LAKE POWELL WATER QUALITY REPORT
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I. INTRODUCTION

The 1992 water quality monitoring of Lake Powell was conducted at the majority of the same sites used during the 1991 monitoring program (See Table 1); however, many of the sites were sampled at fewer locations. The main sampling was done May through September: historically the peak visitation periods. The same sites which showed high counts during the summer will be monitored throughout the winter to record baseline data. This will determine fecal coliform levels during the lower visitation months.

II. SAMPLING PLAN

Twenty-nine sample sites were monitored this year. Halls Creek Bay was not sampled this year; however, Wahweap Bay and Bullfrog Bay were added to the monitoring list. The sample sites were split this year between an Uplake lab at Hite and the Downlake lab at Wahweap. Eighteen of the sites were monitored by the Wahweap Lab; eleven sites through the Hite lab.

The random plan was continued this year. This plan was instituted in 1991 to allow each district to monitor highly used areas not on the schedule of sample sites.

Sampling dates were again scheduled every two weeks. Days immediately following holiday weekends were also chosen to ascertain any contamination which may have occurred during these higher than normal use periods.

III. SAMPLING PROCEDURES

Samples were collected by boat where the water depth was 4 feet. Two 100 ml samples were collected at a depth of 4 inches below the surface of the water at each location. The samples were immediately packed on ice. Water temperature, time of collection, turbidity of the water, location use, location condition, lake level, weather, and air temperature were recorded. The samples were transported to the Glen Canyon National Recreation Area laboratories to be filtered and incubated using the membrane filtration techniques described in Standard Methods for the Examination of Water and Wastewater (16th edition, 1985, pp. 886-894). The samples were handled in such a way as to insure that they were processed within the six hour time limit recommended by Standard Methods (16th edition, 1985, pg. 859) to avoid "unpredictable changes".

IV. ANALYSIS

Fecal coliform is a type of bacteria (consisting of many species) found in the intestinal tracts of warm blooded animals.

Generally it is not a health hazard, but may serve as an indicator organism as it is almost always present in water containing enteric pathogenic bacteria and viruses. Consequently, water that is free of coliforms is considered free of pathogens.

After a twenty four hour incubation period in a water bath at 44.5 C, fecal coliform colonies were counted and recorded. The mFC media used for the fecal coliform test contains aniline blue dye and lactose. As the fecal coliform grow they ferment the lactose producing an acid. The acid reacts with the aniline blue dye, staining the fecal coliform colonies blue. Only those colonies exhibiting the blue color were counted. Those having a cream, grey or green color are non-fecal thermophiles and were not considered.

Due to the existence of regulatory standards for specific water uses; the relative ease of isolation and testing for fecal coliforms; and the longevity of fecal coliforms; fecal coliform testing is used exclusively by Glen Canyon National Recreation Area as a test of the cleanliness of it's primary contact waters. A standard of 200 colonies/100 ml from primary contact waters used for full body immersion (swimming) has been set by the EPA. The states of Utah and Arizona have adopted this standard.

V. PROCEDURAL MODIFICATIONS

Several errors were found in the procedure manual. The grams of NaOH required for the 1M and 0.2N solutions of NaOH were miscalculated. This miscalculation has effected the Rosolic Acid and the sterile buffer dilution water. In the case of the Rosolic Acid, the NaOH with which it is prepared was forty times weaker than it should have been. The purpose of the Rosolic Acid is to kill any background colonies that may be mistaken for fecal coliform colonies. In the case of the dilution water the NaOH was half as strong as it should have been. The only effect this had was that it took more 1M NaOH to achieve the correct pH reading for the buffer solution. The 0.2N solution was remixed and used from the beginning of the season the 1M solution was not remixed until mid-season as it is only used to alter the pH of the KH_2PO_4 used in the buffer solution. The manual will be altered to reflect these changes for next year.

Two site names were changed this year to bring them more into the Government established standards. These sites are Wahweap Swim Beach and Government Swim Beach. Since there are no lifeguards on duty they cannot be called "Swim Beach"; therefore, their names have been changed to Wahweap Lodge Beach and Government Housing Beach respectively.

The sample size filtered should be varied as needed in 1993 to obtain a countable plate in all cases. Standard Methods for the Examination of Water and Wastewater (16th edition, 1985, pp

890-891) states:

> "An ideal sample volume will yield growth of about 50 coliform colonies and not more than 200 colonies of all types. Analyze drinking waters by filtering duplicate portions of the same volume, such as 100 to 500 ml or more, or by filtering two smaller sample volumes. Analyze other waters (not drinking water) by filtering three different volumes (diluted or undiluted), depending on the expected bacterial density...When less than 20 ml of sample (diluted or undiluted) is to be filtered, add approximately 10 ml sterile dilution water to the funnel before filtration. This increase in water volume aids in uniform dispersion of the bacterial suspension over the entire effective filtering surface."

Suggested volumes for the sample sizes would be 100 ml and 50 ml for the first sample. If the counts are 200 colonies or more, then the resample should be run using 50 ml, 25 ml, and 10 ml. All data is eventually reported in terms of number of colonies/100 ml, so the size of the sample would not effect the later comparison of the data. Since resample days include fewer samples, running one extra sample per location would not represent a significant time factor for the lab technician.

> "To report coliform density as (total) coliforms/100ml, compute the count using membrane filters with 20 to 80 coliform colonies and not more than 200 colonies of all types per membrane, by the following equation:
>
> $$\text{Total colonies/100 ml} = \frac{\text{Coliform colonies counted X 100}}{\text{ml of sample filtered}}$$
>
> If no filter has a coliform count falling in the ideal range (20-80), total the coliform counts on all filters and report as number per 100 ml. For example if duplicate 50 ml samples were examined and the two membranes had five and three coliform colonies respectively, report the count as eight coliform colonies per 100 ml. Similarly if 50 ml, 25 ml, and 10 ml volumes were filtered and the counts were 15, 6, and 1 respectively, report the count as 25/100 ml.
>
> On the other hand, if 10, 1.0, and 0.1 ml portions were examined with counts of 40, 9, and <1 coliform colonies, respectively, select the 10 ml portion only for calculating the coliform density because this filter had coliform count falling in the ideal range. The result is 400/100 ml." (Standard Methods for the Examination of Water and Wastewater, 16th edition, 1985, pg. 893).

In an instance where the total colony count is > 200, a new sample should be collected and more appropriate volumes filtered to achieve a result reading within the range of 20 - 80 colonies. When colony counts reach >200, filters begin to be overloaded and the size of the colonies drop considerably making identification and counting of colony numbers much more difficult. This year and in past years filters which were so overloaded that they were impossible to count were called TNTC (Too Numerous to Count) and were assigned a count of 1000. By instituting these dilution procedures in 1993 it will be possible to be much more sure of the cleanliness or contamination of the water. This will tend to eliminate any counting errors that may occur as well, which can and may have occurred this year when the colony counts soared over three hundred.

The procedure for unexpected control results should be to immediately recheck all lab systems: media; UV sterilizer; water bath temperature; etcetera; in accord with whichever control gave the unexpected result. This procedural change should be made in the manual and adhered to more strictly than it has been in past years.

This year geometric means were calculated on a thirty day rather than monthly basis. This is what was intended since the program was instituted in 1986.

VI. RESULTS

Both labs functioned well. There was a total of 1250 samples run this year out of both labs combined from 29 sample sites (See Table 1), and they were processed in a timely manner. This is due in large part to the cooperation of the protection rangers in facilitating the collection of samples and to the diligence of the technicians in working the hours necessary to get results. This year required a number of resample days in addition to the regularly scheduled collection days. The protection rangers made the entire process of collection run very smoothly.

The counts followed expected trends. Large open canyons and bays did not have high coliform counts, while the smaller more restricted bays and canyons showed high counts as they have in previous years. Furthermore, the more heavily visited a site, the higher the counts were. (See Table 2)

Correlation coefficients were calculated between individual coliform counts and the following variables: boats; people; vehicles; and water temperature. The results were as follows:

Coliform counts with boats:	0.115
Coliform counts with people:	0.128
Coliform counts with vehicles:	0.001
Coliform counts with Water Temperature:	0.210

The strongest correlation exists with water temperature. However, there is not a significant correlation. Taken as a whole the correlation coefficients would seem to indicate what has been shown previously: that higher visitation and water temperature, which occurs during the peak visitation times, contribute to high fecal coliform counts.

This year eight canyons were posted "No Swimming"(See Table 3). All of those canyons have now been opened as of November 5, 1992 (See Table 4). Moqui and Farley Canyons were posted last year and had to be posted again this year. The other sites that were posted: Government Housing; Llewellyn Gulch; Oak Canyon; Upper Bullfrog Bay; Hite Marina; and Forgotten Canyon were high last year but never reached the point of having to be posted. Llewellyn Gulch was originally posted as "No Swimming" on June 30, 1992. On July 31, 1992 the buoy was changed to read "Closed, Bacterial Contamination" this was done because the coliform counts were not dropping as expected. A management decision was made to extend the closure of Llewellyn Gulch through the winter. This decision was made to allow monitoring of a canyon that has had virtually no human activity in it since July 31, 1992. It was reposted with a white buoy reading: "CLOSED TO PUBLIC ACCESS, NPS Vessels Only" on 11/10/92.

The performance of the controls was erratic. (See Table 5) The positive control is designed to show that the condition of the media and the water bath are conducive to the growth of E. coli; 100 ml of buffer solution is inoculated with E. coli and then filtered. The plate should produce a countable plate. The positive control consistently worked as expected except on 7/15 for the downlake counts, and 5/27 for the uplake counts. However, all but one of the plates had colonies that were too numerous to count. Next year the lab technicians should strive to achieve a countable plate for this control.

The negative control, Enterobacter aerogenes, was supposed to show no growth. This is to insure that the media is selective for fecal coliform and that the water bath temperature is correct, because Enterobacter aerogenes has a suppressed growth at the water bath temperature of 44.5 C. This control worked as expected on 7/6, 7/15, 7/22, 8/26, 8/31, and 9/17 for the downlake counts which is approximately 35% of the time. For the uplake counts the negative control worked on 6/22, 8/17, 8/20 and 9/28 which is approximately 20% of the time. It was determined that the Enterobacter Aerogenes sample received from the Coconino County Board of Health was possibly contaminated with E. coli and a new sample was obtained from both the Coconino County Board of Health and the State Lab in Phoenix before the 6/22 collection date. Concurrent Enterobacter aerogenes controls were run from both labs and it was determined definitively that the Coconino County control was contaminated. It is possible that the negative control failed to work due to further contamination or that the media was not selective for E. coli.

The UV control was used to determine that the UV sterilizer was working as it should. According to Standard Methods the UV sterilizer is considered working if an inoculated sample run through a filter and an inoculated sample first UV sterilized and then filtered show a 90% reduction in the number of colonies upon comparison. This is another reason why it is necessary to achieve a countable plate for the positive control: so there can be a comparison between the positive control and the UV control. The downlake control worked on 6/8, 7/15, 8/5, 8/18, 8/31, and 10/19, which is approximately 35% of the time. The uplake UV control worked on 5/19, 6/22, 6/24, 7/20, 9/8, 9/14, 9/21, and 9/28 or 40% of the time. The UV controls were considered working because there was a significant reduction in growth; however, the sterilizer was not killing all the E. coli. It is also possible that on those days the UV sterilizer didn't work, the inoculated solution was so dense that three minutes was insufficient to kill all the colonies. If an especially contaminated sample was run through a filter and then that filter was sterilized it is possible that filter was not completely bacteria free before the next sample was run, and thus contaminated samples run later. The UV control was exposed to varying times in the sterilizer to determine if a lengthier exposure time to the UV light would produce a more definitive decrease in growth, this measure proved unsuccessful.

Finally the blank controls which are another way of testing to be sure that the UV sterilizer is working properly, consistently operated correctly, showing no growth. Media controls were instituted towards the end of the season, and also operated properly, showing no growth.

Due to the inconsistent operation of negative and UV controls, the absolute value of bacterial counts should be regarded with some suspicion. Nevertheless, the consistent operation of blank controls; media controls; the consistent trend to have low counts in waters little used be visitors, higher counts in heavily used areas; and a seasonal pattern of counts corresponding with visitation rates, all validate the results obtained by the monitoring. We are certain that the spatial and temporal trends in bacterial contamination are accurate. (See Table 6)

The Uplake counts until July 15th should not be given as much weight as those taken after the 15th. Several errors in procedure may have led to false low counts. These errors include incubating the samples right side up, which may have caused drying out of the filters, and confirming the water bath temperature before putting in the samples. The procedural errors were corrected and counts after July 15th have more validity.

The data for this year was entered into a dBase file and can be used in future years for statistical interpretation of long term trends. This data includes: Date sample was taken; Time sample was taken; Water elevation; Weather; Air temperature; Wind

conditions; Water temperature; People at the site; Boat Count; Vehicle Count; and Coliform Count. This can be expanded next year in an effort to find correlations between high counts and other factors (ie. visitation). Extra samples were taken at the three Lone Rock sites to begin the process of collecting sufficient data to be statistically interpreted.

VII. MANAGEMENT SUGGESTIONS

1. Verify that the controls are working correctly prior to the start of the summer season. Work to achieve a countable plate for all of the controls. Furthermore, determine how non-working controls will be assessed. Do non working controls negate the whole sample day? If this is so, then a resample will need to be done immediately. Do non-working controls call for an adjustment in the counts themselves? If this is the case then those adjustments must be determined and put into the procedure manual. In addition to this, preseason training sessions for the laboratory staff at the Coconino County Department of Health should be expanded to incorporate the full range of procedures, problem identification and correction. Investigation should be made into requirements for laboratory technician certification.

2. Run blanks and UV controls every ten plates to determine when failure of the UV sterilizer occurs. As it was run this year, it was impossible to tell if all the filters were sterilized equally. By running the UV and blank controls more often it will be possible to tell when and if the counts become unreliable.

3. Have a mid year split sample run by an outside lab as soon as counts exceed 100 colonies/100 ml. This will verify the counts of the National Recreation Area's labs, and insure that the methods being followed are accurate and error free.

4. Both laboratories used in the monitoring programs should be certified in the states in which they are located prior to the beginning of monitoring in 1993.

5. Last year a practice of sampling areas that seemed to have high usage, but that were not on the list of sample areas was begun. This was referred to as "random sampling", but a more accurate term might be "systematic sampling" . The "systematic sampling" must be increased. One extra sample should be taken each and every sample and resample date. A goal should be set to sample every major canyon at it's highest use area at least once over the course of the summer. This will give a much clearer picture of the condition of the lake. This was begun this year at the Dirty Devil and North Wash. Relatively high counts in these areas may indicate contaminated waters flowing into Lake Powell. In 1993 this possibility should be investigated more fully.

6. It is highly recommended that sample sites with collection areas a great distance from each other be considered separate sample sites. Upper Bullfrog Bay is one such sample site which should be divided. The collection areas are at least three quarters of a mile from each other across a wide open bay. What occurred because of this distance was that one side of the bay had high counts and by those counts alone should have been posted. However; the bay was not posted because the counts on the other side of the bay were low enough to keep the geometric mean below 200: the figure needed for a closure. Antelope Point Beach is another such site. It is a wide shallow cove. Sample one is taken at the beach itself, sample two is taken at the mouth of the cove almost in the main channel. There were times when the counts were very disparate and the imposition of the geometric mean gave an inaccurate assessment of the condition of Antelope Point Beach itself.

7. Next year everything having to do with postings will be yellow: signs, buoys, and site bulletins. This will greatly aid in recognition by the public of closure notices and may possibly avoid the problems that were faced this year in which the public either didn't see the postings, or didn't understand them.

8. The Hite lab was up and running this year. This greatly improved the timeliness of the processing. The six hour time constraints were more easily met and the stress and strain of trying to meet a plane schedule was eliminated. However, the Hite lab is still too remote. A minimum of two hours is spent just traveling to and from Bullfrog and Halls Crossing. The majority of the sites which needed to be resampled were at Bullfrog or Halls Crossing. The proposed move of the lab to Bullfrog is highly recommended. If the ranger at Hite does the collecting at Farley Canyon and Hite Marina and sends the samples down on the afternoon flight from Hite to Bullfrog, this will save additional time.

9. Last year, as well as, this year "the Cut" rather than "the Narrows" was sampled. There was confusion about the exact location to be sampled. Next year it is recommended that both sites be sampled, as "the Cut" did register high counts, and "the Narrows" still hasn't been sampled.

10. A review of standard sites should be made with the ranger staff to determine whether changing conditions such as lake level, have altered the sites which should be sampled.

11. A significant problem the water quality program faces is the incredible length of time which passes between the discovery of high counts and the actual posting of areas. (See Table 4) In some cases nearly a month passed between the discovery of high counts and posting. Uplake an average of 9.4 days passed before posting, after a closure notice was signed. This can be attributed to a lack of communication between divisions. Two changes must be made next year, both involve

dissemination of information. First and foremost, the water quality technician should inform protection rangers and maintenance personnel about possible impending closures. Then, if and when a closure occurs, it isn't a surprise to the personnel involved in posting the signs and buoys. Secondly, closure and reopening notices must be sent to all areas having contact with visitors. These areas are: District Rangers Office - Wahweap; Dispatch - Headquarters; Carl Hayden Visitor Center; Reception desk - Headquarters; Dangling Rope; Halls Crossing Visitor Center; Bullfrog Orientation and Medical Center; and Hite Visitor Center. In addition a standard response should be sent with the closure notices so that all visitors are receiving accurate, complete information from whomever they may contact about the status of water quality on Lake Powell.

12. A complete run through should be conducted at both labs with both technicians to insure that procedures are carried out in a similar manner.

13. There is an increased need to place toilet facilities in an accessible place. At present the Lone Rock vault toilets are approximately a half a mile from the shoreline. Maintenance is pumping out approximately 50% less material than when the lake was at full pool, while they are pumping out twice as much material from the toilets on the Colorado River at the Petroglyph Panel. The logical conclusion is that the Lone Rock toilets are not being used. Farley Canyon and Upper Bullfrog Bay are also facing the same circumstances. Both of these areas yielded high counts in 1992. (See Table 2)

VIII. CONCLUSION

The water quality program is continuing to grow, this year expanding to include water sampling on the portion of the Colorado River below the dam. Glen Canyon National Recreation Area has begun building a solid data base that will serve well to indicate the trends and status of all it's water resources. Water quality is a major issue in the public eye as the oceans and waterways become more and more contaminated. Glen Canyon National Recreation Area must be at the forefront, ever expanding and modifying management of it's water resource to insure that it remains healthy and safe.

Table 1

SITE	# OF LOCATIONS	MAY	JUNE	JULY	AUG.	SEPT.
WAHWEAP BAY	1	18,26	8,22	6,20	3,17,31	8
WAHWEAP LODGE BEACH	2	18,26	8,22	6,20	3,17,31	8
GOVERNMENT HOUSING	1	26	22	20	31	8
WAHWEAP MARINA	2	18,26	8,22	6,20	3,17,31	8
LONE ROCK BEACH	3	18,26	8,22	6,20	3,17,31	8
ANTELOPE POINT	2	18,26	8,22	6,20	3,17,31	8
WARM CREEK BEACH	2	18,26	8,22	6,20	3,17,31	8
WARM CREEK CATTLE	1	26	22	20	31	8
THE CUT	1	26	22	20	31	8
DANGLING ROPE MAR.	2	18,26	8,22	6,20	3,17,31	8
RAINBOW BRIDGE	1	18,26	8,22	6,20	3,17,31	8
MT. SHEEP CANYON	2	18,26	8,22	6,20	3,17,31	8
OAK CANYON	2	18,26	8,22	6,20	3,17,31	8
CHA CANYON	1	26	22	20	31	8
WILSON CREEK	1	26	22	20	31	8
DUNGEON CREEK	1	26	22	20	31	8
LLEWELLYN GULCH	2	18,26	8,22	6,20	3,17,31	8
DAVIS GULCH	2	18,26	8,22	6,20	3,17,31	8
HOBI CAT BEACH	2	18,26	8,22	6,20	3,17,31	8
STANTON CREEK	2	18,26	8,22	6,20	3,17,31	8
BULLFROG BAY	1	18,26	8,22	6,20	3,17,31	8
BULLFROG MARINA	2	18,26	8,22	6,20	3,17,31	8
UPPER BULLFROG BAY	2	18,26	8,22	6,20	3,17,31	8
HANSEN CREEK	1	18,26	8,22	6,20	3,17,31	8
FORGOTTEN CANYON	1	26	22	20	31	8
HALLS CROSSING MAR.	2	18,26	8,22	6,20	3,17,31	8
MOQUI CANYON	2	18,26	8,22	6,20	3,17,31	8
FARLEY CANYON	2	18,26	8,22	6,20	3,17,31	8
HITE MARINA	2	18,26	8,22	6,20	3,17,31	8

THE FOLLOWING ARE SITE NAME ABBREVIATIONS USED IN TABLE 2.

ANTELOPE POINT	AP1 (BEACH), AP2 (INTAKE)
BULLFROG BAY	BB
BULLFROG MARINA	BFMAR1, BFMAR2,
CHA CANYON	CHA1, CHA2
THE CUT	CUT1
DUNGEON CREEK	DCR1
DANGLING ROPE MARINA	DRM1, DRM2
DAVIS GULCH	DVG1
FARLEY CANYON	FAR1, FAR2
FORGOTTEN CANYON	FOR1
GOVERNMENT HOUSING	NPS1
HANSEN CREEK	HAN1
HOBI CAT BEACH	HOBI1, HOBI2
HALLS CROSSING MARINA	HCMAR1, HCMAR2
HITE MARINA	HIMAR1, HIMAR2
LLEWELLYN GULCH	LEW1, LEW2
LONE ROCK BEACH	LONE1, LONE2, LONE3
MOQUI CANYON	MOQUI1, MOQUI2
MT. SHEEP CANYON	MSC1, MSC2
OAK CANYON	OAK1, OAK2
RAINBOW BRIDGE	RB
STANTON CREEK	STAN1, STAN2
UPPER BULLFROG BAY	UBB1, UBB2
WARM CREEK BEACH	WCB1, WCB2
WARM CREEK CATTLE AREA	WCCA1
WILSON CREEK	WIL1
WAHWEAP BAY	WWB
WAHWEAP LODGE BEACH	WWLB1, WWLB2
WAHWEAP MARINA	WWM1, WWM2

TABLE 2

1992 WATER QUALITY DATA FOR AP1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	955	3625.50	CLEAR	85	5	24	0	0	0	5
05/18/92	955	3625.50	CLEAR	85	5	24	0	0	0	0
05/26/92	1054	3628.45	CLEAR	75	4	21	0	0	0	704
05/26/92	1054	3628.45	CLEAR	75	4	21	0	0	0	1000
05/29/92	920	3629.28	CLEAR	70	3	21	7	2	4	70
05/29/92	920	3629.28	CLEAR	70	3	21	7	2	4	104
06/08/92	1132	3632.49	CLOUDY	70	1	24	5	1	2	59
06/08/92	1132	3632.49	CLOUDY	70	1	24	5	1	2	66
06/22/92	1114	3633.98	CLEAR	85	1	22	8	2	3	268
06/22/92	1114	3633.98	CLEAR	85	1	22	8	2	3	372
06/24/92	935	3634.01	CLEAR	85	0	24	12	0	4	134
06/24/92	935	3634.01	CLEAR	85	0	24	12	0	4	270
07/06/92	950	3633.37	CLEAR	90	2	25	20	3	9	169
07/06/92	950	3633.37	CLEAR	90	2	25	20	3	9	136
07/20/92	845	3632.05	CLEAR	36	0	26	20	6	8	213
07/20/92	845	3632.05	CLEAR	80	0	26	20	6	8	226
07/22/92	825	3631.72	CLEAR	90	2	0	20	0	0	130
07/22/92	825	3631.72	CLEAR	90	2	0	20	0	0	353
08/03/92	920	3630.34	CLEAR	90	0	26	10	6	3	108
08/03/92	920	3630.34	CLEAR	90	0	26	10	6	3	98
08/17/92	1238	3628.08	CLEAR	90	5	29	15	6	7	81
08/17/92	1238	3628.08	CLEAR	90	5	29	15	6	7	146
08/31/92	956	3626.26	RAINY	65	15	25	4	3	2	55
08/31/92	956	3626.26	RAINY	65	15	25	4	3	2	170
09/08/92	954	3625.50	CLEAR	80	3	25	0	0	0	32
09/08/92	954	3625.50	CLEAR	80	3	25	0	0	0	68

1992 WATER QUALITY DATA FOR AP2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1000	3625.50	CLEAR	85	5	24	0	0	0	14
05/18/92	1000	3625.50	CLEAR	85	5	24	0	0	0	21
05/26/92	1059	3628.45	CLEAR	75	4	22	0	0	0	109
05/26/92	1059	3628.45	CLEAR	75	4	22	0	0	0	210
06/08/92	1138	3632.49	CLOUDY	70	1	24	5	1	2	12
06/08/92	1138	3632.49	CLOUDY	70	1	24	5	1	2	0
06/22/92	1109	3633.98	CLEAR	85	1	22	8	2	3	20
06/22/92	1109	3633.98	CLEAR	85	1	22	8	2	3	42
07/06/92	1055	3633.37	CLEAR	90	2	24	20	3	9	185
07/06/92	1055	3633.37	CLEAR	90	2	24	20	3	9	236
07/20/92	850	3632.05	CLEAR	80	0	26	20	6	8	109
07/20/92	850	3632.05	CLEAR	80	0	26	20	6	8	84
07/22/92	830	3631.72	CLEAR	90	2	0	20	0	0	45
07/22/92	830	3631.72	CLEAR	90	2	0	20	0	0	36
08/03/92	930	3630.34	CLEAR	90	0	27	10	6	3	134
08/03/92	930	3630.34	CLEAR	90	0	27	10	6	3	218

(AP2 , CONTINUED)

08/17/92	1240	3628.08	CLEAR	90	5	30	15	6	7	93
08/17/92	1240	3628.08	CLEAR	90	5	30	15	6	7	134
08/31/92	1004	3626.26	RAINY	65	15	26	4	3	2	61
08/31/92	1004	3626.26	RAINY	65	15	26	4	3	2	32
09/08/92	1003	3625.50	CLEAR	80	3	26	0	0	0	48
09/08/92	1003	3625.50	CLEAR	80	3	26	0	0	0	90

1992 WATER QUALITY DATA FOR BB

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1125	3625.50	CLEAR	80	5	0	0	2	0	0
05/18/92	1125	3625.50	CLEAR	86	3	0	0	2	0	0
05/26/92	1310	3628.45	CLEAR	80	5	23	2	2	0	0
05/26/92	1310	3628.45	CLEAR	23	5	23	2	2	0	0
06/08/92	1055	3632.49	CLEAR	80	1	24	2	2	0	1
06/08/92	1055	3632.49	CLEAR	80	1	24	2	2	0	1
06/22/92	1400	3633.98	CLEAR	85	2	28	6	4	0	278
06/22/92	1400	3633.98	CLEAR	85	2	28	6	4	0	134
07/06/92	1120	3633.37	CLEAR	85	5	25	4	2	0	2
07/06/92	1120	3633.37	CLEAR	85	7	25	4	2	0	0
07/20/92	1115	3632.05	CLEAR	90	5	26	12	6	0	148
07/20/92	1115	3632.05	CLEAR	90	5	26	12	6	0	84
08/03/92	1200	3630.34	CLEAR	90	5	27	15	10	0	44
08/03/92	1200	3630.34	CLEAR	90	5	27	15	10	0	100
08/17/92	1142	3628.08	CLEAR	95	0	29	0	0	0	60
08/17/92	1142	3628.08	CLEAR	95	0	29	0	0	0	68
08/20/92	1150	3627.47	CLEAR	95	3	28	8	16	20	104
08/20/92	1150	3627.47	CLEAR	95	3	28	8	16	20	108
09/08/92	1100	3625.50	CLEAR	90	3	23	0	1	2	120
09/08/92	1100	3625.50	CLEAR	90	3	23	2	1	0	164

1992 WATER QUALITY DATA FOR BFMAR1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1043	3625.50	CLEAR	80	5	23	99	99	99	36
05/18/92	1043	3625.50	CLEAR	80	5	23	99	99	99	42
05/26/92	1335	3628.45	CLEAR	80	5	23	99	99	99	6
05/26/92	1335	3628.45	CLEAR	80	5	23	99	99	99	0
06/08/92	1012	3632.49	CLEAR	80	1	24	99	99	99	39
06/08/92	1012	3632.49	CLEAR	80	1	24	99	99	99	41
06/22/92	1305	3633.98	CLEAR	85	2	27	99	99	99	108
06/22/92	1305	3633.98	CLEAR	85	2	28	99	99	99	84
07/06/92	955	3633.37	CLEAR	85	7	26	99	99	99	0
07/06/92	955	3633.37	CLEAR	85	7	26	99	99	99	0
07/20/92	1025	3632.05	CLEAR	90	5	26	99	99	99	156
07/20/92	1025	3632.05	CLEAR	90	5	26	99	99	99	164
08/03/92	1100	3630.34	CLEAR	90	5	26	99	99	99	124
08/03/92	1100	3630.34	CLEAR	90	5	26	99	99	99	116

(BFMAR1, CONTINUED)

08/17/92	1100	3628.08	CLEAR	95	3	27	99	99	99	88
08/17/92	1100	3628.08	CLEAR	95	3	27	99	99	99	120
08/31/92	955	3626.26	CLOUDY	80	7	24	99	99	99	144
08/31/92	955	3626.26	CLOUDY	80	7	24	99	99	99	196
09/08/92	1015	3625.50	CLEAR	90	3	24	99	99	99	124
09/08/92	1015	3625.50	CLEAR	90	3	24	99	99	99	160

1992 WATER QUALITY DATA FOR BFMAR2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1052	3625.50	CLEAR	80	5	23	99	99	99	2
05/18/92	1052	3625.50	CLEAR	80	5	23	99	99	99	1
05/26/92	1340	3628.45	CLEAR	80	5	23	99	99	99	4
05/26/92	1340	3628.45	CLEAR	80	5	23	99	99	99	6
06/08/92	1021	3632.49	CLEAR	80	1	23	99	99	99	8
06/08/92	1021	3632.49	CLEAR	80	1	23	99	99	99	5
06/22/92	1320	3633.98	CLEAR	85	2	26	99	99	99	0
06/22/92	1320	3633.98	CLEAR	85	2	26	99	99	99	0
07/06/92	1045	3633.37	CLEAR	85	7	26	99	99	99	0
07/06/92	1045	3633.37	CLEAR	85	7	26	99	99	99	0
07/20/92	1035	3632.05	CLEAR	90	5	26	99	99	99	188
07/20/92	1035	3632.05	CLEAR	90	5	26	99	99	99	160
08/03/92	1115	3630.34	CLEAR	90	5	27	99	99	99	92
08/03/92	1115	3630.34	CLEAR	90	5	27	99	99	99	64
08/17/92	1115	3628.08	CLEAR	95	3	28	99	99	99	72
08/17/92	1115	3628.08	CLEAR	95	3	28	99	99	99	58
08/31/92	1005	3626.26	CLOUDY	80	7	24	99	99	99	84
08/31/92	1005	3626.26	CLOUDY	80	7	24	99	99	99	164
09/08/92	1020	3625.50	CLEAR	90	3	24	99	99	99	100
09/08/92	1020	3625.50	CLEAR	90	3	24	99	99	99	112

1992 WATER QUALITY DATA FOR CHA1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	940	3628.45	CLOUDY	72	7	21	0	0	0	1000
05/26/92	940	3628.45	CLOUDY	72	7	21	0	0	0	522
05/29/92	1540	3629.28	CLEAR	70	0	22	4	1	0	229
05/29/92	1540	3629.28	CLEAR	70	0	0	4	1	0	192
06/22/92	1050	3633.98	CLEAR	85	3	24	10	3	0	1000
06/22/92	1050	3633.98	CLEAR	85	3	24	10	3	0	382
06/24/92	1245	3634.01		0	0	23	4	1	0	91
06/24/92	1245	3634.01		0	0	23	4	1	0	62
07/06/92	1330	3633.37	CLEAR	95	30	26	8	1	0	63
07/06/92	1330	3633.37	CLEAR	95	30	26	8	1	0	120
07/20/92	1100	3632.05	CLOUDY	89	0	26	20	5	0	85
07/20/92	1100	3632.05	CLOUDY	89	0	26	20	5	0	128
08/31/92	1352	3626.26	RAINY	65	0	0	8	1	0	153
08/31/92	1352	3626.26	RAINY	65	0	0	8	1	0	226

(CHA1 , CONTINUED)

09/08/92	1219	3625.50	CLEAR	85	3	24	5	2	0	152
09/08/92	1219	3625.50	CLEAR	85	3	24	5	2	0	178

1992 WATER QUALITY DATA FOR CUT1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	1000	3628.45	CLEAR	75	4	21	0	6	0	145
05/26/92	1000	3628.45	CLEAR	75	4	21	0	6	0	386
06/22/92	1024	3633.98	CLEAR	85	1	24	20	12	0	12
06/22/92	1024	3633.98	CLEAR	85	1	24	20	12	0	10
07/20/92	935	3632.05	CLEAR	80	0	26	40	11	0	239
07/20/92	935	3632.05	CLEAR	80	0	26	40	11	0	182
07/22/92	900	3631.72	CLEAR	90	2	0	0	0	0	67
07/22/92	900	3631.72	CLEAR	90	2	0	0	0	0	70
08/31/92	1108	3626.26	RAINY	65	15	25	10	4	0	57
08/31/92	1108	3626.26	RAINY	65	15	25	10	4	0	60

1992 WATER QUALITY DATA FOR DCR1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	1230	3628.45	CLOUDY	72	7	23	10	3	0	93
05/26/92	1230	3628.45	CLOUDY	72	7	22	10	3	0	280
06/22/92	1315	3633.98	CLEAR	85	3	25	15	3	0	50
06/22/92	1315	3633.98	CLEAR	85	3	25	5	3	0	36
07/20/92	1345	3632.05	CLOUDY	89	0	23	2	1	0	79
07/20/92	1345	3632.05	CLOUDY	89	0	23	2	1	0	128
08/31/92	1448	3626.26	RAINY	65	0	0	5	1	0	33
08/31/92	1448	3626.26	RAINY	65	0	0	5	1	0	34

1992 WATER QUALITY DATA FOR DRM1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1230	3625.50	CLOUDY	85	5	22	30	4	4	51

(DRM1 , CONTINUED)

05/18/92	1230	3625.50	CLOUDY	85	5	22	30	4	4	41
05/26/92	1125	3628.45	CLOUDY	75	7	21	0	0	0	27
05/26/92	1125	3628.45	CLOUDY	72	7	21	0	0	0	12
06/08/92	1025	3632.49	CLOUDY	75	5	25	0	0	0	0
06/08/92	1025	3632.49	CLOUDY	75	5	25	0	0	0	14
07/06/92	1600	3633.37	CLEAR	95	30	22	0	0	0	47
07/06/92	1600	3633.37	CLEAR	95	30	22	0	0	0	58
07/20/92	1210	3632.05	CLOUDY	89	0	25	0	0	0	75
07/20/92	1210	3632.05	CLOUDY	89	0	25	0	0	0	80
08/03/92	1135	3630.34	CLEAR	95	0	26	0	0	0	95
08/03/92	1135	3630.34	CLEAR	95	0	26	0	0	0	146
08/05/92	1510	3629.96	CLOUDY	95	5	25	0	0	0	24
08/05/92	1510	3629.96	CLOUDY	95	5	25	0	0	0	80
08/17/92	1320	3628.08	CLEAR	99	0	28	0	0	0	114
08/17/92	1320	3628.08	CLEAR	99	0	28	0	0	0	110
08/31/92	919	3626.26	RAINY	65	0	24	0	0	0	41
08/31/92	919	3626.26	RAINY	65	0	24	0	0	0	108
09/08/92	1521	3626.50	CLEAR	85	3	25	0	0	0	59
09/08/92	1521	3626.50	CLEAR	85	3	25	0	0	0	84

1992 WATER QUALITY DATA FOR DRM2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	1130	3628.45	CLOUDY	72	7	22	0	0	0	31
05/26/92	1130	3628.45	CLOUDY	22	7	22	0	0	0	898
05/28/92	1240	3625.00	CLOUDY	85	5	22	30	4	4	64
05/28/92	1240	3625.00	CLOUDY	85	5	22	30	4	4	22
06/08/92	1030	3632.49	CLOUDY	75	5	24	0	0	0	21
06/08/92	1030	3632.49	CLOUDY	75	5	24	0	0	0	0
06/22/92	1300	3633.98	CLEAR	85	3	24	0	0	0	17
06/22/92	1300	3633.98	CLEAR	85	3	24	0	0	0	26
07/06/92	1610	3633.37	CLEAR	95	30	24	0	0	0	25
07/06/92	1610	3633.37	CLEAR	95	30	24	0	0	0	88
07/20/92	1215	3632.05	CLOUDY	89	0	24	0	0	0	75
07/20/92	1215	3632.05	CLOUDY	89	0	24	0	0	0	82
08/03/92	1138	3630.34	CLEAR	95	0	26	0	0	0	239
08/03/92	1138	3630.34	CLEAR	95	0	26	0	0	0	208
08/05/92	1515	3629.96	CLOUDY	95	5	25	0	0	0	49
08/05/92	1515	3629.96	CLOUDY	95	5	25	0	0	0	62
08/17/92	1330	3628.08	CLEAR	99	0	28	0	0	0	51
08/17/92	1330	3628.08	CLEAR	99	0	28	0	0	0	120
08/31/92	929	3626.26	RAINY	65	0	23	0	0	0	44
08/31/92	929	3626.26	RAINY	65	0	23	0	0	0	24
09/08/92	1528	3626.50	CLEAR	85	3	25	0	0	0	50
09/08/92	1528	3626.50	CLEAR	85	3	25	0	0	0	42

1992 WATER QUALITY DATA FOR DVG1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1010	3625.50	CLOUDY	85	5	22	0	0	0	107
05/18/92	1010	3625.50	CLOUDY	85	5	22	0	0	0	37
05/26/92	840	3628.45	CLOUDY	72	7	21	4	1	0	100
05/26/92	840	3628.45	CLOUDY	72	7	21	4	1	0	194
06/08/92	755	3632.49	CLOUDY	75	5	24	11	1	0	55
06/08/92	755	3632.49	CLOUDY	75	5	22	11	1	0	20
06/22/92	925	3633.98	CLEAR	85	3	23	20	5	0	79
06/22/92	925	3633.98	CLEAR	85	3	23	20	5	0	142
07/06/92	1140	3633.37	CLEAR	95	30	23	12	1	0	307
07/06/92	1140	3633.37	CLEAR	95	30	23	12	1	0	348
07/08/92	1225	3633.08	RAINY	77	5	24	4	1	0	237
07/08/92	1225	3633.08	RAINY	77	5	24	4	1	0	148
07/20/92	945	3632.05	CLOUDY	89	0	24	0	0	0	54
07/20/92	945	3632.05	CLOUDY	89	0	24	0	0	0	120
08/03/92	1000	3630.34	CLEAR	95	0	26	8	1	0	248
08/03/92	1000	3630.34	CLEAR	95	0	26	8	1	0	308
08/05/92	1350	3629.96	CLOUDY	95	5	26	4	1	0	273
08/05/92	1350	3629.96	CLOUDY	95	5	26	4	1	0	226
08/10/92	1034	3629.16	CLEAR	98	2	28	4	1	0	170
08/17/92	1445	3628.08	CLEAR	99	0	28	10	1	0	236
08/17/92	1445	3628.08	CLEAR	99	0	28	10	1	0	137
08/26/92	1130	3626.65	CLEAR	85	3	26	4	1	0	141
08/26/92	1130	3626.65	CLEAR	85	3	26	4	1	0	242
08/31/92	1235	3626.26	RAINY	65	0	0	6	1	0	149
08/31/92	1235	3626.26	RAINY	65	0	0	6	1	0	104
09/08/92	1331	3625.50	CLEAR	85	3	24	7	1	0	153
09/08/92	1331	3625.50	CLEAR	85	3	24	7	1	0	154
10/19/92	942	3621.69	CLOUDY	55	0	21	0	0	0	63
10/19/92	942	3621.69	CLOUDY	55	0	21	0	0	0	39

1992 WATER QUALITY DATA FOR FAR1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1500	3625.50	CLEAR	80	5	22	1	1	1	18
05/18/92	1500	3625.50	CLEAR	80	5	22	1	1	1	11
05/26/92	925	3628.45	CLEAR	80	5	21	12	1	6	68
05/26/92	925	3628.45	CLEAR	80	5	21	12	1	6	122
06/08/92	1355	3632.49	CLEAR	80	1	23	0	99	0	117
06/08/92	1355	3632.49	CLEAR	80	1	25	10	3	5	359
06/22/92	1740	3633.98	CLEAR	85	2	30	6	0	3	80
06/22/92	1740	3633.98	CLEAR	85	2	30	6	0	3	108
07/06/92	1415	3633.37	CLEAR	85	7	24	2	0	1	0
07/06/92	1415	3633.37	CLEAR	85	7	24	2	0	1	0
07/20/92	1456	3632.05	CLEAR	90	5	26	12	7	6	388
07/20/92	1456	3632.05	CLEAR	90	5	26	12	7	6	590
07/22/92	1320	3631.72	CLOUDY	85	8	26	10	4	5	340

(FAR1 , CONTINUED)

07/22/92	1320	3631.72	CLOUDY	85	0	26	10	4	5	408
07/27/92	1156	3631.15	CLEAR	90	8	27	12	2	11	236
07/27/92	1156	3631.15	CLEAR	90	8	27	11	2	11	292
08/03/92	1542	3630.34	CLEAR	90	5	29	33	4	7	256
08/03/92	1542	3630.34	CLEAR	90	5	29	33	4	7	312
08/07/92	1435	3629.46	CLEAR	90	3	26	10	2	6	212
08/07/92	1435	3629.46	CLEAR	90	3	26	10	2	6	252
08/17/92	1530	3628.00	CLOUDY	95	12	28	8	2	3	460
08/17/92	1530	3628.08	CLOUDY	95	12	28	8	2	3	440
08/19/92	1415	3627.64	CLEAR	95	7	29	4	2	5	324
08/19/92	1415	3627.64	CLEAR	95	7	29	4	2	5	256
08/31/92	1415	3626.26	CLEAR	80	7	24	1	0	1	600
08/31/92	1415	3626.26	CLEAR	80	7	24	1	0	1	360
09/08/92	1445	3625.50	CLEAR	90	12	24	10	1	4	236
09/08/92	1445	3625.50	CLEAR	90	12	24	10	1	4	216
09/14/92	1420	3624.73	CLEAR	90	7	23	8	6	20	352
09/14/92	1420	3624.73	CLEAR	90	7	23	8	6	20	332
09/21/92	1410	3624.03	CLEAR	90	7	23	5	0	4	280
09/21/92	1410	3624.03	CLEAR	90	7	23	5	0	4	268
09/28/92	1245	3623.23	CLEAR	90	3	21	5	2	4	204
09/28/92	1245	3623.23	CLEAR	90	3	21	5	2	4	208

1992 WATER QUALITY DATA FOR FAR2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1505	3625.50	CLEAR	80	5	23	1	1	1	6
05/18/92	1505	3625.50	CLEAR	80	5	23	1	1	1	7
05/26/92	930	3628.45	CLEAR	80	5	21	12	1	6	42
05/26/92	930	3628.45	CLEAR	80	5	21	12	1	6	32
06/08/92	1400	3632.49	CLEAR	80	1	25	10	3	5	24
06/08/92	1400	3632.49	CLEAR	80	1	25	10	3	5	21
06/22/92	1745	3633.98	CLEAR	85	2	29	6	0	3	216
06/22/92	1745	3633.98	CLEAR	85	2	29	6	0	3	0
07/06/92	1420	3633.37	CLEAR	85	7	24	1	0	2	0
07/06/92	1420	3633.37	CLEAR	85	7	24	2	0	1	0
07/20/92	1458	3632.05	CLEAR	90	5	28	12	7	6	536
07/20/92	1458	3632.05	CLEAR	90	5	28	12	7	6	548
07/22/92	1325	3631.72	CLOUDY	85	0	26	10	4	5	592
07/22/92	1325	3631.72	CLOUDY	85	8	26	10	4	5	404
07/27/92	1158	3631.15	CLEAR	90	8	90	11	2	11	324
07/27/92	1158	3631.15	CLEAR	90	8	27	11	2	11	132
08/03/92	1548	3630.34	CLEAR	90	5	28	33	4	7	236
08/03/92	1548	3630.34	CLEAR	90	5	28	33	4	7	280
08/07/92	1440	3629.46	CLEAR	90	3	26	10	2	6	168
08/07/92	1440	3629.46	CLEAR	90	3	26	10	2	6	96
08/17/92	1535	3628.08	CLOUDY	95	12	28	8	2	3	340
08/17/92	1535	3628.08	CLOUDY	95	12	28	8	2	3	324
08/19/92	1420	3627.64	CLEAR	95	7	29	4	2	5	240
08/19/92	1420	3627.64	CLEAR	95	7	29	4	2	5	288
08/31/92	1420	3626.26	CLEAR	80	7	23	1	0	1	560
08/31/92	1420	3626.26	CLEAR	80	7	23	1	0	1	376
09/08/92	1450	3625.50	CLEAR	90	12	24	10	1	4	168

(FAR2 , CONTINUED)

09/08/92	1450	3625.50	CLEAR	90	12	24	10	1	4	180
09/14/92	1425	3624.73	CLEAR	90	7	23	8	6	20	300
09/14/92	1425	3624.73	CLEAR	90	7	23	8	0	20	326
09/21/92	1415	3624.03	CLEAR	90	7	21	5	0	4	260
09/21/92	1415	3624.03	CLEAR	90	7	21	5	0	4	196
09/28/92	1250	3623.23	CLEAR	90	3	22	5	2	4	132
09/28/92	1250	3623.23	CLEAR	90	3	22	5	2	4	134

1992 WATER QUALITY DATA FOR FOR1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1350	3625.50	CLEAR	80	5	22	1	1	0	0
05/18/92	1350	3625.50	CLEAR	80	5	22	1	1	0	1
05/26/92	1115	3628.45	CLEAR	80	5	22	6	6	0	0
05/26/92	1115	3628.45	CLEAR	80	5	22	6	6	0	0
06/22/92	1620	3633.98	CLEAR	85	2	28	32	22	0	6
06/22/92	1620	3633.98	CLEAR	85	2	28	32	22	0	26
07/20/92	1346	3632.05	CLEAR	90	5	27	99	22	0	256
07/20/92	1346	3632.05	CLEAR	90	5	27	99	22	0	336
07/27/92	1050	3631.15	CLOUDY	85	8	26	20	12	0	136
07/27/92	1050	3631.15	CLOUDY	85	8	26	20	12	0	120
08/03/92	1416	3630.34	CLEAR	90	5	29	99	30	99	284
08/03/92	1416	3630.34	CLEAR	90	5	29	99	30	99	228
08/06/92	1000	3629.85	CLOUDY	85	3	26	15	8	0	252
08/06/92	1000	3629.85	CLOUDY	85	3	26	15	8	0	216
08/17/92	1425	3628.08	CLEAR	95	3	29	15	8	0	308
08/17/92	1425	3628.08	CLEAR	95	3	29	15	8	0	252
08/20/92	1040	3627.47	CLEAR	95	3	27	40	22	0	316
08/31/92	1320	3627.47	CLEAR	95	7	22	10	5	0	368
08/31/92	1320	3627.47	CLEAR	95	7	22	10	5	0	240
09/08/92	1325	3625.50	CLEAR	95	3	24	10	5	0	280
09/08/92	1325	3625.50	CLEAR	95	3	24	10	5	0	308
09/14/92	1030	3624.73	CLOUDY	90	3	23	15	7	0	492
09/14/92	1030	3624.73	CLOUDY	90	3	23	15	7	0	436
09/21/92	1045	3624.03	CLEAR	90	3	22	12	6	0	168
09/21/92	1045	3624.03	CLEAR	90	3	22	12	6	0	200
09/28/92	1150	3623.23	CLEAR	85	3	21	8	4	0	124
09/28/92	1150	3623.23	CLEAR	85	3	21	8	4	0	120
09/28/92	1150	3623.23	CLEAR	85	3	20	8	4	0	180
09/28/92	1150	3623.23	CLEAR	85	3	20	8	4	0	160
10/27/92	910	3621.30	CLEAR	85	1	20	0	0	0	1
10/27/92	910	3621.30	CLEAR	85	1	20	0	0	0	0

1992 WATER QUALITY DATA FOR FOR2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
07/27/92	1055	3631.15	CLOUDY	85	8	26	20	12	0	280
08/20/92	1040	3627.47	CLEAR	95	3	27	40	22	0	288

1992 WATER QUALITY DATA FOR HAN1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1320	3625.50	CLEAR	80	5	22	0	2	0	4
05/18/92	1320	3625.50	CLEAR	80	5	22	0	2	0	2
05/26/92	1140	3628.45	CLEAR	80	5	23	5	5	0	6
05/26/92	1140	3628.45	CLEAR	80	5	23	5	5	0	0
06/08/92	1250	3632.49	CLEAR	80	1	23	0	99	0	0
06/08/92	1250	3632.49	CLEAR	80	1	23	0	99	0	1
06/22/92	1553	3633.98	CLEAR	85	2	27	35	0	0	6
06/22/92	1553	3633.98	CLEAR	85	2	27	35	0	0	22
07/06/92	1235	3633.37	CLEAR	85	7	24	25	18	0	0
07/06/92	1235	3633.37	CLEAR	85	7	24	25	18	0	2
07/15/92	1125	3632.45	CLEAR	75	5	25	20	10	0	413
07/15/92	1125	3632.45	CLEAR	75	5	25	20	10	0	456
07/15/92	1045	3632.45	CLEAR	75	5	25	20	6	15	149
07/15/92	1125	3632.45	CLEAR	75	5	25	20	10	0	174
07/20/92	1327	3632.05	CLEAR	90	5	26	20	7	0	160
07/20/92	1327	3632.05	CLEAR	90	5	26	20	7	0	122
08/03/92	1356	3630.34	CLEAR	90	5	27	99	24	0	196
08/03/92	1356	3630.34	CLEAR	90	5	27	99	24	0	140
08/17/92	1320	3628.08	CLEAR	95	3	29	15	12	0	128
08/17/92	1320	3628.08	CLEAR	95	3	29	15	12	0	112
08/31/92	1300	3626.26	CLEAR	95	7	24	12	8	0	188
08/31/92	1300	3626.26	CLEAR	95	7	24	12	8	0	211
09/08/92	1300	3625.50	CLEAR	95	3	24	20	10	0	160
09/08/92	1300	3625.50	CLEAR	95	3	24	20	10	0	152

1992 WATER QUALITY DATA FOR HCB1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1130	3625.50	CLEAR	80	5	24	0	2	0	0
05/18/92	1130	3625.50	CLEAR	80	5	24	0	2	0	1
05/26/92	1250	3628.45	CLEAR	23	5	23	4	1	6	8
05/26/92	1250	3628.45	CLEAR	80	5	23	4	1	6	8
06/08/92	1107	3632.49	CLEAR	80	1	24	0	1	1	34
06/08/92	1107	3632.49	CLEAR	80	1	24	0	1	1	32
06/22/92	1411	3633.98	CLEAR	85	2	30	1	0	99	5
06/22/92	1411	3633.98	CLEAR	85	2	30	1	0	99	100
07/06/92	1130	3633.37	CLEAR	85	7	25	10	5	99	6
07/06/92	1130	3633.37	CLEAR	85	7	25	10	5	99	6
07/15/92	1015	3632.45	CLEAR	75	5	25	10	7	99	190
07/15/92	1015	3632.45	CLEAR	75	5	25	10	7	99	186
07/15/92	1015	3632.45	CLEAR	75	5	25	10	7	99	316
07/15/92	1015	3632.45	CLEAR	75	5	25	10	7	99	116
07/20/92	1140	3632.05	CLEAR	27	5	27	10	5	99	68
07/20/92	1140	3632.05	CLEAR	90	5	27	10	5	99	72

(HCB1 , CONTINUED)

08/03/92	1210	3630.34	CLEAR	90	5	28	20	12	99	152
08/03/92	1210	3630.34	CLEAR	90	5	28	20	12	99	204
08/17/92	1151	3628.08	CLEAR	95	1	28	0	0	0	80
08/17/92	1151	3628.08	CLEAR	95	1	28	0	0	0	44
08/31/92	1050	3626.26	CLOUDY	80	7	23	2	2	99	100
08/31/92	1050	3626.26	CLOUDY	80	7	23	2	2	99	168
09/08/92	1115	3625.50	CLEAR	90	3	24	10	4	99	104
09/08/92	1115	3625.50	CLEAR	90	3	24	10	4	99	72
10/27/92	1043	3621.30	CLOUDY	70	1	21	0	0	13	28
10/27/92	1043	3621.30	CLOUDY	70	1	21	0	0	13	24

1992 WATER QUALITY DATA FOR HCB2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1135	3625.50	CLEAR	80	5	23	0	2	0	12
05/18/92	1135	3625.50	CLEAR	80	5	23	0	2	0	8
05/26/92	1300	3628.45	CLEAR	80	5	23	4	1	6	12
05/26/92	1300	3628.45	CLEAR	23	5	23	4	1	6	24
06/08/92	1110	3632.49	CLEAR	80	1	23	0	1	1	70
06/08/92	1110	3632.49	CLEAR	80	1	23	0	1	1	78
06/22/92	1416	3633.98	CLEAR	85	2	28	1	0	99	20
06/22/92	1416	3633.98	CLEAR	28	2	28	1	0	99	14
07/06/92	1135	3633.37	CLEAR	85	7	25	10	5	99	10
07/06/92	1135	3633.37	CLEAR	85	7	25	10	5	99	6
07/15/92	1020	3632.45	CLEAR	75	5	26	10	7	99	143
07/15/92	1020	3632.45	CLEAR	75	5	26	10	7	99	160
07/15/92	1020	3632.45	CLEAR	26	5	26	10	7	99	100
07/15/92	1020	3632.45	CLEAR	26	5	26	10	7	99	61
07/20/92	1145	3632.05	CLEAR	90	5	27	10	5	99	156
07/20/92	1145	3632.05	CLEAR	90	5	27	10	5	99	129
08/03/92	1215	3630.34	CLEAR	90	5	27	20	12	99	150
08/03/92	1215	3630.34	CLEAR	90	5	27	20	12	99	100
08/17/92	1156	3628.08	CLEAR	95	1	28	0	0	0	48
08/31/92	1055	3626.26	CLOUDY	80	7	24	2	2	99	72
08/31/92	1055	3626.26	CLOUDY	80	7	24	2	2	99	132
09/08/92	1120	3625.50	CLEAR	90	3	24	10	4	99	116
09/08/92	1120	3625.50	CLEAR	90	3	24	10	4	99	180
10/27/92	1035	3621.30	CLOUDY	70	1	21	0	0	13	7
10/27/92	1035	3621.30	CLOUDY	70	1	21	0	0	13	16

1992 WATER QUALITY DATA FOR HCMAR1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1200	3625.50	CLEAR	80	5	23	99	99	99	0
05/18/92	1200	3625.50	CLEAR	23	5	23	99	99	99	0
05/26/92	1230	3628.45	CLEAR	23	5	23	99	99	99	2
05/26/92	1230	3628.45	CLEAR	80	5	23	99	99	99	0
06/08/92	1134	3632.49	CLEAR	80	1	22	99	99	99	2

(HCMAR1, CONTINUED)

06/08/92	1134	3632.49	CLEAR	80	1	22	99	99	99	0
06/22/92	1450	3633.98	CLEAR	85	2	26	99	99	99	0
06/22/92	1454	3633.98	CLEAR	85	2	26	99	99	99	0
07/06/92	1025	3633.37	CLEAR	85	7	26	99	99	99	0
07/06/92	1025	3633.37	CLEAR	85	7	26	99	99	99	0
07/20/92	1210	3632.05	CLEAR	90	5	26	99	99	99	196
07/20/92	1210	3632.05	CLEAR	90	5	27	99	99	99	88
08/03/92	1245	3630.34	CLEAR	90	5	28	99	99	99	28
08/03/92	1250	3630.34	CLEAR	90	5	27	99	99	99	32
08/17/92	1217	3628.08	CLEAR	95	3	29	99	99	99	156
08/17/92	1217	3628.08	CLEAR	95	3	29	99	99	99	62
08/31/92	1205	3626.26	CLOUDY	80	7	24	99	99	99	56
08/31/92	1205	3626.26	CLOUDY	80	7	24	99	99	99	156
09/08/92	1155	3625.50	CLEAR	90	3	24	99	99	99	76
09/08/92	1155	3625.50	CLEAR	90	3	24	99	99	99	128

1992 WATER QUALITY DATA FOR HCMAR2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1212	3625.50	CLEAR	80	5	22	99	99	99	0
05/18/92	1212	3625.50	CLEAR	80	5	22	99	99	99	0
05/26/92	1223	3628.45	CLEAR	23	5	23	99	99	99	0
05/26/92	1223	3628.45	CLEAR	80	5	23	99	99	99	0
06/08/92	1140	3632.49	CLEAR	80	1	23	99	99	99	0
06/08/92	1140	3632.49	CLEAR	80	1	23	99	99	99	1
06/22/92	1454	3633.98	CLEAR	85	2	26	99	99	99	0
06/22/92	1454	3633.98	CLEAR	85	2	26	99	99	99	0
07/06/92	1030	3633.37	CLEAR	85	7	26	99	99	99	2
07/06/92	1030	3633.37	CLEAR	85	7	85	99	99	99	0
07/20/92	1214	3632.05	CLEAR	27	5	27	99	99	99	156
07/20/92	1214	3632.05	CLEAR	90	5	27	99	99	99	136
08/03/92	1250	3630.34	CLEAR	90	5	27	99	99	99	48
08/03/92	1250	3630.34	CLEAR	90	5	27	99	99	99	64
08/17/92	1221	3628.08	CLEAR	95	3	27	99	99	99	84
08/17/92	1221	3628.08	CLEAR	95	3	27	99	99	99	124
08/31/92	1210	3626.26	CLOUDY	80	7	24	99	99	99	100
08/31/92	1210	3626.26	CLOUDY	80	7	24	99	99	99	80
09/08/92	1200	3625.50	CLEAR	90	3	24	99	99	99	124
09/08/92	1200	3625.50	CLEAR	90	3	24	99	99	99	56

1992 WATER QUALITY DATA FOR HIMAR1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1530	3625.50	CLEAR	80	5	20	99	99	99	16
05/18/92	1530	3625.50	CLEAR	80	5	22	99	99	99	26
05/26/92	857	3628.45	CLEAR	21	5	21	3	99	99	22
05/26/92	857	3628.45	CLEAR	80	5	21	3	99	99	16
06/08/92	1415	3632.49	CLEAR	23	1	23	99	99	99	368

(HIMAR1, CONTINUED)

06/08/92	1415	3632.49	CLEAR	80	1	23	99	99	99	334
06/22/92	1757	3633.98	CLEAR	85	2	29	99	99	99	170
06/22/92	1757	3633.98	CLEAR	85	2	29	99	99	99	0
07/06/92	1435	3633.37	CLEAR	85	7	24	99	99	99	0
07/06/92	1435	3633.37	CLEAR	85	7	24	99	99	99	0
07/20/92	1514	3632.05	CLEAR	90	5	26	99	99	99	600
07/20/92	1514	3632.05	CLEAR	90	5	26	99	99	99	340
07/22/92	1350	3631.72	CLOUDY	85	8	25	99	99	99	372
07/22/92	1350	3631.72	CLOUDY	85	8	25	99	99	99	324
07/27/92	1215	3631.15	CLEAR	90	8	28	99	99	99	612
07/27/92	1215	3631.15	CLEAR	90	8	28	99	99	99	452
08/03/92	1604	3630.34	CLEAR	90	5	28	99	99	99	320
08/03/92	1604	3630.34	CLEAR	90	5	28	99	99	99	512
08/07/92	1510	3629.46	CLEAR	90	3	27	99	99	99	320
08/07/92	1510	3629.46	CLEAR	90	3	27	99	99	99	276
08/17/92	1550	3628.08	CLOUDY	95	12	28	99	99	99	200
08/17/92	1550	3628.08	CLOUDY	95	12	28	99	99	99	188
08/19/92	1450	3627.64	CLEAR	95	7	29	99	99	99	500
08/19/92	1450	3627.64	CLEAR	95	7	29	99	99	99	380
08/31/92	1440	3626.26	CLEAR	80	7	24	99	99	99	408
08/31/92	1440	3626.26	CLEAR	80	7	24	99	99	99	468
09/08/92	1500	3625.50	CLEAR	90	12	24	99	99	99	296
09/08/92	1500	3625.50	CLEAR	90	12	24	99	99	99	292
09/14/92	1500	3624.73	CLEAR	90	7	23	99	99	99	252
09/14/92	1500	3624.73	CLEAR	90	7	23	99	99	99	316
09/21/92	1555	3624.03	CLEAR	90	7	23	99	99	99	312
09/21/92	1555	3624.03	CLEAR	90	7	23	99	99	99	300
09/28/92	1310	3623.23	CLEAR	90	3	21	99	99	99	212
09/28/92	1310	3623.23	CLEAR	90	3	21	99	99	99	224

1992 WATER QUALITY DATA FOR HIMAR2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1535	3625.50	CLEAR	80	5	19	99	99	99	20
05/18/92	1535	3625.50	CLEAR	80	5	19	99	99	99	11
05/26/92	850	3628.45	CLEAR	80	5	20	3	99	99	6
05/26/92	850	3628.45	CLEAR	80	5	20	3	99	99	4
06/08/92	1425	3632.49	CLEAR	80	1	23	99	99	99	16
06/08/92	1425	3632.49	CLEAR	80	1	23	99	99	99	16
06/22/92	1808	3633.98	CLEAR	85	2	30	99	99	99	174
06/22/92	1808	3633.98	CLEAR	85	2	85	99	99	99	90
07/06/92	1440	3633.37	CLEAR	85	7	24	99	99	99	4
07/06/92	1440	3633.37	CLEAR	85	7	24	99	99	99	4
07/20/92	1521	3632.05	CLEAR	90	5	24	99	99	99	444
07/20/92	1521	3632.05	CLEAR	90	5	24	99	99	99	740
07/22/92	1400	3631.72	CLOUDY	85	8	25	99	99	99	296
07/22/92	1400	3631.72	CLOUDY	85	8	25	99	99	99	384
07/27/92	1224	3631.15	CLEAR	90	8	28	99	99	99	292
08/03/92	1611	3630.34	CLEAR	90	5	29	99	99	99	564
08/03/92	1611	3630.34	CLEAR	90	5	29	99	99	99	428
08/07/92	1510	3629.46	CLEAR	90	3	27	99	99	99	376
08/07/92	1520	3629.46	CLEAR	90	3	27	99	99	99	340

(HIMAR2, CONTINUED)

08/17/92	1550	3628.08	CLOUDY	95	12	28	99	99	99	276
08/17/92	1550	3628.08	CLOUDY	95	12	28	0	99	99	240
08/19/92	1500	3627.64	CLEAR	95	7	29	99	99	99	216
08/19/92	1500	3627.64	CLEAR	95	7	29	99	99	99	272
08/31/92	1445	3626.26	CLEAR	80	7	24	99	99	99	396
08/31/92	1445	3626.26	CLEAR	80	7	24	99	99	99	472
09/08/92	1505	3625.50	CLEAR	90	12	24	99	99	99	188
09/08/92	1505	3625.50	CLEAR	90	12	24	99	99	99	208
09/14/92	1510	3624.73	CLEAR	90	7	23	99	99	99	280
09/14/92	1510	3624.73	CLEAR	90	7	23	99	99	99	256
09/21/92	1600	3624.03	CLEAR	90	7	22	99	99	99	204
09/21/92	1600	3624.03	CLEAR	90	7	22	99	99	99	128
09/28/92	1315	3623.23	CLEAR	90	3	21	99	99	99	212
09/28/92	1315	3623.23	CLEAR	90	3	21	99	99	99	256

1992 WATER QUALITY DATA FOR LEW1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1050	3625.50	CLOUDY	85	5	21	15	2	0	190
05/18/92	1050	3625.50	CLOUDY	85	5	21	15	2	0	121
05/26/92	910	3628.45	CLOUDY	72	7	23	4	2	0	272
05/26/92	910	3628.45	CLOUDY	72	7	23	4	2	0	365
05/29/92	1505	3629.28	CLEAR	70	0	23	3	1	0	108
05/29/92	1505	3629.28	CLEAR	70	0	23	3	1	0	81
06/08/92	820	3632.49	CLOUDY	75	5	24	7	2	0	149
06/08/92	820	3632.49	CLOUDY	75	5	24	7	2	0	210
06/22/92	1010	3633.98	CLEAR	85	3	24	7	2	0	1000
06/22/92	1010	3633.98	CLEAR	85	3	24	7	2	0	1000
06/24/92	1205	3634.01		0	0	25	10	1	0	271
06/24/92	1205	3634.01		0	0	25	10	1	0	106
07/06/92	1227	3633.37	CLEAR	95	30	25	8	1	0	161
07/06/92	1227	3633.37	CLEAR	95	30	25	8	1	0	218
07/08/92	1250	3633.08	RAINY	77	5	25	8	1	0	147
07/08/92	1250	3633.08	RAINY	77	5	25	4	1	0	184
07/20/92	1015	3632.05	CLOUDY	89	0	25	15	3	0	277
07/20/92	1015	3632.05	CLOUDY	89	0	25	15	3	0	278
07/22/92	1200	3631.72	CLOUDY	95	0	25	10	3	0	137
07/22/92	1200	3631.72	CLOUDY	95	0	25	10	3	0	174
08/03/92	1030	3630.34	CLEAR	95	0	26	0	0	0	1000
08/03/92	1030	3630.34	CLEAR	95	0	26	0	0	0	1000
08/05/92	1410	3629.96	CLOUDY	95	5	26	0	0	0	308
08/05/92	1410	3629.96	CLOUDY	95	5	26	0	0	0	454
08/10/92	1200	3629.16	CLEAR	98	2	29	0	0	0	39
08/10/92	1200	3629.16	CLEAR	98	2	29	0	0	0	102
08/17/92	1505	3628.08	CLEAR	99	0	28	0	0	0	1000
08/17/92	1505	3628.08	CLEAR	99	0	28	0	0	0	666
08/26/92	1205	3626.65	CLEAR	85	3	24	0	0	0	143
08/26/92	1205	3626.65	CLEAR	85	3	24	0	0	0	258
08/31/92	1155	3626.26	RAINY	65	0	24	0	0	0	30
08/31/92	1155	3626.26	RAINY	65	0	24	0	0	0	36
09/08/92	1257	3625.50	CLEAR	85	3	24	0	0	0	155
09/08/92	1257	3625.50	CLEAR	85	3	24	0	0	0	214

(LEW1 , CONTINUED)

09/24/92	1227	3623.64	CLEAR	90	15	23	0	0	0	237
09/24/92	1227	3623.64	CLEAR	90	15	23	0	0	0	240
10/19/92	1038	3621.69	CLOUDY	55	3	20	3	1	0	13
10/19/92	1038	3621.69	CLOUDY	55	3	20	3	1	0	38

1992 WATER QUALITY DATA FOR LEW2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1055	3625.50	CLOUDY	85	5	21	15	2	0	164
05/18/92	1055	3625.50	CLOUDY	85	5	21	15	2	0	164
05/26/92	915	3628.45	CLOUDY	72	7	22	4	2	0	240
05/26/92	915	3628.45	CLOUDY	72	7	22	4	2	0	291
05/29/92	1508	3629.28	CLEAR	70	0	0	3	1	0	110
05/29/92	1508	3629.28	CLEAR	70	0	23	3	1	0	98
06/08/92	825	3632.49	CLOUDY	75	5	24	7	2	0	161
06/08/92	825	3632.49	CLOUDY	75	5	24	7	2	0	200
06/22/92	1015	3633.98	CLEAR	85	3	25	7	2	0	1000
06/22/92	1015	3633.98	CLEAR	85	3	25	7	2	0	1000
06/24/92	1210	3634.01		0	0	25	10	1	0	182
06/24/92	1210	3634.01		0	0	25	10	1	0	218
07/06/92	1240	3633.37	CLEAR	95	30	23	8	1	0	193
07/06/92	1240	3633.37	CLEAR	95	30	23	8	1	0	1000
07/08/92	1255	3633.08	RAINY	77	2	24	8	1	0	200
07/08/92	1255	3633.08	RAINY	77	5	24	8	1	0	272
07/20/92	1020	3632.05	CLOUDY	89	0	25	15	3	0	172
07/20/92	1020	3632.05	CLOUDY	89	0	25	15	3	0	180
07/22/92	1205	3631.72	CLOUDY	95	0	26	10	3	0	1000
07/22/92	1205	3631.72	CLOUDY	95	0	26	10	3	0	1000
08/03/92	1033	3630.34	CLEAR	95	0	26	0	0	0	73
08/03/92	1033	3630.34	CLEAR	95	0	26	0	0	0	214
08/05/92	1415	3629.96	CLOUDY	95	5	27	0	0	0	255
08/05/92	1415	3629.96	CLOUDY	95	5	0	0	0	0	186
08/10/92	1130	3629.16	CLEAR	98	2	29	0	0	0	116
08/10/92	1130	3629.16	CLEAR	98	2	29	0	0	0	130
08/17/92	1508	3628.08	CLEAR	99	0	28	0	0	0	1000
08/17/92	1508	3628.08	CLEAR	99	0	28	0	0	0	1000
08/26/92	1210	3626.65	CLEAR	85	3	25	0	0	0	211
08/26/92	1210	3626.65	CLEAR	85	3	25	0	0	0	244
08/31/92	1204	3626.26	RAINY	65	0	0	0	0	0	270
08/31/92	1204	3626.26	RAINY	65	0	0	0	0	0	360
09/08/92	1303	3625.50	CLEAR	85	3	23	0	0	0	181
09/08/92	1303	3625.50	CLEAR	85	3	23	0	0	0	256
09/24/92	1212	3623.64	CLEAR	90	15	24	0	0	0	60
09/24/92	1212	3623.64	CLEAR	90	15	24	0	0	0	66
10/19/92	1018	3621.69	CLOUDY	55	3	21	3	1	0	24
10/19/92	1018	3621.69	CLOUDY	55	3	21	3	1	0	38

1992 WATER QUALITY DATA FOR LONE1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	826	3625.50	CLEAR	85	5	20	25	13	25	1
05/18/92	826	3625.50	CLEAR	85	5	20	25	13	35	7
05/26/92	927	3628.45	CLEAR	75	4	21	22	12	42	207
05/26/92	927	3628.45	CLEAR	75	4	21	22	12	42	274
05/29/92	800	3629.28	CLEAR	0	0	20	15	10	18	79
05/29/92	800	3629.28	CLEAR	0	0	20	15	10	13	60
06/08/92	1010	3632.49	CLOUDY	70	1	23	80	30	60	1000
06/08/92	1010	3632.49	CLOUDY	70	1	23	80	30	60	548
06/22/92	950	3633.98	CLEAR	85	1	24	99	30	90	22
06/22/92	950	3633.98	CLEAR	85	1	24	99	30	90	32
07/06/92	1100	3633.37	CLEAR	90	2	26	80	20	30	440
07/06/92	1100	3633.37	CLEAR	90	2	26	80	20	30	312
07/08/92	843	3633.08	RAINY	75	5	23	90	20	50	142
07/08/92	843	3633.08	RAINY	75	2	23	90	20	50	176
07/13/92	810	3632.51	CLEAR	70	0	23	99	50	99	150
07/13/92	810	3632.51	CLEAR	70	0	23	99	50	99	176
07/13/92	1330	3632.51	RAINY	65	20	22	99	30	60	140
07/13/92	1330	3632.51	RAINY	65	20	22	99	30	60	136
07/20/92	950	3632.05	CLEAR	80	0	25	99	35	99	103
07/20/92	950	3632.05	CLEAR	80	0	25	99	35	99	160
07/21/92	1000	3631.89	CLEAR	90	0	26	99	30	99	118
07/21/92	1000	3631.89	CLEAR	90	0	26	99	30	99	104
07/29/92	1325	3630.98	CLEAR	95	5	26	99	30	60	77
07/29/92	1325	3630.98	CLEAR	95	5	26	99	30	60	266
08/03/92	1035	3630.34	CLEAR	90	0	27	99	60	99	55
08/03/92	1035	3630.34	CLEAR	90	0	27	99	60	99	100
08/11/92	1011	3629.06	CLEAR	95	0	29	99	70	99	60
08/11/92	1011	3629.06	CLEAR	95	0	29	99	70	99	122
08/11/92	1403	3629.06	CLOUDY	80	5	31	99	50	99	133
08/11/92	1403	3629.06	CLEAR	80	5	31	99	50	99	246
08/12/92	942	3628.86	CLEAR	80	4	27	99	50	99	353
08/12/92	942	3628.86	CLEAR	80	4	27	99	50	99	0
08/12/92	1358	3628.86	CLEAR	90	5	29	99	30	99	102
08/12/92	1358	3628.86	CLEAR	90	5	29	99	30	99	112
08/12/92	1435	3628.86	CLEAR	90	5	30	99	30	99	48
08/12/92	1435	3628.86	CLEAR	90	5	30	99	30	99	80
08/17/92	1050	3628.08	CLEAR	90	5	29	99	99	99	87
08/17/92	1050	3628.08	CLEAR	90	5	29	99	99	99	190
08/26/92	851	3626.65	CLEAR	65	2	26	0	0	0	76
08/26/92	851	3626.65	CLEAR	65	2	25	0	0	0	100
08/26/92	1047	3626.65	CLEAR	75	4	27	0	0	0	42
08/26/92	1047	3626.65	CLEAR	75	4	27	0	0	0	64
08/27/92	1253	3626.45	CLEAR	90	4	27	99	30	99	40
08/31/92	1125	3626.26	RAINY	65	15	25	99	20	50	32
08/31/92	1125	3626.26	RAINY	65	15	25	99	20	50	66
09/03/92	850	3625.83	CLOUDY	70	7	24	99	30	70	55
09/03/92	956	3625.83	CLOUDY	70	10	26	80	30	60	100
09/03/92	956	3625.83	CLOUDY	70	10	26	80	30	60	102
09/03/92	850	3625.83	CLOUDY	70	7	24	99	30	70	108
09/08/92	1109	3625.50	CLEAR	80	3	26	99	20	60	108

(LONE1 , CONTINUED)

09/08/92	1109	3625.50	CLEAR	80	3	26	99	20	60	104
09/17/92	940	3624.30	CLEAR	80	2	22	40	10	20	81
09/17/92	940	3624.30	CLEAR	80	2	22	40	10	20	102
09/17/92	1035	3624.30	CLEAR	80	2	24	50	10	30	90
09/17/92	1035	3624.30	CLEAR	80	2	24	50	10	30	88
09/24/92	1454	3623.64	CLEAR	90	15	24	90	6	50	71
09/24/92	1454	3623.64	CLEAR	90	15	24	90	6	50	66
10/22/92	740	3621.49	CLEAR	65	2	21	13	0	7	2
10/22/92	740	3621.49	CLEAR	65	2	21	13	0	7	4
10/22/92	740	3621.49	CLEAR	65	2	21	13	0	7	3

1992 WATER QUALITY DATA FOR LONE2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	836	3625.50	CLEAR	85	5	20	25	13	35	96
05/18/92	836	3625.50	CLEAR	85	5	20	25	13	35	41
05/26/92	936	3628.45	CLEAR	75	4	22	22	12	42	88
05/26/92	936	3628.45	CLEAR	75	4	22	22	12	42	102
05/29/92	818	3629.28	CLEAR	0	0	19	15	10	13	154
05/29/92	818	3629.28	CLEAR	70	0	19	15	10	13	152
06/08/92	1024	3632.49	CLOUDY	70	1	24	80	30	60	36
06/08/92	1024	3632.49	CLOUDY	70	1	24	80	30	60	48
06/22/92	957	3633.98	CLEAR	85	1	24	99	30	90	49
06/22/92	957	3633.98	CLEAR	85	1	24	99	30	90	74
07/06/92	1111	3633.37	CLEAR	90	2	26	80	20	30	158
07/06/92	1111	3633.37	CLEAR	90	2	26	80	20	30	90
07/08/92	855	3633.08	RAINY	75	2	23	90	20	50	129
07/08/92	855	3633.08	RAINY	75	2	23	90	20	50	108
07/13/92	825	3632.51	CLEAR	70	0	23	99	50	99	131
07/13/92	825	3632.51	CLEAR	70	0	23	5	50	99	254
07/13/92	1340	3632.51	RAINY	65	20	23	99	30	60	111
07/13/92	1340	3632.51	RAINY	65	20	23	99	30	60	110
07/20/92	1000	3632.05	CLEAR	80	0	26	99	35	99	60
07/20/92	1000	3632.05	CLEAR	80	0	26	99	35	99	92
07/21/92	1010	3631.89	CLEAR	90	0	25	99	30	99	38
07/21/92	1010	3631.89	CLEAR	90	0	25	99	30	99	56
07/29/92	1338	3630.98	CLEAR	95	5	28	99	30	60	94
07/29/92	1338	3630.98	CLEAR	95	5	28	99	30	60	154
08/03/92	1040	3630.34	CLEAR	90	0	28	99	60	99	55
08/03/92	1040	3630.34	CLEAR	90	0	28	99	60	99	132
08/11/92	1023	3629.06	CLEAR	95	0	29	99	70	99	1000
08/11/92	1023	3629.06	CLEAR	95	0	29	99	70	99	596
08/11/92	1416	3629.06	CLEAR	80	5	31	99	50	99	46
08/11/92	1416	3629.06	CLEAR	80	5	31	99	50	99	62
08/12/92	955	3628.86	CLEAR	80	4	28	99	50	99	1000
08/12/92	955	3628.86	CLEAR	80	4	28	99	50	99	760
08/12/92	1410	3628.86	CLEAR	90	5	30	99	30	99	55
08/12/92	1410	3628.86	CLEAR	90	5	30	99	30	99	192
08/12/92	1445	3628.86	CLEAR	90	5	30	99	30	99	59
08/12/92	1445	3628.86	CLEAR	90	5	30	99	30	99	64
08/17/92	1105	3628.08	CLEAR	90	5	29	99	99	99	69
08/17/92	1105	3628.08	CLEAR	90	5	29	99	99	99	110

(LONE2 , CONTINUED)

08/26/92	900	3626.65	CLEAR	65	2	25	0	0	0	86
08/26/92	900	3626.65	CLEAR	65	2	27	0	0	0	74
08/26/92	1037	3626.65	CLEAR	75	4	27	0	0	0	102
08/26/92	1037	3626.65	CLEAR	75	4	27	0	0	0	90
08/27/92	1300	3626.45	CLEAR	90	4	28	99	30	99	298
08/27/92	1300	3626.45	CLEAR	90	4	28	99	30	99	80
08/31/92	1135	3626.26	RAINY	65	15	24	99	20	50	134
08/31/92	1135	3626.26	RAINY	65	15	24	99	20	50	166
09/03/92	900	3625.83	CLOUDY	70	7	25	99	30	70	223
09/03/92	900	3625.83	CLOUDY	70	7	25	99	30	70	270
09/03/92	1022	3625.83	CLOUDY	70	10	25	80	30	60	97
09/03/92	1022	3625.83	CLOUDY	70	10	25	80	30	60	92
09/08/92	1109	3625.50	CLEAR	80	3	26	99	20	60	19
09/08/92	1120	3625.50	CLEAR	80	3	26	99	20	60	70
09/17/92	950	3624.30	CLEAR	80	2	23	40	10	20	59
09/17/92	950	3624.30	CLEAR	80	2	23	40	10	20	72
09/17/92	1042	3624.30	CLEAR	80	2	24	50	10	30	154
09/17/92	1042	3624.30	CLEAR	80	2	24	50	10	30	174
09/24/92	1500	3623.64	CLEAR	90	15	24	90	6	50	58
09/24/92	1500	3623.64	CLEAR	90	15	24	90	6	50	58
10/22/92	800	3621.49	CLEAR	65	2	18	13	0	7	2
10/22/92	800	3621.49	CLEAR	65	2	18	13	0	7	3

1992 WATER QUALITY DATA FOR LONE3

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	851	3625.50	CLEAR	85	5	21	25	13	35	93
05/18/92	851	3625.50	CLEAR	85	5	21	25	13	35	95
05/26/92	944	3628.45	CLEAR	75	4	21	22	12	42	1000
05/26/92	944	3628.45	CLEAR	75	4	21	22	12	42	1000
05/29/92	827	3629.28	CLEAR	70	3	21	15	10	13	49
05/29/92	827	3629.28	CLEAR	70	3	21	15	10	13	28
06/08/92	1030	3632.49	CLOUDY	70	1	22	80	30	60	52
06/08/92	1030	3632.49	CLOUDY	70	1	22	80	30	60	112
06/22/92	1005	3633.98	CLEAR	85	1	24	99	30	90	128
06/22/92	1005	3633.98	CLEAR	85	1	24	99	30	90	200
07/06/92	1123	3633.37	CLEAR	90	2	25	80	20	30	174
07/06/92	1123	3633.37	CLEAR	90	2	25	80	20	30	196
07/08/92	907	3633.08	RAINY	75	2	23	90	20	50	140
07/08/92	907	3633.08	RAINY	75	2	23	90	20	50	114
07/13/92	835	3632.51	CLEAR	70	0	23	99	50	99	88
07/13/92	835	3632.51	CLEAR	70	0	23	99	50	99	174
07/13/92	1430	3632.51	RAINY	65	20	23	99	30	60	92
07/13/92	1340	3632.51	RAINY	65	20	23	99	30	60	132
07/20/92	1010	3632.05	CLEAR	80	0	25	99	35	99	67
07/20/92	1010	3632.05	CLEAR	80	0	25	99	35	99	88
07/21/92	1020	3631.89	CLEAR	90	0	27	99	30	99	8
07/21/92	1020	3631.89	CLEAR	90	0	27	99	30	99	260
07/29/92	1350	3630.98	CLEAR	95	5	28	99	30	60	88
07/29/92	1350	3630.98	CLEAR	95	5	28	99	30	60	162
08/03/92	1053	3630.34	CLEAR	90	0	29	99	60	99	98
08/03/92	1053	3630.34	CLEAR	90	0	29	99	60	99	50

(LONE3 , CONTINUED)

08/11/92	1040	3629.06	CLEAR	95	0	29	99	70	99	185
08/11/92	1040	3629.06	CLEAR	95	0	29	99	70	99	210
08/11/92	1426	3629.06	CLEAR	80	5	30	99	50	99	69
08/11/92	1426	3629.06	CLEAR	80	5	30	99	50	99	90
08/12/92	1007	3628.86	CLEAR	80	4	29	99	50	99	61
08/12/92	1007	3628.86	CLEAR	80	4	29	99	50	99	42
08/12/92	1420	3628.86	CLEAR	90	5	30	99	30	99	96
08/12/92	1420	3628.86	CLEAR	90	5	30	99	30	99	158
08/12/92	1456	3628.86	CLEAR	90	5	30	99	30	99	111
08/12/92	1456	3628.86	CLEAR	90	5	30	99	30	99	110
08/17/92	1114	3628.08	CLEAR	90	5	28	99	99	99	68
08/17/92	1114	3628.08	CLEAR	90	5	28	99	99	99	90
08/26/92	910	3626.65	CLEAR	65	2	27	0	0	0	153
08/26/92	910	3626.65	CLEAR	65	2	27	0	0	0	192
08/26/92	1030	3626.65	CLEAR	75	4	27	0	0	0	19
08/26/92	1030	3626.65	CLEAR	75	4	27	0	0	0	32
08/27/92	1253	3626.45	CLEAR	90	4	27	99	30	99	19
08/27/92	1309	3626.45	CLEAR	90	4	30	99	30	99	33
08/27/92	1309	3626.45	CLEAR	90	4	30	99	30	99	38
08/31/92	1145	3626.26	RAINY	65	15	25	99	20	50	114
08/31/92	1145	3626.26	RAINY	65	15	25	99	20	50	74
09/03/92	908	3625.83	CLOUDY	70	7	25	99	30	70	47
09/03/92	908	3625.83	CLOUDY	70	7	25	99	30	70	70
09/03/92	1028	3625.83	CLOUDY	70	10	26	80	30	60	1000
09/03/92	1028	3625.83	CLOUDY	70	10	26	80	30	60	142
09/08/92	1125	3625.50	CLEAR	80	3	26	99	20	60	162
09/08/92	1125	3625.50	CLEAR	80	3	26	99	20	60	206
09/17/92	1000	3624.30	CLEAR	80	2	25	40	10	20	111
09/17/92	1000	3624.30	CLEAR	80	2	25	40	10	20	158
09/17/92	1047	3624.30	CLEAR	80	2	25	50	10	30	97
09/17/92	1047	3624.30	CLEAR	80	2	25	50	10	30	172
09/24/92	1510	3623.64	CLEAR	90	15	23	90	6	50	87
09/24/92	1510	3623.64	CLEAR	90	15	23	90	6	50	124
10/22/92	810	3621.49	CLEAR	65	2	20	13	0	7	2
10/22/92	810	3621.49	CLEAR	65	2	20	13	0	7	6
10/22/92	810	3621.49	CLEAR	65	2	20	13	0	7	5

1992 WATER QUALITY DATA FOR MOQUI1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1250	3625.50	CLEAR	80	5	29	0	1	0	0
05/18/92	1250	3625.50	CLEAR	80	5	29	0	1	0	0
05/26/92	1205	3628.45	CLEAR	80	5	23	8	6	0	0
05/26/92	1205	3628.45	CLEAR	80	5	23	8	0	0	2
06/08/92	1225	3632.49	CLEAR	80	1	24	4	2	0	0
06/08/92	1225	3632.49	CLEAR	80	1	24	4	2	0	0
06/22/92	1525	3633.98	CLEAR	85	2	21	6	4	0	460
06/22/92	1525	3633.98	CLEAR	85	2	21	6	4	0	452
07/06/92	1210	3633.37	CLEAR	85	7	26	30	23	0	0
07/06/92	1210	3633.37	CLEAR	85	7	26	30	23	0	2
07/20/92	1256	3632.05	CLEAR	90	5	26	30	12	0	592
07/20/92	1256	3632.05	CLEAR	90	5	26	30	12	0	536

(MOQUI1, CONTINUED)

07/27/92	1015	3631.15	CLOUDY	85	8	25	30	20	0	196
07/27/92	1015	3631.15	CLOUDY	85	8	25	30	20	0	112
08/03/92	1325	3630.34	CLEAR	90	7	28	111	21	0	356
08/03/92	1325	3630.34	CLEAR	90	7	28	111	21	0	396
08/06/92	1030	3629.85	CLOUDY	85	3	27	20	13	0	296
08/06/92	1030	3629.85	CLOUDY	85	3	27	20	13	0	260
08/17/92	1250	3628.08	CLEAR	95	3	28	15	12	0	132
08/17/92	1250	3628.08	CLEAR	95	3	28	15	12	0	108
08/20/92	1115	3627.47	CLEAR	95	3	28	40	28	0	288
08/20/92	1115	3627.47	CLEAR	95	3	28	40	28	0	300
08/31/92	1230	3626.26	CLEAR	95	7	22	4	2	0	536
08/31/92	1230	3626.26	CLEAR	95	7	22	4	2	0	462
09/08/92	1225	3625.50	CLEAR	95	7	24	4	2	0	272
09/08/92	1225	3625.50	CLEAR	95	7	24	4	2	0	232
09/14/92	1109	3624.73	CLOUDY	90	3	23	20	6	0	460
09/14/92	1109	3624.73	CLOUDY	90	3	23	20	6	0	344
09/21/92	1125	3624.03	CLEAR	90	3	21	12	5	0	192
09/21/92	1125	3624.03	CLEAR	90	3	21	12	5	0	220
09/28/92	1115	3623.23	CLEAR	85	3	21	10	6	0	100
09/28/92	1115	3623.23	CLEAR	85	3	21	10	6	0	204
10/27/92	1005	3621.30	CLOUDY	70	1	20	0	0	0	3
10/27/92	1005	3621.30	CLOUDY	70	1	20	0	0	0	6

1992 WATER QUALITY DATA FOR MOQUI2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1250	3625.50	CLEAR	29	5	29	0	1	0	0
05/18/92	1357	3625.50	CLEAR	80	5	22	0	1	0	0
05/26/92	1215	3628.45	CLEAR	80	5	23	8	6	0	0
05/27/92	1215	3628.45	CLEAR	86	3	23	8	6	0	0
06/08/92	1230	3632.49	CLEAR	23	1	23	4	2	0	0
06/08/92	1230	3632.49	CLEAR	80	1	23	4	2	0	1
06/22/92	1530	3633.98	CLEAR	85	2	27	6	4	0	0
06/22/92	1530	3633.98	CLEAR	85	2	27	6	4	0	0
07/06/92	1215	3633.37	CLEAR	85	7	26	30	23	0	0
07/06/92	1215	3633.37	CLEAR	85	7	26	30	23	0	0
07/20/92	1302	3632.05	CLEAR	90	5	27	30	12	0	340
07/20/92	1302	3632.05	CLEAR	90	5	27	30	12	0	360
07/27/92	1015	3631.15	CLOUDY	85	8	25	30	20	0	104
07/27/92	1020	3631.15	CLOUDY	85	8	26	30	20	0	276
08/03/92	1327	3630.34	CLEAR	90	7	28	111	21	0	204
08/03/92	1327	3630.34	CLEAR	90	7	28	111	21	0	236
08/06/92	1040	3629.85	CLOUDY	85	3	26	20	13	0	156
08/06/92	1040	3629.85	CLOUDY	85	3	26	20	13	0	148
08/17/92	1255	3628.08	CLEAR	95	3	28	15	12	0	196
08/17/92	1255	3628.08	CLEAR	95	3	28	15	12	0	192
08/20/92	1120	3627.47	CLEAR	95	3	28	40	28	0	360
08/20/92	1120	3627.47	CLEAR	95	3	28	40	28	0	268
08/31/92	1240	3626.26	CLEAR	95	7	23	4	2	0	284
08/31/92	1240	3626.26	CLEAR	95	7	23	4	2	0	312
09/08/92	1230	3625.50	CLEAR	95	7	24	4	2	0	588
09/08/92	1230	3625.50	CLEAR	95	7	24	4	2	0	436

(MOQUI2, CONTINUED)

09/14/92	1105	3624.73	CLOUDY	90	3	23	20	6	0	376
09/14/92	1105	3624.73	CLOUDY	90	3	23	20	6	0	268
09/21/92	1130	3624.03	CLEAR	90	3	23	12	5	0	300
09/21/92	1130	3624.03	CLEAR	90	3	23	12	5	0	280
09/28/92	1117	3623.23	CLEAR	85	3	21	10	6	0	104
09/28/92	1117	3623.23	CLEAR	85	3	21	10	6	0	120
10/27/92	1012	3621.30	CLOUDY	70	1	20	0	0	0	4
10/27/92	1012	3621.30	CLOUDY	70	1	20	0	0	0	4

1992 WATER QUALITY DATA FOR MSC1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1210	3625.50	CLOUDY	85	5	22	0	0	0	33
05/18/92	1210	3625.50	CLOUDY	85	5	22	0	0	0	84
05/26/92	1115	3628.45	CLOUDY	72	7	22	0	0	0	1000
05/26/92	1115	3628.45	CLOUDY	72	7	22	0	0	0	1000
05/29/92	1630	3629.28	CLEAR	70	0	22	0	0	0	44
05/29/92	1630	3629.28	CLEAR	70	0	22	0	0	0	78
06/08/92	1015	3632.49	CLOUDY	75	5	22	6	1	0	56
06/08/92	1015	3632.49	CLOUDY	75	5	22	6	1	0	24
06/22/92	1220	3633.98	CLEAR	85	3	25	4	1	0	43
06/22/92	1220	3633.98	CLEAR	85	3	25	4	1	0	54
07/06/92	1535	3633.37	CLEAR	95	30	26	9	2	0	81
07/06/92	1535	3633.37	CLEAR	95	30	26	9	2	0	110
07/20/92	1200	3632.05	CLOUDY	89	0	25	0	0	0	101
07/20/92	1200	3632.05	CLOUDY	89	0	25	0	0	0	126
08/03/92	1125	3630.34	CLEAR	95	0	25	0	0	0	103
08/03/92	1125	3630.34	CLEAR	95	0	25	0	0	0	224
08/17/92	1345	3628.08	CLEAR	99	0	27	0	0	0	68
08/17/92	1345	3628.08	CLEAR	99	0	27	0	0	0	102
08/31/92	941	3626.26	RAINY	65	0	21	0	0	0	55
08/31/92	941	3626.26	RAINY	65	0	21	0	0	0	52
09/08/92	1507	3625.50	CLEAR	85	3	24	4	1	0	38
09/08/92	1507	3625.50	CLEAR	85	3	24	4	1	0	86

1992 WATER QUALITY DATA FOR MSC2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1217	3625.50	CLOUDY	85	5	21	0	0	0	44
05/18/92	1217	3625.50	CLOUDY	85	5	21	0	0	0	67
05/26/92	1120	3628.45	CLOUDY	72	7	22	0	0	0	1000
05/26/92	1120	3628.45	CLOUDY	72	4	22	0	0	0	1000
05/29/92	1634	3629.28	CLEAR	70	0	21	0	0	0	45
05/29/92	1634	3629.28	CLEAR	70	0	21	0	0	0	102
06/08/92	1020	3632.49	CLOUDY	75	5	22	6	1	0	26
06/08/92	1020	3632.49	CLOUDY	75	5	22	6	1	0	44
06/22/92	1225	3633.98	CLEAR	85	3	25	4	1	0	46
06/22/92	1225	3633.98	CLEAR	85	3	25	4	1	0	72

(MSC2 , CONTINUED)

07/06/92	1551	3633.37	CLEAR	95	30	25	9	2	0	92
07/06/92	1551	3633.37	CLEAR	95	30	25	9	2	0	266
07/20/92	1205	3632.05	CLOUDY	89	0	25	0	0	0	70
07/20/92	1205	3632.05	CLOUDY	89	0	25	0	0	0	48
08/03/92	1130	3630.34	CLEAR	95	0	26	0	0	0	113
08/03/92	1130	3630.34	CLEAR	95	0	26	0	0	0	194
08/17/92	1350	3628.08	CLEAR	99	0	28	0	0	0	90
08/17/92	1350	3628.08	CLEAR	99	0	28	0	0	0	120
08/31/92	950	3626.26	RAINY	65	0	22	0	0	0	1000
08/31/92	950	3626.26	RAINY	65	0	22	0	0	0	1000
09/08/92	1513	3625.50	CLEAR	85	3	24	4	1	0	72
09/08/92	1513	3625.50	CLEAR	85	3	24	4	1	0	74

1992 WATER QUALITY DATA FOR NPS1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	847	3628.45	CLEAR	75	4	21	0	0	0	333
05/26/92	847	3628.45	CLEAR	75	4	21	0	0	0	640
05/29/92	723	3629.28	CLEAR	0	0	20	0	0	0	120
05/29/92	723	3629.28	CLEAR	0	0	20	0	0	0	100
06/22/92	844	3633.98	CLEAR	85	1	22	0	0	0	260
06/22/92	844	3633.98	CLEAR	85	1	22	0	0	0	432
06/24/92	1200	3634.01	CLEAR	85	0	25	2	1	0	1000
06/24/92	1200	3634.01	CLEAR	85	0	25	2	1	0	1000
07/06/92	910	3633.37	CLEAR	90	2	25	0	0	0	126
07/06/92	910	3633.37	CLEAR	90	2	25	0	0	0	114
07/20/92	825	3632.05	CLEAR	80	0	25	0	0	0	183
07/20/92	825	3632.05	CLEAR	80	0	25	0	0	0	218
07/22/92	808	3631.72	CLEAR	90	2	0	0	0	0	66
07/22/92	808	3631.72	CLEAR	90	2	0	0	0	0	120
08/03/92	1300	3630.34	CLEAR	90	0	32	0	0	0	58
08/03/92	1300	3630.34	CLEAR	90	0	32	0	0	0	88
08/31/92	928	3626.26	RAINY	65	15	26	0	0	0	60
08/31/92	928	3626.26	RAINY	65	15	26	0	0	0	100

1992 WATER QUALITY DATA FOR OAK1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1130	3625.50	CLOUDY	85	5	21	10	1	0	185
05/18/92	1130	3625.50	CLOUDY	85	5	21	10	1	0	159
05/26/92	1045	3628.45	CLOUDY	72	7	21	7	3	0	23
05/26/92	1045	3628.45	CLOUDY	72	7	21	7	3	0	78
06/08/92	845	3632.49	CLOUDY	75	5	23	3	1	0	53
06/08/92	845	3632.49	CLOUDY	75	5	23	3	1	0	46
06/22/92	1135	3633.98	CLEAR	85	3	24	20	2	0	62
06/22/92	1135	3633.98	CLEAR	85	3	24	20	2	0	48
07/06/92	1420	3633.37	CLEAR	95	30	22	0	0	0	73
07/06/92	1420	3633.37	CLEAR	95	30	22	0	0	0	94

(OAK1 , CONTINUED)

07/20/92	1140	3632.05	CLOUDY	89	0	24	15	3	0	89
07/20/92	1140	3632.05	CLOUDY	89	0	24	15	3	0	56
08/03/92	1050	3630.34	CLEAR	95	0	26	10	1	0	1000
08/03/92	1050	3630.34	CLEAR	95	0	26	10	1	0	412
08/05/92	1440	3629.96	CLOUDY	95	5	25	10	2	0	57
08/05/92	1440	3629.96	CLOUDY	95	5	25	0	2	0	38
08/17/92	1530	3628.08	CLEAR	99	0	27	8	1	0	1000
08/17/92	1530	3628.08	CLEAR	99	0	27	8	1	0	560
08/26/92	1300	3626.65	CLEAR	85	3	26	0	0	0	49
08/26/92	1300	3626.65	CLEAR	85	3	26	0	0	0	112
08/31/92	1127	3626.26	RAINY	65	0	22	0	0	0	36
08/31/92	1127	3626.26	RAINY	65	0	22	0	0	0	56
09/08/92	1118	3625.50	CLEAR	85	3	23	0	0	0	39
09/08/92	1118	3625.50	CLEAR	85	3	23	0	0	0	68
09/17/92	1350	3624.30	CLEAR	80	2	23	20	0	0	18
09/17/92	1350	3624.30	CLEAR	80	2	23	20	0	0	18

1992 WATER QUALITY DATA FOR OAK2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1140	3625.50	CLOUDY	85	5	21	10	1	0	89
05/26/92	1050	3628.45	CLOUDY	72	7	21	7	3	0	70
05/26/92	1050	3628.45	CLOUDY	72	7	21	7	3	0	258
06/08/92	850	3632.49	CLOUDY	75	5	22	3	1	0	104
06/08/92	850	3632.49	CLOUDY	75	5	22	3	1	0	156
06/22/92	1145	3633.98	CLEAR	85	3	24	20	2	0	59
06/22/92	1145	3633.98	CLEAR	85	3	24	20	2	0	94
07/06/92	1430	3633.37	CLEAR	95	30	22	0	0	0	74
07/06/92	1430	3633.37	CLEAR	95	30	22	0	0	0	82
07/20/92	1145	3632.05	CLOUDY	89	0	24	15	3	0	97
07/20/92	1145	3632.05	CLOUDY	89	0	24	15	3	0	118
08/03/92	1054	3630.34	CLEAR	95	0	26	10	1	0	113
08/03/92	1054	3630.34	CLEAR	95	0	26	10	1	0	152
08/05/92	1445	3629.96	CLOUDY	95	5	26	10	2	0	133
08/05/92	1445	3629.96	CLOUDY	95	5	26	10	2	0	260
08/17/92	1535	3628.08	CLEAR	99	0	27	8	1	0	1000
08/17/92	1535	3628.08	CLEAR	99	0	27	8	1	0	206
08/26/92	1310	3626.65	CLEAR	26	3	26	0	0	0	1000
08/26/92	1310	3626.65	CLEAR	85	3	26	0	0	0	1000
08/31/92	1131	3626.26	RAINY	65	0	22	0	0	0	49
08/31/92	1131	3626.26	RAINY	65	0	22	0	0	0	20
09/08/92	1123	3625.50	CLEAR	85	3	23	0	0	0	50
09/08/92	1123	3625.50	CLEAR	85	3	23	0	0	0	68
09/17/92	1345	3624.30	CLEAR	80	2	23	20	0	0	49
09/17/92	1345	3624.30	CLEAR	80	2	23	20	0	0	34

1992 WATER QUALITY DATA FOR RB1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1155	3625.50	CLOUDY	85	5	21	0	0	0	98
05/26/92	1055	3628.45	CLOUDY	72	7	21	0	0	0	56
05/26/92	1055	3628.45	CLOUDY	72	7	21	0	0	0	108
05/28/92	1155	3625.00	CLOUDY	85	5	21	0	0	0	24
06/08/92	955	3632.49	CLOUDY	75	5	22	0	0	0	39
06/08/92	955	3632.49	CLOUDY	75	5	22	0	0	0	54
06/22/92	1205	3633.98	CLEAR	85	3	23	0	0	0	35
06/22/92	1205	3633.98	CLEAR	85	3	23	0	0	0	50
07/06/92	1500	3633.37	CLEAR	95	30	25	80	10	0	141
07/06/92	1500	3633.37	CLEAR	95	30	25	80	10	0	98
07/20/92	1155	3632.05	CLOUDY	89	0	24	0	0	0	368
07/20/92	1155	3632.05	CLOUDY	89	0	24	0	0	0	456
07/22/92	1225	3631.72	CLOUDY	95	0	25	0	0	0	170
07/22/92	1225	3631.72	CLOUDY	95	0	25	0	0	0	166
08/03/92	1115	3630.34	CLEAR	95	0	25	0	0	0	85
08/03/92	1115	3630.34	CLEAR	95	0	25	0	0	0	178
08/17/92	1405	3628.08	CLEAR	99	0	26	0	0	0	111
08/17/92	1405	3628.08	CLEAR	99	0	26	0	0	0	92
08/31/92	1008	3626.26	RAINY	65	0	23	0	0	0	39
08/31/92	1008	3626.26	RAINY	65	0	23	0	0	0	86
09/08/92	1110	3625.50	CLEAR	85	3	21	2	1	0	1000
09/08/92	1110	3625.50	CLEAR	85	3	21	2	1	0	1000
09/24/92	1123	3623.64	CLEAR	90	15	24	0	0	0	63
09/24/92	1123	3623.64	CLEAR	90	15	24	0	0	0	70

1992 WATER QUALITY DATA FOR STAN1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1145	3625.50	CLEAR	80	5	0	5	1	7	144
05/18/92	1145	3625.50	CLEAR	80	5	0	5	1	7	204
05/26/92	1245	3628.45	CLEAR	80	5	20	4	1	6	6
05/26/92	1245	3628.45	CLEAR	80	5	20	3	1	3	6
06/08/92	1120	3632.49	CLEAR	80	1	23	15	4	11	16
06/08/92	1120	3632.49	CLEAR	0	1	23	15	4	11	13
06/22/92	1435	3633.98	CLEAR	85	2	28	24	3	12	126
06/22/92	1435	3633.98	CLEAR	85	2	28	24	3	12	28
07/06/92	1140	3633.37	CLEAR	85	7	25	12	2	10	0
07/06/92	1140	3633.37	CLEAR	85	7	25	12	2	10	0
07/15/92	1000	3632.45	CLEAR	75	5	25	20	6	15	378
07/15/92	1000	3632.45	CLEAR	75	5	25	20	6	15	306
07/15/92	1040	3632.45	CLEAR	75	5	25	20	6	15	75
07/15/92	1040	3632.45	CLEAR	75	5	25	20	6	15	112
07/20/92	1155	3632.05	CLEAR	90	5	26	15	5	12	268
07/20/92	1155	3632.05	CLEAR	90	5	26	15	5	12	132
08/03/92	1230	3630.34	CLEAR	90	5	26	20	10	21	356
08/03/92	1230	3630.34	CLEAR	90	5	26	20	10	21	232

(STAN1 , CONTINUED)

08/06/92	1105	3629.85	CLOUDY	85	3	27	30	12	15	200
08/06/92	1105	3629.85	CLOUDY	85	3	27	30	12	15	204
08/17/92	1203	3628.08	CLEAR	95	1	28	0	0	0	160
08/17/92	1203	3628.08	CLEAR	95	1	28	0	0	0	248
08/31/92	1155	3626.26	CLOUDY	80	7	24	3	0	1	240
08/31/92	1155	3626.26	CLOUDY	80	7	24	3	0	1	180
09/08/92	1130	3625.50	CLEAR	90	3	22	10	1	3	80
09/08/92	1130	3625.50	CLEAR	90	3	22	10	1	3	76

1992 WATER QUALITY DATA FOR STAN2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1157	3625.50	CLEAR	80	5	22	5	1	7	6
05/18/92	1157	3625.50	CLEAR	80	5	22	5	1	7	1
05/26/92	1247	3628.45	CLEAR	24	5	24	3	1	3	2
05/26/92	1247	3628.45	CLEAR	80	5	24	3	1	3	0
06/08/92	1123	3632.49	CLEAR	80	1	23	15	4	11	7
06/08/92	1123	3632.49	CLEAR	80	1	23	15	4	11	4
06/22/92	1445	3633.98	CLEAR	85	2	27	24	3	12	182
06/22/92	1445	3633.98	CLEAR	28	2	27	24	3	12	144
07/06/92	1145	3633.37	CLEAR	85	7	25	12	2	10	0
07/06/92	1145	3633.37	CLEAR	85	7	25	12	2	10	0
07/15/92	1045	3632.45	CLEAR	75	5	25	20	6	15	206
07/15/92	1045	3632.45	CLEAR	75	5	25	20	6	15	162
07/15/92	1045	3632.45	CLEAR	75	5	25	20	6	15	87
07/15/92	1045	3632.45	CLEAR	75	5	25	20	6	15	132
07/20/92	1214	3632.05	CLEAR	90	5	27	99	99	99	128
07/20/92	1214	3632.05	CLEAR	90	5	27	99	99	99	136
08/03/92	1235	3630.34	CLEAR	90	5	26	20	10	21	148
08/03/92	1235	3630.34	CLEAR	90	5	26	20	10	21	124
08/06/92	1110	3629.85	CLOUDY	85	3	27	30	12	15	164
08/06/92	1110	3629.85	CLOUDY	85	3	27	30	12	15	152
08/17/92	1206	3628.08	CLEAR	95	1	28	0	0	0	72
08/17/92	1206	3628.08	CLEAR	95	1	28	0	0	0	86
08/31/92	1200	3626.26	CLOUDY	80	7	25	3	0	1	172
08/31/92	1200	3626.26	CLOUDY	80	7	25	3	0	1	196
09/08/92	1135	3625.50	CLEAR	90	3	23	10	1	3	80
09/08/92	1135	3625.50	CLEAR	90	3	23	10	1	3	56

1992 WATER QUALITY DATA FOR UBB1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1110	3625.50	CLEAR	80	5	24	4	3	3	122
05/18/92	1110	3625.50	CLEAR	80	5	24	4	3	3	78
05/26/92	1315	3628.45	CLEAR	80	5	23	9	1	9	8
05/26/92	1315	3628.45	CLEAR	80	5	23	9	1	9	10
06/08/92	1040	3632.49	CLEAR	80	1	24	15	3	10	22
06/08/92	1040	3632.49	CLEAR	80	1	24	15	3	10	10

(UBB1 , CONTINUED)

06/22/92	1337	3633.98	CLEAR	85	2	28	12	6	6	0
06/22/92	1337	3633.98	CLEAR	85	2	28	12	6	6	0
07/06/92	1105	3633.37	CLEAR	85	7	25	10	5	3	0
07/06/92	1105	3633.37	CLEAR	85	7	25	10	5	3	0
07/15/92	940	3632.45	CLEAR	75	5	25	40	5	20	210
07/15/92	940	3632.45	CLEAR	75	5	25	40	5	20	408
07/15/92	940	3632.45	CLEAR	75	5	25	40	5	20	172
07/15/92	940	3632.45	CLEAR	75	5	25	40	5	20	416
07/20/92	1100	3632.05	CLEAR	90	5	27	30	10	20	496
07/20/92	1100	3632.05	CLEAR	90	5	27	30	10	20	420
07/27/92	931	3631.15	CLOUDY	85	8	26	49	7	14	232
07/27/92	931	3631.15	CLOUDY	85	8	26	49	7	14	280
08/03/92	1135	3630.34	CLEAR	90	5	27	20	13	8	400
08/03/92	1135	3630.34	CLEAR	90	5	27	20	13	8	328
08/06/92	1335	3629.85	CLOUDY	85	3	26	30	25	15	280
08/06/92	1335	3629.85	CLOUDY	85	3	26	30	25	15	212
08/17/92	1127	3628.08	CLEAR	95	3	28	44	11	0	244
08/17/92	1127	3628.08	CLEAR	95	3	28	44	11	0	316
08/20/92	1150	3627.47	CLEAR	95	3	28	20	16	8	124
08/20/92	1150	3627.47	CLEAR	95	3	28	20	16	8	196
08/31/92	1025	3626.26	CLOUDY	80	7	23	6	3	1	212
08/31/92	1025	3626.26	CLOUDY	80	7	23	6	3	1	272
09/08/92	1040	3625.50	CLEAR	90	3	24	20	5	10	176
09/08/92	1040	3625.50	CLEAR	90	3	24	20	5	10	224
09/14/92	1140	3624.73	CLEAR	90	3	24	20	6	5	156
09/14/92	1140	3624.73	CLEAR	90	3	24	20	6	5	192
09/21/92	1200	3624.03	CLEAR	90	7	23	20	10	8	384
09/21/92	1200	3624.03	CLEAR	90	7	23	20	10	8	412
09/28/92	1005	3623.23	CLEAR	85	3	20	10	5	5	192
09/28/92	1005	3623.23	CLEAR	85	3	20	10	5	5	216
10/27/92	1100	3621.30	CLOUDY	70	1	21	0	0	0	8
10/27/92	1100	3621.30	CLOUDY	70	1	21	0	0	0	6

1992 WATER QUALITY DATA FOR UBB2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1115	3625.50	CLEAR	80	5	24	4	3	3	32
05/18/92	1115	3625.50	CLEAR	24	5	24	4	3	3	30
05/26/92	1315	3628.45	CLEAR	80	5	23	9	1	9	10
05/26/92	1320	3628.45	CLEAR	80	5	22	9	1	9	20
06/08/92	1048	3632.49	CLEAR	80	1	24	15	3	10	15
06/08/92	1048	3632.49	CLEAR	80	1	24	15	3	10	11
06/22/92	1343	3633.98	CLEAR	85	2	27	12	6	6	30
06/22/92	1343	3633.98	CLEAR	85	2	27	12	6	6	110
07/06/92	1110	3633.37	CLEAR	85	7	25	10	5	3	0
07/06/92	1110	3633.37	CLEAR	85	7	25	10	5	3	6
07/15/92	950	3632.45	CLEAR	75	5	26	40	5	20	313
07/15/92	950	3632.45	CLEAR	75	5	26	40	5	20	598
07/15/92	950	3632.45	CLEAR	75	5	26	40	5	20	225
07/15/92	950	3632.45	CLEAR	75	5	26	40	5	20	314
07/20/92	1110	3632.05	CLEAR	90	5	26	30	10	20	196
07/20/92	1110	3632.05	CLEAR	90	5	26	30	10	20	360

(UBB2 , CONTINUED)

08/03/92	1145	3630.34	CLEAR	90	5	27	20	13	8	164
08/03/92	1145	3630.34	CLEAR	90	5	27	20	13	8	120
08/06/92	1345	3629.85	CLOUDY	85	3	26	30	25	15	240
08/06/92	1345	3629.85	CLOUDY	85	3	26	30	25	15	236
08/17/92	1132	3628.08	CLEAR	95	3	28	44	11	0	200
08/17/92	1132	3628.08	CLEAR	95	3	28	44	11	0	240
08/20/92	1200	3627.47	CLEAR	95	3	28	20	16	8	192
08/20/92	1200	3627.47	CLEAR	95	3	28	20	16	8	200
08/31/92	1030	3626.26	CLOUDY	80	7	24	6	3	1	304
08/31/92	1030	3626.26	CLOUDY	80	7	24	6	3	1	204
09/08/92	1045	3625.50	CLEAR	90	3	24	20	5	10	152
09/08/92	1045	3625.50	CLEAR	90	3	24	20	5	10	132
09/14/92	1143	3624.73	CLEAR	90	3	24	20	6	5	480
09/14/92	1143	3624.73	CLEAR	90	3	24	20	6	5	568
09/21/92	1210	3624.03	CLEAR	90	7	22	20	10	8	260
09/21/92	1210	3624.03	CLEAR	90	7	22	20	10	8	324
09/28/92	1010	3623.23	CLEAR	85	3	20	10	5	5	196
09/28/92	1010	3623.23	CLEAR	85	3	20	10	5	5	140
10/27/92	1105	3621.30	CLOUDY	70	1	21	0	0	0	14
10/27/92	1105	3621.30	CLOUDY	70	1	21	0	0	0	6

1992 WATER QUALITY DATA FOR WCB1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	920	3625.50	CLEAR	85	5	22	4	1	0	11
05/18/92	920	3625.50	CLEAR	85	5	22	0	0	0	20
05/26/92	1023	3628.45	CLEAR	75	4	23	0	0	0	16
05/26/92	1023	3628.45	CLEAR	75	4	23	0	0	0	30
06/08/92	1103	3632.49	CLOUDY	70	1	25	0	4	0	182
06/08/92	1103	3632.49	CLOUDY	70	1	25	0	4	0	190
06/22/92	1042	3633.98	CLEAR	85	1	24	0	0	0	18
06/22/92	1042	3633.98	CLEAR	85	1	24	0	0	0	80
07/06/92	1023	3633.37	CLEAR	90	2	27	20	4	0	34
07/06/92	1023	3633.37	CLEAR	90	0	27	20	4	0	112
07/20/92	915	3632.05	CLEAR	80	0	26	5	2	0	117
07/20/92	915	3632.05	CLEAR	80	0	26	5	2	0	166
08/03/92	956	3630.34	CLEAR	90	0	29	10	9	0	113
08/03/92	956	3630.34	CLEAR	90	0	29	10	9	0	204
08/17/92	1153	3628.08	CLEAR	90	5	30	6	5	1	57
08/17/92	1153	3628.08	CLEAR	90	5	30	6	5	1	68
08/31/92	1045	3626.26	RAINY	65	15	24	3	3	0	61
08/31/92	1045	3626.26	RAINY	65	15	24	3	3	0	82
09/08/92	1035	3625.50	CLEAR	80	3	27	7	3	0	84
09/08/92	1035	3625.50	CLEAR	80	3	27	7	3	0	116

1992 WATER QUALITY DATA FOR WCB2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	930	3625.50	CLEAR	85	5	24	0	0	0	31

(WCB2 , CONTINUED)

05/18/92	930	3625.50	CLEAR	85	5	24	0	0	0	40
05/26/92	1027	3628.45	CLEAR	75	4	22	0	0	0	209
05/26/92	1027	3628.45	CLEAR	75	4	22	0	0	0	146
06/08/92	1108	3632.49	CLOUDY	70	1	24	0	4	0	70
06/08/92	1108	3632.49	CLOUDY	70	1	24	0	4	0	30
06/22/92	1047	3633.98	CLEAR	85	1	25	0	0	0	0
06/22/92	1047	3633.98	CLEAR	85	1	25	0	0	0	0
07/06/92	1032	3633.37	CLEAR	90	2	27	20	4	0	92
07/20/92	923	3632.05	CLEAR	80	0	26	5	2	0	102
07/20/92	923	3632.05	CLEAR	80	0	26	5	2	0	178
08/03/92	1007	3630.34	CLEAR	90	0	29	10	9	0	145
08/03/92	1007	3630.34	CLEAR	90	0	29	10	9	0	162
08/17/92	1210	3628.08	CLEAR	90	5	29	6	5	1	68
08/17/92	1210	3628.08	CLEAR	90	5	29	6	5	1	94
08/31/92	1033	3626.26	RAINY	65	15	26	3	3	0	104
08/31/92	1033	3626.26	RAINY	65	15	26	3	3	0	108
09/08/92	1040	3625.50	CLEAR	80	3	27	7	3	0	69
09/08/92	1040	3625.50	CLEAR	80	3	27	7	3	0	58

1992 WATER QUALITY DATA FOR WCCA1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	1015	3628.45	CLEAR	75	4	22	4	0	0	291
05/26/92	1015	3628.45	CLEAR	75	4	22	4	0	0	182
06/22/92	1037	3633.98	CLEAR	85	1	24	8	2	0	126
07/20/92	910	3632.05	CLEAR	80	0	24	5	3	0	136
07/20/92	910	3632.05	CLEAR	80	0	24	5	3	0	100
08/31/92	1056	3626.26	RAINY	65	15	22	0	0	0	102
08/31/92	1056	3626.26	RAINY	65	15	22	0	0	0	184

1992 WATER QUALITY DATA FOR WIL1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/26/92	1005	3628.45	CLOUDY	72	7	22	0	0	0	1000
05/26/92	1005	3628.45	CLOUDY	72	7	22	0	0	0	130
06/22/92	1100	3633.98	CLEAR	85	3	24	5	1	0	52
06/22/92	1100	3633.98	CLEAR	85	3	24	5	1	0	32
07/20/92	1115	3632.05	CLEAR	89	0	25	0	0	0	100
07/20/92	1115	3632.05	CLEAR	89	0	25	0	0	0	193
08/31/92	1340	3626.26	RAINY	65	0	0	0	0	0	197
08/31/92	1340	3626.26	RAINY	65	0	0	0	0	0	300
09/08/92	1207	3625.50	CLEAR	85	3	24	0	0	0	90
09/08/92	1207	3625.50	CLEAR	85	3	24	0	0	0	118

1992 WATER QUALITY DATA FOR WWB

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	757	3625.50	CLEAR	85	5	20	0	0	0	35
05/18/92	757	3625.50	CLEAR	85	5	20	0	0	0	35
05/26/92	907	3628.45	CLEAR	75	4	21	0	0	0	111
05/26/92	907	3628.45	CLEAR	75	4	21	0	0	0	156
06/08/92	1158	3632.49	CLOUDY	70	1	23	0	0	0	76
06/08/92	1158	3632.49	CLOUDY	70	1	23	0	0	0	102
06/22/92	854	3633.98	CLEAR	85	1	24	0	0	0	47
06/22/92	854	3633.98	CLEAR	85	1	24	0	0	0	68
07/06/92	920	3633.37	CLEAR	90	2	25	0	0	0	131
07/06/92	920	3633.37	CLEAR	90	2	25	0	0	0	98
07/20/92	1125	3632.05	CLEAR	80	0	26	0	0	0	86
07/20/92	1125	3632.05	CLEAR	80	0	26	0	0	0	164
08/03/92	904	3630.34	CLEAR	90	0	26	0	0	0	77
08/03/92	904	3630.34	CLEAR	90	0	26	0	0	0	85
08/17/92	1003	3628.08	CLEAR	90	5	29	0	0	0	42
08/17/92	1003	3628.08	CLEAR	90	5	29	0	0	0	76
08/31/92	938	3626.26	RAINY	65	15	24	0	0	0	71
08/31/92	938	3626.26	RAINY	65	15	24	0	0	0	120
09/08/92	1230	3625.50	CLEAR	80	3	25	0	0	0	60
09/08/92	1230	3625.50	CLEAR	80	3	25	0	0	0	66

1992 WATER QUALITY DATA FOR WWLB1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	807	3625.50	CLEAR	85	5	19	15	20	0	9
05/18/92	814	3625.50	CLEAR	85	5	20	15	20	0	4
05/26/92	907	3628.45	CLEAR	75	4	21	0	0	0	118
05/26/92	907	3628.45	CLEAR	75	4	21	13	7	2	142
06/08/92	956	3632.49	CLOUDY	70	1	22	0	0	0	33
06/08/92	956	3632.49	CLOUDY	70	1	22	0	0	0	52
06/22/92	931	3633.98	CLEAR	85	1	23	2	0	0	152
06/22/92	931	3633.98	CLEAR	85	1	23	2	0	0	138
07/06/92	1140	3633.37	CLEAR	90	2	26	50	8	0	134
07/06/92	1140	3633.37	CLEAR	90	2	26	50	8	0	146
07/08/92	924	3633.08	RAINY	75	2	24	0	0	0	105
07/08/92	924	3633.08	RAINY	75	2	24	0	0	0	144
07/20/92	1055	3632.05	CLEAR	80	0	25	50	1	0	90
07/20/92	1055	3632.05	CLEAR	80	0	25	50	1	0	86
08/03/92	1110	3630.34	CLEAR	90	0	29	70	0	0	28
08/03/92	1110	3630.34	CLEAR	29	0	29	70	0	0	62
08/17/92	1035	3628.08	CLEAR	90	5	29	35	0	0	108
08/17/92	1035	3628.08	CLEAR	90	5	29	35	0	0	104
08/31/92	1156	3626.26	RAINY	65	15	25	2	4	0	58
08/31/92	1156	3626.26	RAINY	65	15	25	2	4	0	84
09/08/92	1153	3625.50	CLEAR	80	3	27	20	0	0	37
09/08/92	1153	3625.50	CLEAR	80	3	27	20	0	0	98

(WWLB2 , CONTINUED)

1992 WATER QUALITY DATA FOR WWLB2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	814	3625.50	CLEAR	85	5	20	15	20	0	8
05/18/92	814	3625.50	CLEAR	85	5	20	15	20	0	11
05/26/92	918	3628.45	CLEAR	75	4	21	13	7	2	123
05/26/92	918	3628.45	CLEAR	75	4	21	13	7	2	172
06/08/92	1002	3632.49	CLOUDY	70	1	22	0	0	0	150
06/08/92	1002	3632.49	CLOUDY	70	1	22	0	0	0	78
06/22/92	938	3633.98	CLEAR	85	1	23	2	0	0	9
06/22/92	938	3633.98	CLEAR	85	1	0	2	0	0	12
07/06/92	1150	3633.37	CLEAR	90	2	28	50	8	0	254
07/06/92	1150	3633.37	CLEAR	90	2	28	50	8	0	280
07/08/92	931	3633.08	RAINY	75	2	24	0	0	0	95
07/08/92	931	3633.08	RAINY	75	2	24	0	0	0	198
07/20/92	1104	3632.05	CLEAR	80	0	26	50	1	0	126
07/20/92	1104	3632.05	CLEAR	80	0	26	50	1	0	144
08/03/92	1118	3630.34	CLEAR	90	0	30	70	0	0	46
08/17/92	1035	3628.08	CLEAR	90	5	29	35	0	0	81
08/17/92	1035	3628.08	CLEAR	90	5	90	35	0	0	62
08/31/92	1203	3626.26	RAINY	65	15	25	2	4	0	22
08/31/92	1203	3626.26	RAINY	65	15	25	2	4	0	52
09/08/92	1200	3625.50	CLEAR	80	3	26	20	0	0	85
09/08/92	1200	3625.50	CLEAR	80	3	26	20	0	0	90

1992 WATER QUALITY DATA FOR WWM1

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	750	3625.50	CLEAR	85	5	19	0	99	0	410
05/18/92	750	3625.50	CLEAR	85	5	19	0	99	0	347
05/18/92	711	3625.50	RAINY	70	9	20	3	8	6	54
05/21/92	711	0.00	RAINY	70	9	20	3	8	6	119
05/26/92	840	3628.45	CLEAR	75	4	21	0	0	0	68
05/26/92	840	3628.45	CLEAR	75	4	21	0	0	0	48
06/08/92	919	3632.49	CLOUDY	70	1	22	10	4	7	83
06/08/92	919	3632.49	CLOUDY	70	1	22	10	4	7	72
06/22/92	836	3633.98	CLEAR	85	1	23	20	12	9	22
06/22/92	836	3633.98	CLEAR	85	1	23	20	12	9	20
07/06/92	910	3633.37	CLEAR	90	2	25	0	0	0	115
07/06/92	900	3633.37	CLEAR	90	2	24	0	21	8	98
07/20/92	815	3632.05	CLEAR	80	0	26	20	7	8	142
07/20/92	815	3632.05	CLEAR	80	0	26	20	7	8	176
08/03/92	837	3630.34	CLEAR	90	0	0	15	2	6	165
08/03/92	837	3630.34	CLEAR	90	0	0	15	2	6	230
08/17/92	1035	3628.08	CLEAR	90	5	29	35	0	0	74
08/17/92	950	3628.08	CLEAR	90	5	28	20	10	8	114
08/31/92	923	3626.26	RAINY	65	15	21	0	0	0	107

(WWM1 ., CONTINUED)

08/31/92	923	3626.26	RAINY	65	15	21	0	0	0	268
09/08/92	1230	3625.50	CLEAR	80	3	26	0	0	0	80
09/08/92	1230	3625.50	CLEAR	80	3	26	0	0	0	130

1992 WATER QUALITY DATA FOR WWM2

DATE	TIME	WATER LEVEL (FT)	WEATHER	AIR TEMP (F)	WIND (MPH)	WATER TEMP (C)	PEOPLE COUNT	BOAT COUNT	VEHICLE COUNT	COLIFORM COUNT
05/18/92	1400	3625.50	CLEAR	85	5	24	0	99	0	5
05/18/92	1400	3625.50	CLEAR	85	5	24	0	99	0	6
05/20/92	720	0.00	RAINY	0	9	20	3	8	6	44
05/21/92	720	0.00	RAINY	0	9	20	3	8	6	123
05/26/92	1414	3628.45	CLEAR	75	4	23	0	0	0	54
05/26/92	1414	3628.45	CLEAR	75	4	23	0	0	0	138
06/08/92	945	3632.49	CLOUDY	70	1	22	10	4	7	86
06/08/92	945	3632.49	CLOUDY	70	1	22	10	4	7	136
06/22/92	917	3633.98	CLEAR	85	1	23	20	12	9	82
06/22/92	917	3633.98	CLEAR	85	1	23	20	12	9	110
07/06/92	1206	3633.37	CLEAR	90	2	25	92	21	8	125
07/06/92	1206	3633.37	CLEAR	90	2	25	92	21	8	158
07/20/92	1117	3632.05	CLEAR	80	0	26	20	7	8	157
07/20/92	1117	3632.05	CLEAR	80	0	26	20	7	8	200
08/03/92	1135	3630.34	CLEAR	90	0	31	15	2	6	148
08/03/92	1135	3630.34	CLEAR	90	0	31	15	2	6	162
08/17/92	1011	3628.08	CLEAR	90	5	29	20	10	8	85
08/17/92	1011	3628.08	CLEAR	90	5	29	20	10	8	118
08/31/92	1216	3626.26	RAINY	65	15	22	0	0	0	120
08/31/92	1216	3626.26	RAINY	65	15	22	0	0	0	94
09/08/92	1230	3625.50	CLEAR	80	3	26	0	0	0	103
09/08/92	1230	3625.50	CLEAR	80	3	26	0	0	0	130

KEY TO RANDOM SAMPLES

DW - DRINKING WATER

CC - CHA CANYON

RD - RED CANYON

DC - ONE COVE UP FROM NPS BEACH

WC - WHITE CANYON

AB - ANASAZI BEACH

RB - RAINBOW BRIDGE

NW - NORTH WASH

DD - DIRTY DEVIL

CR - COLORADO RIVER ABOVE HITE

LM - LLEWELLYN GULCH MOUTH - MID CHANNEL

WM - WAHWEAP BAY - MID CHANNEL

RANDOM SAMPLES

	Date	Time	Weather	Air Temp (F)	Water Level	Wind	Water Temp (C)	Turb	Use	Boats	People	Vehicles	Sani St	Count
)W	5/18	--	CLEAR	85	3625.20	--	--	--		--	--	--	--	0
		--	CLEAR	85	6325.20	--	--	--		--	--	--	--	2
		--	CLEAR	85	3625.20	--	--	--		--	--	--	--	0
		--	CLEAR	85	3625.20	--	--	--		--	--	--	--	0
CC	5/26	9:40	CLOUDY	72	3628.45	7	21	M		0	0	0	0	259
CC	5/29	3:40	--	--	3629.28	--	22	M		1	4	0	0	82
		3:40	--	--	3629.28	--	22	M		1	4	0	0	139
ID	6/8	1:30	CLEAR	90	3632.49	5-10	23	M		1	0	0	0	1
		1:30	CLEAR	90	3632.49	5-10	23	M		1	0	0	0	0
)C	7/6	9:28	CLEAR	90	3633.37	2	25	CL		0	0	0	0	119
		9:28	CLEAR	90	3633.37	2	25	CL		0	0	0	0	82
JC	7/6	2:05	CLEAR	85	3633.37	5-10	25	M		1	4	0	0	0
		2:05	CLEAR	85	3633.37	5-10	25	M		1	4	0	0	0
AB	7/20	11:30	CLEAR	85	3632.05	1-5	26	--		0	6	0	0	45
		11:30	CLEAR	85	3632.05	1-5	26	--		0	6	0	0	32
RB	8/31	--	RAINY	80	3626.26	0	23	CL		0	0	0	0	97
		--	RAINY	80	3626.26	0	23	CL		0	0	0	0	72
NW	8/31	--	CLOUDY	80	3626.26	5-10	23.5	--		0	0	2	0	452
		--	CLOUDY	80	3626.26	5-10	23.5	--		0	0	2	0	388
DD	9/14	--	CLEAR	90	3624.60	5-10	23	--		0	0	1	0	328
		--	CLEAR	90	3624.60	5-10	23	--		0	0	1	0	260

RANDOM SAMPLES

	Date	Time	Weather	Air Temp (F)	Water Level	Wind	Water Temp (C)	Turb	Use	Boats	People	Vehicles	Sani St	Count
CR	9/14	--	CLEAR	90	3624.60	5-10	21	--		0	0	0	0	1
		--	CLEAR	90	3624.60	5-10	21	--		0	0	0	0	5
DD	9/21	1:55	CLEAR	90	3624.03	1-5	22	M		2	10	6	0	192
		1:55	CLEAR	90	3624.03	1-5	22	M		2	10	6	0	180
LM	9/24	1:03	CLEAR	90	3623.64	1-5	23	CL		0	0	0	0	25
		1:03	CLEAR	90	3623.64	1-5	23	CL		0	0	0	0	32
WM	9/24	3:33	CLEAR	90	3623.64	15	23	CL		0	0	0	0	26
		3:33	CLEAR	90	3623.64	15	23	CL		0	0	0	0	32
DD	9/28	1:05	CLEAR	90	3623.23	1-5	21	--		0	0	3	0	212
		1:05	CLEAR	90	3623.23	1-5	21	--		0	0	3	0	140

Table 3

Site	Dates of Posting 1991	1992	Signs and buoys used	Signs and buoys needed
FARLEY CANYON	9/4-9/6	7/24-I1/5	SIGN	SIGN/BUOY
FORGOTTEN CANYON		9/2-11/5	BUOY	BUOY
HANSEN CREEK	6/14-24,7/1-8,8/5-19		BUOY	SIGN/BUOY
HITE MARINA		7/29-11/5	SIGNS	SIGNS(2)
HOBI CAT BEACH	6/14-24,8/5-19		SIGNS	SIGNS/BUOY
LLEWELLYN GULCH		6/30-11/5	BUOY	BUOY
MOQUI CANYON	9/4-9/16	7/29-11/5	BUOY BUOY SIGN	BUOY/SIGN
NPS BEACH		6/30-7/29	SIGN	SIGN
STANTON CREEK	6/14-24,8/22-9/16		SIGN	SIGNS
UPPER BULLFROG BAY		7/24-11/5	SIGN	SIGNS/BUOY

Table 4

Location	Date of first sustained high count	Days between first high count and signing of closure	Date closure notice was signed	Days between signing of notice and posting	Date signs or buoys were posted	Days between first high count and actual posting	Reopen date
NPS	6/22	8 days	6/30	0 days	6/30	8 days	11/29
LLEW	7/22	8 days	6/30	0 days	6/30	8 days	
OAK	8/5	15 days	8/20	6 days	8/26	21 days	9/18
UBB	7/15	9 days	7/24	14 days	8/7	23 days	11/5
FARLEY	7/20	4 days	7/24	14 days	8/7	18 days	11/5
HITE	7/20	9 days	7/29	9 days	8/7	18 days	11/5
MOQUI	7/20	9 days	7/29	9 days	8/7,9/3	18 days	11/5
FOR. CAN	7/27	6 days	9/2	1 day	9/3	7 days	11/5

TABLE 5 · CONTROL RESULTS

Date 1992	FAR[1]	FOR[2]	HM[3]	LEW[4]	MC[5]	NPS[6]	OAK[7]	UBB[8]	*EC*[9]	*EA*[10]	*EA-Phx*[11]	*UV*[12]	*BK*[13]	*MD*[14]
5-19				190 121 117 164			185 159 190 89		TNTC	TNTC		TNTC		
5-19	18 11 6 7	0 1	16 26 20 11		0 0 0 0			122 78 32 30	TNTC	TNTC		6	0	
5-27				272 365 240 291		333 640	23 78 70 258		TNTC	TNTC		TNTC	0	
5-27	68 122 42 32	0 0	16 6 4		0 2 0 0			8 10 10 20	0	TNTC		TNTC	0	
5-29				108 81 110 98		120 100			TNTC	1		TNTC		
6-8				149 210 161 200			53 46 104 156		TNTC	TNTC		18		
6-8	117 359 24 21		368 334 16 16		0 0 0 1			22 10 15 11	TNTC	TNTC		TNTC	0	

Date 1992	FAR[1]	FOR[2]	HM[3]	LEW[4]	MC[5]	NPS[6]	OAK[7]	UBB[8]	*EC*[9]	*EA*[10]	*EA–Phx*[11]	*UV*[12]	*BK*[13]	*MD*[14]
6-22				TNTC TNTC TNTC TNTC		260 432	62 48 59 94		TNTC	0	0	106		
6-22	80 108 216 0	6 26	170 0 174 90		460 452 0 0			0 0 30 110	TNTC	TNTC		TNTC		
6-24				271 106 182 218		TNTC TNTC			TNTC	TNTC		2		
7-6				161 218 193 TNTC		126 114	73 94 74 82		TNTC	TNTC		TNTC		
7-6	0 0 0 0		0 0 4 4		0 2 0 0			0 0 0 6	TNTC	0		**[15]	0	
7-8				147 184 200 272					TNTC	TNTC	0	TNTC		
7-15	210 408 313 598								0	0		0		

Date 1992	FAR[1]	FOR[2]	HM[3]	LEW[4]	MC[5]	NPS[6]	OAK[7]	UBB[8]	*EC*[9]	*EA*[10]	*EA–Phx*[11]	*UV*[12]	*BK*[13]	*MD*[14]
7-15								172 416 225 314	TNTC	3		TNTC		
7-20				277 278 172 180		183 218	89 56 97 118		TNTC	TNTC		0		
7-20	388 590 536 548	256 336	600 340 444 740		592 536 340 360			496 420 196 360	TNTC	40		TNTC		
7-22				137 174 TNTC TNTC		66 120			TNTC	TNTC		TNTC		
7-22	340 408 592 404		372 324 296 384						TNTC	0		TNTC	1	
7-27	236 292 324 132	0 136 120 280	612 452 0 292		196 112 104 276			232 280 0 0	266	2		472	0	
8-3				TNTC TNTC 73 214		58 88	TNTC 412 113 152		TNTC	20	29	0		

Date 1992	FAR[1]	FOR[2]	HM[3]	LEW[4]	MC[5]	NPS[6]	OAK[7]	UBB[8]	*EC*[9]	*EA*[10]	*EA-Phx*[11]	*UV*[12]	*BK*[13]	*MD*[14]
8-3	256 312 236 280	284 228	320 512 564 428		356 396 204 236			400 328 164 120	TNTC	7		TNTC	6	
8-5				308 454 255 186			57 38 133 260		TNTC	19	3	7		
8-6		252 216		296 260 156 148			280 212 240 236		TNTC	0		TNTC	0	
8-7	212 252 168 96		320 276 376 340						TNTC	0		TNTC	0	
8-18				TNTC 666 TNTC TNTC			TNTC 560 TNTC 206		TNTC	18	5	21		
8-17	460 440 340 324	308 252	200 188 276 240		132 108 196 192			244 316 200 240	TNTC	0		TNTC		
8-20		316 288			288 300 360 268			124 196 192 200	TNTC	0		TNTC	0	

Date 1992	FAR[1]	FOR[2]	HM[3]	LEW[4]	MC[5]	NPS[6]	OAK[7]	UBB[8]	*EC*[9]	*EA*[10]	*EA-Phx*[11]	*UV*[12]	*BK*[13]	*MD*[14]
8-26				143 358 211 244			49 112 TNTC TNTC		TNTC	93	0	TNTC		
8-31				30 36 270 360		60 100	36 56 49 20		TNTC	7	0	18		
8-31	600 360 560 376	368 240	408 468 396 472		536 462 284 312			212 272 304 204	TNTC	3		TNTC	2	
9-8				155 214 181 256			39 68 50 68		TNTC	25	TNTC	TNTC		
9-8	236 216 168 180	280 308	296 292 188 208		272 232 588 436			176 224 152 132	TNTC	8		12	6	
9-14	352 332 300 326	492 436	252 316 280 256		460 344 376 268			156 192 480 568	TNTC	4		1	5	
9-17							18 18 49 34		TNTC	0		TNTC		0

Date 1992	FAR[1]	FOR[2]	HM[3]	LEW[4]	MC[5]	NPS[6]	OAK[7]	UBB[8]	*EC*[9]	*EA*[10]	*EA-Phx*[11]	*UV*[12]	*BK*[13]	*MD*[14]
9-21	280 268 260 196	168 200	312 300 204 128		192 220 300 280			384 412 260 324	TNTC	1		0	0	
9-24				237 240 60 66					TNTC	2		TNTC	0	0
9-28	204 208 132 134	124 120 180 160	212 224 212 256		100 204 104 120			192 216 196 140	TNTC	0		62	1	
10-19				13 38 24 38					TNTC	2		8	0	0
10-27		1 0			3 6 4 4			8 6 14 6	TNTC	28	1	TNTC	0	0

1. Farley Canyon
2. Forgotten Canyon
3. Hite Marina
4. Lewellyn Gulch
5. Moqui Canyon
6. Government Housing Beach
7. Oak Canyon

8. Upper Bullfrog Bay
9. Escherchia Coli
10. Enterobacter aerogenes
11. Enterobacter aerogenes (Phoenix)
12. Ultraviolet
13. Blank
14. Media
15. BAD PLATE

Table 6 ARITHMETIC MEAN OF COLIFORM COUNTS PER SITE

SITE	1988	1989	1990	1991	1992
WAHWEAP BAY	N/A	N/A	N/A	N/A	85
WAHWEAP LODGE BEACH	8	3	6	103	94
GOVERNMENT HOUSING BEACH	N/A	4	10	61	279*
WAHWEAP MARINA	N/A	N/A	N/A	99	121
LONE ROCK BEACH	6	83*	56	128	143
ANTELOPE POINT	2	77*	5	143	145
WARM CREEK BEACH	2	9	8	51	89
WARM CREEK CATTLE AREA	.7	.2	6	136	160
THE CUT	N/A	N/A	N/A	37	123
DANGLING ROPE MARINA	N/A	1.5	40	118	83
RAINBOW BRIDGE	N/A	N/A	26	14	191
MT. SHEEP CANYON	4	.7	24	31	208*
OAK CANYON	23	12	74	84	191
CHA CANYON	1.5	N/A	325*	83	266*
WILSON CREEK	N/A	N/A	232*	97	221*
DUNGEON CREEK	N/A	N/A	23	103	92
LLEWELLYN GULCH	N/A	N/A	350*	78	315*
DAVIS GULCH	8	36	133	155	158
HOBI CAT BEACH	N/A	N/A	21	124	77
STANTON CREEK	N/A	N/A	123	253*	120
BULLFROG BAY	19	30	N/A	N/A	71
BULLFROG MARINA	N/A	N/A	N/A	144	72
UPPER BULLFROG BAY	7	14	68	198*	190*
HANSEN CREEK	N/A	N/A	70	283*	117
FORGOTTEN CANYON	N/A	N/A	45	135	193*
HALLS CROSSING MARINA	N/A	N/A	32	94	49
MOQUI CANYON	30	26	N/A	480*	198*
FARLEY CANYON	94*	14	14	338*	238*
HITE MARINA	14.8	6	32	299*	257*

*HIGHEST AVERAGE COUNTS FOR THE SEASON