, AZ  
 Havasu Springs Resort, Parker, AZ  
 Hidden Shores Village, Imperial Dam, AZ  
 Hite Resort & Marina, Hite, UT  
 Jake's Marine Service & Storage, Bullhead City, AZ  
 Lake Havasu Marina, Lake Havasu City, AZ  
 Lake Havasu Yacht Club, Lake Havasu City, AZ  
 Lake Mead Resort Marina, Boulder City, NV  
 Lake Mohave Resort/Seven Resorts, Bullhead City, AZ  
 Las Vegas Boat Harbor, Henderson, NV  
 Laughlin Bay Marina, Laughlin, NV  
 Lost Lake Resort, Blythe, CA  
 Martinez Lake Marina, Martinez Lake, AZ  
 Needles Marina Park, Needles, CA  
 Park Moabi Marina, Needles, CA

Pirate Cove Resort & Marina, Needles, CA  
 River Lodge Resort, Parker Dam, CA  
 Riviera Marina, Bullhead City, AZ  
 Riverland Resort, Earp, CA  
 Sand Point Marina & RV Park, Lake Havasu City, AZ  
 Seatow Havasu, Lake Havasu City, AZ  
 Sunshine Resort, Parker Dam, CA  
 Temple Bar Resort, Inc., Temple Bar, AZ  
 Topock Gorge Marina, Topock, AZ  
 Wahweap Marina/Dangling Rope Marina, Page, AZ  
 Water Wheel, Blythe, CA  
 Wheel-er In Family Resort, Earp, CA  
 Willow Beach Marina, Willow Beach, AZ  
 Willow Valley Marina, Mohave Valley, AZ  
 Windmill Resort, Earp, CA

### Interior Arizona Marinas

Apache Lake Marina & Resort, Apache Lake, AZ  
 Bartlett Lake Marina, Carefree, AZ  
 Canyon Lake Marina, Mesa, AZ  
 Hawley Lake Store, White River, AZ  
 Lake Patagonia Marina, Patagonia, AZ  
 Parker Canyon Lake Marina, Sonoita, AZ  
 Pleasant Harbor Marina, Peoria, AZ  
 Rainbow Lake Lodge Resort, Lakeside, AZ  
 Ray Ruiz Marina, Apache Junction, AZ  
 Roosevelt Lake Marina, Roosevelt Lake, AZ  
 Saguaro Lake Marina, Mesa, AZ  
 San Carlos Lake Development Corporation, Peridot, AZ  
 Scorpion Bay Marina, Lake Pleasant, AZ  
 Tempe Town Lake, Tempe, AZ

NAME

ADDRESS

TELEPHONE

Winter/Spring 2012

Dear Agency Manager:

Arizona Revised Statutes, Section 28-5926, requires that the Arizona Game and Fish Department, the Arizona Department of Transportation, and the State Parks Board complete an Arizona Watercraft Survey every three years for the purpose of determining the amount of fuel sold within Arizona that is used for propelling watercraft. This percentage is then used in determining the amount of fuel tax revenue to be allocated to the State Lake Improvement Fund for water-based recreation improvements.

We need specific information from you to be able to complete this survey. Please take a few minutes to complete the enclosed forms and promptly return them to Behavior Research Center in the postage-paid envelope provided for your convenience. Behavior Research Center has been contracted to complete the Arizona Watercraft Survey.

The information you provide will remain strictly confidential and will only be used for statistical purposes. **Please return this form even if your agency did not use any fuel in boats during 2011.** Your information is critical to the successful completion of the study. If you have any questions about this project, please call Bruce Hernandez of Behavior Research Center, (602) 258-4554.

Thank you for your cooperation and information.

Sincerely,

Larry D. Voyles  
Director

Enclosures

**2012 ARIZONA WATERCRAFT SURVEY**

**PUBLIC AGENCY INVENTORY FORM**

**Confidential Information**

Name of Agency: \_\_\_\_\_

Agency Person  
Responsible for  
Watercraft: \_\_\_\_\_

Title of Person: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

- A. How many gallons of fuel did your agency (or agency representative such as Coast Guard auxiliary, water posse, etc., for which your agency purchased watercraft fuel) use on Arizona lakes and rivers, including the Colorado River, in 2011? No. of gallons \_\_\_\_\_
- B. What percentage of the total gallons mentioned in Q.A was purchased from commercial marina sources? \_\_\_\_\_ %
- C. What percentage of the total gallons mentioned in Q.A did your agency pay fuel tax in 2011? \_\_\_\_\_ %

Please complete the above information and promptly return to Behavior Research Center, Inc., 45 East Monterey Way, Phoenix, AZ 85012, in the postage paid envelope provided.

Thank you for your assistance.



Winter/Spring 2012

Dear Manager:

The Arizona Game and Fish Department, the Arizona Department of Transportation, and the State Parks Board are required by law to complete an Arizona Watercraft Survey every three years for the purpose of determining the amount of fuel sold within Arizona that is used for propelling watercraft. This percentage is then used in determining the amount of fuel tax revenue to be allocated to the State Lake Improvement Fund for water-based recreation improvements.

We need specific information from you concerning the total gallons of fuel your company used during 2011 within Arizona and on the Colorado River to be able to complete this survey. Please take a few minutes to complete the enclosed forms and promptly return them to Behavior Research Center in the postage-paid envelope provided for your convenience. Behavior Research Center has been contracted to complete the Arizona Watercraft Survey. If you have any questions about this project, please call Bruce Hernandez of Behavior Research Center, (602) 258-4554.

The information you provide will remain strictly confidential and will only be used for statistical purposes. **Please return this form even if your company did not sell any Arizona fuel during 2011.** Your information is critical to the successful completion of the study.

Thank you for your cooperation and information.

Sincerely,

Larry D. Voyles  
Director

Enclosures

**2012 ARIZONA WATERCRAFT SURVEY**

**EXCURSION/LIVERY INVENTORY FORM**

**Confidential Information**

Name of Operator:

Owner/Operator/Contact: \_\_\_\_\_

Person filling out form: \_\_\_\_\_  
(If same, please indicate)

Telephone number: \_\_\_\_\_

- A. How many gallons of marine fuel did your company use during 2011 on Colorado River expeditions or in its livery/rental operations at any locations in Arizona? No. of gallons
- B. What percentage of the total gallons mentioned in Q.A was purchased from an Arizona gasoline distributor? \_\_\_\_\_ %
- C. What percentage of the total gallons mentioned in Q.A were purchased from commercial marinas? \_\_\_\_\_ %

Please complete the above information and the enclosed referral form and promptly return to Behavior Research Center, Inc., 45 East Monterey Way, Phoenix, AZ 85012, in the postage paid envelope provided.

Thank you for your assistance.

## REFERRAL FORM

The following is a list of excursion/livery operators who have been contacted in past Watercraft Surveys. We are contacting marina operators separately, so please examine the following list as it only relates to excursion/livery operators. If we have overlooked any in your area, please provide us with their names, addresses, and telephone numbers in the space provided. If we have not overlooked any to your knowledge, please write "NONE." Please return this form to us along with your completed excursion/livery inventory form. Thank you for your assistance!

2 Wheels Motorcycle Repair, Bullhead City, AZ  
A C Watercraft Rental LLC, Bullhead City, AZ  
Action Adventure Rentals, Needles, CA  
Action Sales, Globe, AZ  
Adrenaline Junkee Rental ToyZ LLC, Chandler, AZ  
Adventure Center, Lake Havasu City, AZ  
Alco Marine, Lake Havasu City, AZ  
All About Towing, Bullhead City, AZ  
All-G's Outfitters and Guide Service, Phoenix, AZ  
All Rainbow Rentals, Henderson, NV  
All Seasons Watersports, Lake Havasu City, AZ  
Ambassador Guides Services, Marble Canyon, AZ  
Angling Arizona Guide Service, Inc., Flagstaff, AZ  
Antelope Point Outfitters, Page, AZ  
AquaJetzz, Bullhead City, AZ  
Arizona Affordalbe Outfitter, Duncan, AZ  
Arizona Discount Marine, Tucson, AZ  
Arizona Outdoor Fun, Phoenix, AZ  
Arizona Play Toyz, Chandler, AZ  
Arizona Raft Adventures, Flagstaff, AZ  
Arizona Reel Time, Marble Canyon, AZ  
Arizona River Runners, Inc., Phoenix, AZ  
Arizona Steamboat Cruises, Apache Junction, AZ  
Arizona WaterSports, Inc., Lake Havasu City, AZ  
Arizona WaterSports, Inc., Parker Dam, AZ  
Arizona Est All Sports, Lake Havasu City, AZ  
At the Bridge Rentals LLC, Lake Havasu City, AZ  
Avi Resort & Casino, Laughlin, NV  
AZFishGuide.com, Sahuarita, AZ  
Aztec Storage Center, Tempe, AZ  
Azwakeboatrental.com, Gilbert, AZ  
AZ Xtreme ATV & Jet Ski Rentals LLC, Peoria, AZ  
Bad Attitude Boats, Parker, AZ  
Bait Boats & Beyond, Nutrioso, AZ  
Barnacle Bill's Boat Rental, Lake Havasu City, AZ  
Barrett Outfitters, Peoria, AZ  
Bass N' Crappie Guide Service, Claypool, AZ  
Beach Essentials & Watercraft Rentals, Mohave Valley, AZ  
Benton Cabo Vacations, Phoenix, AZ  
Best-Jetz LLC, Laughlin, NV  
Big Bass Alley, Mesa, AZ  
Big Lake Tackle Supply, Eager, AZ  
Black Canyon Willow Beach River Adventures, Boulder City, NV  
Blue River Adventures Outfitters & Guide Service, Blue, AZ  
Blue Water Charter, Lake Havasu City, AZ  
Blue Water Resort & Casino, Parker, AZ  
Boat Rentals Lake Powell by Invert Sports, Page, AZ  
Bora Bora, Inc., Fountain Hills, AZ  
Boy Scouts of America, Tucson, AZ  
BTFI, Inc., Page, AZ  
Bubba's - Jerry Pucket, Page, AZ  
Bullhead City Jet Ski Rentals, Bullhead City, AZ  
Campbell Boat Service, Lake Havasu City, AZ  
Canon Guides & Supplies, Page, AZ  
Canyon Explorations, Flagstaff, AZ  
Canyon Jet Boat Services, Meadview, AZ  
Canyon Ministries, Phoenix, AZ  
Canyon Rio, Flagstaff, AZ  
Canyon Road Storage, Boulder City, NV  
Canyon State Guide Service, Cottonwood, AZ  
Canyoneers, Inc., Flagstaff, AZ  
Capt. Dan's Charters, Page, AZ  
Capt. Ray Young, Page, AZ  
Captain Doyle's River Excursions, Topock, AZ  
Carb Medic H2O Zone, Inc., Page, AZ  
Carl's Marine Rentals, Page, AZ  
Catalina Marina, Tucson, AZ  
Ceiba Adventures, Flagstaff, AZ  
Champion Rentals, Lake Havasu City, AZ  
Cheetah Boat Mfg, Lake Havasu, AZ  
Chong RV Marine, Lake Havasu, AZ  
Cliff Dwellers Lodge, Marble Canyon, AZ  
Cliff Pirch's Guide Service, Payson, AZ  
Cochise Honda Yamaha, Sierra Vista, AZ  
Colorado River Discovery, Page, AZ  
Colorado River Dock & Supply, Parker, AZ  
Colorado River Guide Svc., Marble Canyon, AZ  
Colorado River & Trail Expeditions, Inc., Salt Lake City, UT  
Cool Waves Jet Ski Rental, Bullhead City, AZ  
D & T Marine, Page, AZ  
Dana's Sea Doo & Boat Rental, Lake Havasu, AZ  
Davidson Marine, Yuma, AZ  
Desert River Kayak, Bullhead City, AZ  
Desert Service, Page, AZ  
Desert Sun Water Sports, Inc., Lake Havasu, AZ  
Desert Voyagers, Scottsdale, AZ  
Diamond River Adventures, Page, AZ  
Dixie Bell, Lake Havasu City, AZ  
Endless Summer Tours, Bullhead City, AZ  
Escalante Motor Sports, Lake Havasu City, AZ  
FT Powersports, Tempe, AZ  
FT Powersports, Goodyear, AZ  
Fiesta Sportfishing, Gilbert, AZ  
Fish & Feel Good, Glendale, AZ  
Fishing Fundamentals, Tonto Basin, AZ  
Frita Yacht Charters & Rentals, Fountain Hills, AZ  
Fun Fishing, Topock, AZ  
Fun Time Boat Rentals, Lake Havasu City, AZ  
Game Ranger Outfitters, Show Low, AZ  
Get It Wet, Henderson, NV  
Get Wet Rentals, Parker, AZ  
Goin' Fishin' Productions Guide Service, Yuma, AZ

Golden Nugget Waverunner Rentals & Water Recovery, Bullhead City, AZ  
 Got Water Rentals, LLC, Lake Havasu City, AZ  
 Grand Canyon River Guides, Flagstaff, AZ  
 Grand Canyon Whitewater, LLC, Phoenix, AZ  
 Gunn Terry Trophy Trout Tours, Marble Canyon, AZ  
 H 2 O Zone PWC Rentals & Repairs, Page, AZ  
 Hatch River Expeditions, Inc., Marble Canyon, AZ  
 Havasu Landing Resort & Casino, Havasu Landing, CA  
 Havasu Springs Resort, LLC, Parker, AZ  
 Havasu Watercraft Connections, Lake Havasu, AZ  
 Hidden Canyon Kayak, LLC, Page, AZ  
 High Desert Adventures, St. George, UT  
 Holiday Harbor Watercraft Rentals, Parker, AZ  
 Holiday RV & Marine, Bullhead City, AZ  
 Hook Up Outfitters, Peoria, AZ  
 Hualapai River Runners, Peach Springs, AZ  
 Hy-Tech Performance, Lake Havasu City, AZ  
 Island Boat Service, Lake Havasu City, AZ  
 J A R, Inc., Tempe, AZ  
 JML Watercraft Rental, Lake Havasu City, AZ  
 Jerry's Marine Service, Page, AZ  
 Jet Action Rentals, Tempe, AZ  
 Jet Rent, Yuma, AZ  
 Jet Ski Unlimited, Phoenix, AZ  
 Kabul, Inc., Lake Havasu City, AZ  
 Lake Havasu Bassin', Lake Havasu City, AZ  
 Lake Havasu Fishing, Lake Havasu City, AZ  
 Lake Havasu Houseboat Vacations, Lake Havasu, AZ  
 Lake Mary Boat Rental, Flagstaff, AZ  
 Lake Mead Resort, Boulder City, NV  
 Lake Pleasant Watercraft Rentals, Peoria, AZ  
 Lake Powell Charter, Page, AZ  
 Lake Powell Houseboat, Page, AZ  
 Lake Powell Houseboat Rentals, LLC, Page, AZ  
 Lake Powell Water World, Page, AZ  
 Lake-Time, Page, AZ  
 Laughlin Bullhead Vacation Rental & Sales, Bullhead City, AZ  
 Laughlin River Tours, Inc., Laughlin, NV  
 Laughlin Watercraft Rentals, Bullhead City, AZ  
 Lazy Oaks Resort, Lakeside, AZ  
 Lee's Ferry Anglers, Ltd., Marble Canyon, AZ  
 Lee's Fishing Guide Service, Tonto Basin, AZ  
 Liberty Motorsport, Yuma, AZ  
 Life's a Beach Power Sport Rentals, Lake Havasu, AZ  
 London Bridge Marine, Lake Havasu City, AZ  
 London Bridge Watercraft Rentals, Lake Havasu, AZ  
 Luna Lake Yacht Club, Alpine, AZ  
 Lynx Lake Store/Boat Rentals, Prescott AZ  
 Maloneys Guide Service, Prescott, AZ  
 Marble Canyon Outfitters, Page, AZ  
 Martinez Lake Resort, Yuma, AZ  
 McNabb Fishing Guide Service, Page, AZ  
 Mild to Wild Rafting & Jeep Trail Tours, Durango, CO  
 Mohave Sports Center, Bullhead City, AZ  
 Moki Mac River Expeditions, Salt Lake City, UT  
 Montclair Yamaha/Desert Recreation, Inc., Grand Canyon Dorries, Inc., Altaville, CA  
 Grand Canyon Expeditions, Kanab, UT  
 Grand Canyon Jeep Tours, Flagstaff, AZ  
 Bullhead City, AZ  
 Monte Vista Marine, Inc., Flagstaff, AZ  
 Morris Travel, Salt Lake City, UT  
 Nautical Sports Center, Lake Havasu City, AZ  
 Neals Fishing Products, Mesa, AZ  
 Oak Tank Outfitters, Peach Springs, AZ  
 O.A.R.S., Inc. Angels Camp, CA  
 Oar, Inc., Flagstaff, AZ  
 Oceanside Motorsports, Apache Jct, AZ  
 On the Creek Sedona Outfitters, Sedona, AZ  
 Outdoors Unlimited, Flagstaff, AZ  
 PCLMM LLC, Chandler, AZ  
 Palms Marina, Needles, CA  
 Paradise Boat Rentals, Lake Havasu City, AZ  
 Paradise Creek Anglers Pinetop, Pinetop, AZ  
 Parker River Express, Parker, AZ  
 Payson Camp Outfitters, Cave Creek, AZ  
 Performance Watersports, Bullhead City, AZ  
 Prescott Equip. Rentals/Sales, Prescott AZ  
 Primetime Watersport, Bullhead City, AZ  
 Professional River Outfitters, Flagstaff, AZ  
 Raft Adventures, Inc., Flagstaff, AZ  
 Rafter G, Flagstaff, AZ  
 Rainbow's End Resort, Lakeside, AZ  
 Rebel Adventure Tours, Las Vegas, NV  
 Recreation Resource Management, Phoenix, AZ  
 Rental World, Tempe, AZ  
 Resort Rentals, Parker, AZ  
 Ridgeline Guide Services, Tucson, AZ  
 River City Charters & Tours, Lake Havasu City, AZ  
 River Motorsports, Parker, AZ  
 River Performance Marine, Bullhead City, AZ  
 River Proof, Mesa, AZ  
 River Quest, Inc., Parker, AZ  
 River Rats Watersports, Bullhead City, AZ  
 River Travel Center, Pt. Arena, CA  
 Rivers & Oceans, Flagstaff, AZ  
 Riverjetz Watercraft & ATV Rentals, Bullhead City, AZ  
 Riviera Marina, Bullhead City, AZ  
 Ruehle Jerry Fishing Guide, Bullhead City, AZ  
 S B Rentals, Parker, AZ  
 S & G Marine, Inc., Mesa, AZ  
 Safari Co., Tucson, AZ  
 Saguaro Lake Paddleboat Tours, Fountain Hills, AZ  
 Saguaro Lake Ranch River Tours, Mesa, AZ  
 Salt River Rafting LLC (SRR), Phoenix, AZ  
 Sam's Fishing Guide Service, Lake Havasu, AZ  
 San Carlos Recreation & Wildlife Dept., San Carlos, AZ  
 Sandbar Watersports, Lake Havasu City, AZ  
 Scuba Training & Technology, Inc., Lake Havasu, AZ  
 Sedona Adventure Outfitters & Guides, Sedona, AZ  
 Size Matters ATV PWC, Peoria, AZ  
 Skip's Prop Shop, Lake Havasu City, AZ  
 Skipperliner Marine, Page, AZ

Skiwi Rentals, Henderson, NV  
 Skylite Boat Rental, Big Water, UT  
 Skywater Desert Sea Rods, Tucson, AZ  
 Steve Hummel Enterprisies, LLC, Glendale, AZ  
 Summit Divers & Water Sports, Flagstaff, AZ  
 Sunset Havasu LLC, Lake Havasu City, AZ  
 Sunwest Xpress, Bullhead City, AZ  
 Tempe Boat Rentals, Tempe, AZ  
 The Boat Brokers, Lake Havasu City, AZ  
 The Shop, Apache Junction, AZ  
 Tightline Guide Service, Peoria, AZ  
 Tim Pender's Trinity Outdoors, Seligman, AZ  
 Total Marine, Tempe, AZ  
 Total Rentals & Sales Ctr, Flagstaff, AZ  
 Tour West, Inc., Orem, UT  
 Tres Aqua Adventures, Phoenix, AZ  
 Troutback Fly Fishing, Show Low, AZ  
 U-Launch PWC, Bullhead City, AZ  
 Vessell Assist, Lake Havasu City, AZ  
 Wacko, Lake Havasu City, AZ  
 Wakeside Sports, LLC, Mesa, AZ  
 Water Sport Centers, Inc., Lake Havasu City, AZ  
 Water Trix - Jet Ski & Quad Rentals, Mesa, AZ

Watercraft Express Jet Ski Rentals, Bullhead City,  
 AZ  
 Wave Riders Rental, Lake Havasu City, AZ  
 Webb's Outfitting, New River, AZ  
 Westcoast Craigcas, LLC, Bullhead City, AZ  
 Western Arizona Guide Service, Bullhead City, AZ  
 Western River Expeditions, Salt Lake City, UT  
 Wet & Wyld Watersports, Lake Havasu City, AZ  
 Wet Monkey Boat Rentals, Lake Havasu City, AZ  
 Wet-N-Wild, Bullhead City, AZ  
 Whettrods Rentals, Inc., Lake Havasu City, AZ  
 White Mountain Apache Tribe, Whiteriver, AZ  
 Wildcat Watersports, Page, AZ  
 Wilderness Aware Rafting, Buena Vista, CO  
 Wilderness Outfitters Store, Page, AZ  
 Wilderness River Adventures, Page, AZ  
 Windsor Beach Rentals, Lake Havasu City, AZ  
 Yuma River Tours, Yuma, AZ  
 Xtreme Watercraft Rentals Inc., Laughlin, NV

NAME

ADDRESS

TELEPHONE

### 8.3 Agreement of the Agencies

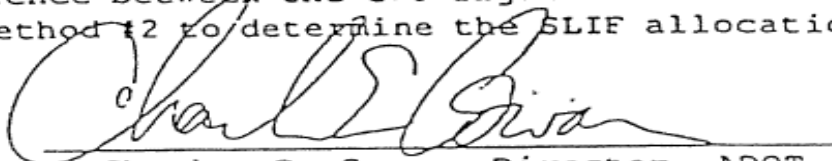
EXHIBIT 6.4

AGREEMENT OF THE AGENCIES

For the first time in the history of the Arizona Watercraft Survey, the study included a cross-check of boaters' estimates of fuel purchased from marinas with marinas' estimates of fuel sold. The check revealed a significant difference between the two estimates. The impact of this discrepancy on allocations from the Highway Users Revenue Fund to the State Lake Improvement Fund (SLIF) would be substantial. If we base our calculations on the boaters' estimates of fuel purchased, the SLIF allocation would be 2.0395 percent or approximately \$6 million annually. However, if we base our calculations on the marinas' estimates of fuel sold, the SLIF allocation would be .9576 percent or approximately \$3 million annually. Therefore, until the next regular survey in 1994 we have agreed to continue payments to the SLIF at 1.4 percent, the rate established by the 1988 watercraft survey and used for fiscal years 1988, 1989, and 1990.

State law requires that motor fuel taxes collected be deposited in the funds reflecting where the taxes were earned. The watercraft survey is intended to determine where these taxes are earned. Consequently, we have agreed that the 1994 survey must be designed to obtain the most accurate data possible, and we will fund the survey at the amount required to obtain this data. We believe an improved survey design will reduce or eliminate the discrepancy between the boaters' and the marinas' estimates

In any case, if the improved survey design does not significantly reduce the discrepancy, we have agreed to resolve the difference by using one of two methods which are shown on the attachment. We will compare boaters' estimates of marina fuel purchases and marinas' estimates of fuel sales. If the difference between the two figures is 25 percent or less, method #1 will be used to calculate the SLIF allocation; if the difference between the two figures is more than 25 percent, we will use method #2 to determine the SLIF allocation.

  
Charles E. Cowan, Director, ADOT

  
Duane L. Shroufe, Director, Game & Fish

  
Kenneth E. Travous, Director, State Parks