STATE OF WEST VIRGINIA

PRELIMINARY PERFORMANCE REVIEW OF THE

WHITEWATER COMMISSION

Whitewater Commission Provides for Industry Safety, Fair Daily Customer Allocation and Effective Contract Oversight

OFFICE OF LEGISLATIVE AUDITOR

Performance Evaluation & Research Division Building 5, Room 751 State Capitol Complex

CHARLESTON, WEST VIRGINIA 25305 (304) 347-4890

PE95-07-28

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> David Ellis, Research Manager Denny Rhodes, Research Analyst

> > October, 1995

WEST VIRGINIA LEGISLATURE

Performance Evaluation and Research Division

Building 5, Room 751A 1900 Kanawha Boulevard, East Charleston, West Virginia 25305-0592 (304) 347-4890 (304) 347-4889 FAX



Antonio E. Jones, Ph.D. Director

October 13, 1995

The Honorable A. Keith Wagner State Senate Box 446 Iaeger, West Virginia 24844

The Honorable Joe Martin House of Delegates Building 1, Room 213E 1900 Kanawha Blvd. East Charleston, West Virginia 25305

Gentlemen:

Pursuant to the West Virginia Sunset Law, we are transmitting this Preliminary Performance Review of the Whitewater Commission, which will be reported to the Joint Committee on Government Operations on Sunday, October 15, 1995. The issue covered herein is "Whitewater Commission Provides for Industry Safety, Fair Daily Customer Allocation and Effective Contract Oversight."

Sincerely,

Antonio E. Jones

AEJ/wsc

Enclosure

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Preliminary Performance Review of the Whitewater Commission

Executive Summary

The Whitewater Commission was created in 1992 within the Division of Natural Resources (DNR) to replace the Whitewater Advisory Council. The Commission was established for the purpose of assisting the director of DNR in regulating, studying, and investigating the whitewater industry to arrive at an efficient market allocation of outfitters that protects public safety and allows for the enjoyment of the natural beauty of the state. The Commission is composed of ten members and is required to meet quarterly.

The Performance Evaluation and Research Division obtained information about the Commission through: studying state statutes and rules; interviews with Law Enforcement personnel of the DNR; a random survey of whitewater outfitters; an examination of Commission meeting minutes; attendance of the July 1995 Whitewater Commission meeting; an analysis of injury reports; and a review of various documents. This information was used to determine whether the Commission established policies that protects the safety of whitewater consumers, whether the Commission established policies that provides for an efficient allocation of whitewater users, and whether the Commission is providing effective oversight of the Whitewater Study.

After reviewing this information, the evaluation team came to the conclusion that the Commission provides effective oversight of the whitewater industry. Injuries on the rivers are minimal, with only .02% of customers injured on the *New River*, .09% of customers injured on the *Gauley River*, and only .01% injured on the *Cheat River*. After an analysis of information provided by the Law Enforcement Section of DNR, the PERD team concluded that the customer allocation methodology does not inhibit industry growth. Finally, the Whitewater Study is being effectively monitored by the Commission and the Law Enforcement Section of DNR¹, with monthly reports and presentations at Commission meetings.

PERD makes several recommendations leading to the final recommendation of **continuing** and reestablishing the Whitewater Commission for six years.

¹The Law Enforcement Section of the Division of Natural Resources provides administrative support for the WWC. Documents regarding the whitewater industry such as injury reports, licenses, and study updates are on file at the Law Enforcement offices.

Whitewater Commission

Review, Objective, Scope and Methodology

Review Objective, Scope and Methodology

This review of the Whitewater Commission was conducted in accordance with the West Virginia Sunset Law, Chapter 4, Article 10, Section 11 of the West Virginia Code as amended. Preliminary performance reviews are intended to assist the Joint Committee on Government Operations in making one of five recommendations. These recommendations include:

- The department, agency or board be terminated as scheduled;
- The department, agency or board be continued and reestablished;
- The department, agency or board be continued and reestablished, but the statutes governing it be amended in specific ways to correct ineffective or discriminatory practices or procedures, burdensome rules and regulations, lack of protection of the public interest, overlapping of jurisdiction with other governmental entities, unwarranted exercise of authority either in law or in fact or any other deficiencies;
- A performance audit be performed on a department, agency or board on which a preliminary review has been completed; or
- The department, agency or board be continued for a period of time not to exceed one year for the purpose of completing a full performance audit.

A preliminary performance review is defined in Chapter 4, Article 10, Section 3 of the West Virginia Code, as amended, is to determine the goals and objectives of a department, agency, or board and to determine the extent to which plan of a department, agency, board has met or is meeting those goals and objectives. The criteria for a preliminary performance review set forth in Chapter 4, Article 10, Section 11 of the West Virginia Code, as amended, enable the determination of the following:

- If the board or agency was created to solve a problem or provide a service;
- If the problem has been solved or the service has been provided;
- The extent to which past board or agency activities and accomplishments, current projects and operations, and planned activities and goals for the future are or have been effective;
- The extent to which there would be significant and discernible adverse effects on the public, health, safety or welfare if the board or agency were abolished;
- Whether or not the board or agency operates in a sound fiscal manner.

This preliminary performance review of the Whitewater Commission began with a planning process. The planning process proceeded with a risk analysis of the Commission's mission in which the possible risks associated with that purpose were defined. The risk analysis included an assessment of the following components:

- A. Mission Identification.
- 1. What is the Commission expected to accomplish?

- 2. Identify customers and their expectations.
- B. Output Risks.
- 1. The Commission may not establish policies that protects the safety of whitewater consumers.
- 2. The Commission may not establish policies that provides for an efficient allocation of whitewater users.
- 3. The Commission may not provide effective oversight of the whitewater study.

The time period covered by the preliminary review included the years 1992 when the Commission was established through July 1, 1995. However, information from previous points in time were incorporated as necessary. Information about the Commission was obtained through: interviews with Law Enforcement personnel of the Division of Natural Resources; a random survey of whitewater outfitters; attending a Commission meeting; an examination of minutes of the Commission's meetings; field observation; an analysis of injury reports; and a review of various documents. The information was used to assist in the identification of risks and the development of an audit program.

Mission of the Whitewater Commission

In 1992, the Legislature created the Whitewater Commission within the Division of Natural Resources (DNR) to replace the Whitewater Advisory Council (WVC 20-2-23a). The Commission was established for the purpose of assisting the director of DNR in regulating, studying, and investigating the whitewater industry to arrive to an efficient market allocation of outfitters that protects public safety and allows for the enjoyment of the natural beauty of the state. The Commission is composed of ten members consisting of the director of the Division of Natural Resources, who serves as chairman; the director of the Division of Parks and Tourism; three representatives of private river users who have no affiliation with any commercial river enterprise; and four persons representing four different licensed commercial whitewater outfitters currently operating within the state. The superintendent of the New River Gorge National Park is a nonvoting member of the Commission.

In pursuit of its mission, the Whitewater Commission designates rivers as "whitewater zones" and grants licenses for the commercial whitewater outfitters operating in these zones. The current whitewater zones include portions of the *New, Gauley, Cheat, Shenandoah*, and *Tygart* Rivers. Outfitters pay an annual license fee of \$500 for each river on which they operate. Alternatively, a commercial whitewater outfitter operating on a river other than those mentioned above must pay an annual license fee of \$500 regardless of the number of rivers on which they operate. Additionally, the Commission administers policies relating to the regulation of the whitewater industry and approves rules promulgated by the director of the Division of Natural Resources with respect to commercial whitewater outfitters. Procedures for hearings on violations of section 20-2-23a of the *West Virginia Code* are established, along with civil penalties.

As required by the West Virginia Code (20-2-23a), the Commission has contracted with

West Virginia University's Division of Forestry to conduct a three year economic study of the *New, Gauley, Cheat, Shenandoah*, and *Tygart* Rivers. Upon completion of this study, currently scheduled for the fall of 1997, the Commission is to formulate and implement an allocation methodology for river carrying capacity. Funding for the study is from a fifty cent per customer user fee collected from outfitters. The fees are deposited into the Whitewater Study and Improvement Fund on the 15th of each month. The fund's estimated expenses for fiscal year 1995 are \$95,000. The budget for the fund includes contractual salaries, transportation, miscellaneous expenses, and a subcontract for environmental resources impact assessment.

Issue Area One: The Whitewater Commission's Regulations Provide for a Safe Industry.

The Commission has adopted a number of rules that establish safeguards for the industry. ² Major safeguards include: commercial whitewater trips must include a trip leader that meets prescribed qualifications for experience; whitewater trip guides are required to have a CPR certification card or the equivalent and an American Red Cross standard first aid card or the equivalent; the minimum raft size is an eight foot, two compartment watercraft; a first aid kit and a 50 foot professional throw line are required equipment on each raft; each passenger is to be provided with a Type V vest-type personal flotation device by the outfitter; and outfitters are randomly inspected by conservation officers. Any violations of these rules can be acted upon by the Commission or the DNR director.

In order to ascertain the effectiveness of the Commission's safety polices, reports on injuries and fatalities were obtained from the Law Enforcement Section of DNR for the years of 1992 through 1994 on the *New, Gauley,* and *Cheat* Rivers. There were no injuries reported in 1994 on the *Shenandoah* and *Tygart* Rivers. The data are presented in TABLES 1 through 3 of Appendix B beginning on page 21 and summarized in Figure A on the next page. After an examination of injury and fatality reports, it was determined that the Commission has established policies that help to make **West Virginia's commercial whitewater rafting a safe activity**. In 1994, 29, or .02% of the 127,469 customers on the *New River* were injured. On the *Gauley River*, 52, or .09% out of the 58,847 customers were injured, and one customer or .01% of 13,974 on the *Cheat River* were injured. Furthermore, an examination of injury reports filed with the DNR showed that most injuries were facial and knee injuries. These injuries occur when the raft enters a rapid and the customers lose control of the paddle either hitting themselves or other customers in the face. Similarly, knee injuries occur when a customer loses their balance in the boat and falls into another customer. Less than half of the injuries in 1994 required medical treatment.

²While the Commission has no authority over river access roads, PERD has determined through fieldwork and direct observation of roads leading to the *New* and *Gauley* Rivers that with the exception of Fayette County Route 82, the river access roads can be safely navigated. Also, the individual outfitters have designed a system of two-way communications to assist in navigating these roads. A letter from the Commissioner of Highways detailing plans for Fayette County Route 82 is located in Appendix A.

Figure A - Percentage of Whitewater Customers Injured (1994)

	Injuries 1994	Customers 1994	% of Customers Injured in "94	Customers Injured Per 1,000 in 1994
New River				
TOTAL	29	127,469	0.02%	< 1
AVERAGE	1	5,542	0.02%	< 1
Gauley River				
TOTAL	52	58,847	0.09%	< 1
AVERAGE	2	2,354	0.06%	<1
Cheat River				
TOTAL	1	13,974	0.01%	<1
AVERAGE	<1	1,165	0.00%	< 1

The Commission is to be commended for establishing a reporting mechanism for industry safety. The Commission requires outfitters to turn in an injury report within fifteen days of the accident to the Law Enforcement Section of the DNR. Reporting allows for an accurate evaluation of the number, type, and causes of injuries on the rivers. In turn, this allows the Commission to act on any changes in the rules that are needed should safety concerns arise. The Whitewater study being conducted by the WVU Division of Forestry will also analyze injuries in the whitewater industry.

Issue Area Two: The Whitewater Commission's Allocations Policies do not Inhibit Industry Growth.

Each licensed outfitter is given a daily allocation of customers on the *New, Gauley,* and *Cheat* Rivers. In 1994, the allocations allow for as many as 3,875 daily customers on the *New River* or 1,414,375 for the total year. The *Gauley River* outfitters are allocated 2,850 customers per day or 1,040,250, and on the *Cheat River* 1,543 customers are allocated totaling 563,195 for the year. Obviously, water levels or inclement weather prevents the use of the rivers year around. As a result the unofficial rafting season is March through September. Therefore, the amount of potential customers on the *New River* is closer to 800,000.³

In order to ascertain whether the various companies in the industry were being burdened by the allocations set by the Commission, we examined the number of customers and the daily allocations for each company rafting the (upper and lower) *New River*, the (upper and lower) *Gauley River*, and the *Cheat River* for 1994. The analysis assumed that if many of the companies were using most of their allocations then the allocations might be a burden on the industry. Alternatively, if the companies were using only small portions of their allocations then the allocations would not inhibit any particular company and therefore the industry from growing.

In TABLE 4 on page 33, each company's allocation was multiplied by 365. Then the percentage of the allocation used for the year was computed. For example, a company that has a *New River* allocation of 150 per day would have an allocation of 54,750 for the year. In all three zones, the total percentage of the allocation used by the companies running the river were below 10%. The range of use on the *New River* was 1.68% to 21.83%. For the *Gauley River* the range was 0.68% to 13.17%. The range of allocation used on the *Cheat River* was 0.34% to 10.01%. Clearly, at these utilization rates the allocations do not appear to inhibit the industry. However, several additional steps were followed before drawing conclusions.

In the next stages of the analysis several limiting assumptions were made. First, in TABLE 5 on page 37 in Appendix B, the number of days by which the daily allocation was multiplied was 214. The restriction assumes that, due to the constraints imposed by the weather and river height, the season available to the industry runs from March to September. Second, in TABLE 6 on page 41 the multiplier of 60 days was used to find the total available allocation. In making this restriction it was assumed that during the period of March through September the weekends provided the best days for the industry to meet their allocations. In both cases, the analysis is limited because the customer data used in the analysis are annual data. Obviously, the analysis would be greatly improved if the observed customer use could be allocated to the actual day that the customer enjoyed their river run. However, immediate availability of the data and computational expense served to limit the collection of a more comprehensive data set. Further, it is our understanding that the three year Whitewater Study currently underway will

³ The WVU study is intended to assist the Commission in coming up with a more accurate and efficient allocation that will reflect the markets needs. The study will also take into account safety, economic impact, environmental impact, customer expectations, customer satisfaction, and crowding.

provide the more comprehensive data set of information for analysis.

TABLE 5 (page 37), in which the analysis is restricted to 214 days or the equivalent to the prime whitewater season, shows that a small portion of the allocation is being used by the industry with only 15.37% of the allocation being used on the New River, 9.26% on the Gauley River and 4.23% on the Cheat River. The ranges are 2.87% to 37.23%, 1.15% to 22.46% and 0.58% to 17.08%, respectively.

In TABLE 6 (page 41), where the analysis is restricted to 60 days or the number of weekend days in the March through September period, the percentages increase. NOTE that values in excess of 100% do not imply that the company has exceeded its allocation, it merely means that it took at least 60 days to reach that level of use. On the *New River*, the industry used 54.83% of the allocation with values ranging from 10.24% to 132.79%. On the *Gauley River* the industry used 34.41% of the available allocation, with values ranging from 4.11% to 80.13%. Finally, *Cheat River* companies used 15.09% of the allocation, with a range of 2.06% to 60.92%. Even when restricting the analysis to 60 days, there appears to be room for many of the companies to continue to grow. Further, the increase shown in TABLE 6 above the annualized and seasonal data tends to confirm the assumption that a good portion of the industry's business is transacted on prime days. Therefore, any future analysis and decisions made about allocations, including the Whitewater study, must account for the strong seasonal behavior in determining fair and efficient allocations.

It should be noted that the Commission has established a variance policy for the industry that helps to maximize the daily allocation. Under the policy, outfitters may work with other outfitters by trading, borrowing or purchasing unused daily allocations. For example, if Company A has a daily allocation of 150 customers, but has scheduled 170 customers, it may purchase 20 slots from Company B, assuming Company B has surplus allocation for 20 customers. Outfitters also have the option of applying to the DNR director for variances that allow the outfitter to exceed their daily allocation by some specified amount. In 1994 the DNR director granted variances to 8 companies for 1,700 customers on the *New, Gauley*, and *Cheat* Rivers. To place variances in perspective, the daily allocation for the 60 days of seasonal weekends is 496,080 customers. By any measure, the variances represent a small proportion of the daily allocation. Therefore, leading to the conclusion that the daily allocation policies of the Commission do not inhibit the industry.

Finally, an attempt was made in the analysis to examine the differential impact of the allocation patterns on larger and smaller firms. Due to the limitations of the data, it is difficult to draw firm conclusions on this issue. However, it appears that while some outfitters are allocated more daily customers, smaller outfitters were able to attract customers at comparable rates and used comparable portions of their daily allocations. Also, the survey of outfitters found that a majority approved of the Commission's license allocation process.

Issue Area Three: The Whitewater Commission Provides Adequate Oversight of the Whitewater Study.

According to the West Virginia Code (20-2-23a), one of the Commission's responsibilities is to contract a study "to determine the physical carrying capacity for the New, Gauley, Cheat, Shenandoah, and Tygart Rivers, and how each relates to the overall economic impact of the state and the safety of the general public." The Whitewater Study being conducted by the WVU Division of Forestry didn't begin until the fall of 1994 pending promulgation of rules. Also, the Whitewater Study and Improvement Fund had to be established along with a fifty cent per customer surcharge, and funds had to be collected to finance the study. Collection of monies began in April of 1994. The WVU Division of Forestry team that received the contract has formulated an expansive technical proposal that will cover all aspects of the whitewater industry. The study will use field observations, interviews with outfitters, and survey research to accomplish their objectives, which is to design a limits of acceptable change process. The steps to complete this process are: to identify issues and concerns specific to the commercial whitewater use of the five study rivers; to identify potential environmental and social conditions for each river segment; to select a set of social and resource indicators of river corridor conditions; and to inventory and evaluate the limits of acceptable change process. Currently, the study is in the first phase, which includes field work on the New River, with field work on the Cheat River just being completed. This field work consists of a customer survey to gather information on the economic impact of commercial whitewater recreation; customer expectations, satisfaction, safety concerns, and crowding perceptions; and perceptions of management problems. Study of the New River will continue throughout the month of August 1995. Finally, the Commission and DNR receives monthly reports on progress of the Study.

After completion of the study, a limits of acceptable change (LAC) will be implemented to try to take advantage of the fullest allocation possible on the rivers with regard to safety, environmental impact and economic benefits. According to the study team, some parts of the study may be completed earlier than others allowing for earlier implementation of the limits of acceptable change process, which would allow the Commission to test the process before implementation on all the river segments. The study team has recommended that they serve in a facilitator/advisor role during this implementation process.

Whitewater Commission Meetings

The Commission only met twice in 1994 and once so far in 1995. By statute (WVC 20-2-23a), the Commission is to meet quarterly. There are two possible reasons for the lack of meetings during this time. First, the DNR Director, who also serves as chairman of the Commission, underwent surgery during the first quarters of 1995. Second, the outfitter's season stretches from March through September. Therefore, they may have a difficult time scheduling meetings during that time period. Many of the outfitters are hands on business owners, and their time is taken running their companies. In any event, the Commission should return to meeting quarterly as required by *Code*. Commission meetings are an excellent sounding board for members and outfitters wishing to discuss the issues concerning the whitewater industry. To ensure that meetings are held in conformity with the statute, the Commission took action in the July 1995 meeting by establishing a permanent schedule of meetings to be held on the third Wednesday of every third month at 1:00 pm. The establishment of firm meeting dates provides Commission members with advance knowledge of the meetings so that they can schedule appropriately.

Conclusion

Even with the Commission not meeting quarterly, the whitewater industry appears to be running smoothly in the state. There are few injuries on the rivers, the market allocation does not appear to be in a critical state. Also, the Whitewater Study is on schedule and is filing monthly reports with the Law Enforcement Section of DNR. The Commission appears to adequately advise the director of DNR, keeping him abreast of the issues facing the whitewater industry. Finally, the Commission's input will be important once the Whitewater Study is completed. The Study will assist the Commission in the further review and promulgating of rules, as well as evaluating and implementing their allocation policy.

Recommendation #1

The Whitewater Commission and the Law Enforcement Section of the Department of Natural Resources should continue collecting and evaluating information on safety, customer allocations, and reports on the Whitewater study. This data will aid any future evaluation of the industry and/or the Commission, and will allow the Commission to have a dependable performance measurement system for the State's whitewater industry.

Recommendation #2

Upon completion, the final report of the Whitewater Study should be forwarded to members of the legislature. The whitewater industry is estimated to bring in approximately 70 million dollars into the West Virginia economy, and the study's results may prove beneficial to the Legislature's evaluation of the industry's needs.

Recommendation #3

PERD recommends that the Whitewater Commission be continued and reestablished for six years allowing time for the recommendations of the Whitewater study to be considered and implemented.

APPENDIX A



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

Gaston Caperton Governor 1900 Kanawha Boulevard East • Building Five • Room 109 Charleston, West Virginia 25305-0430 • 304/558-3505

Charles L. Miller, P.E. Secretary

August 10, 1995

Fred VanKirk, P.E. Commissioner State Highway Engineer

Mr. David Ellis, Research Manager West Virginia Legislature Performance Evaluation and Research Division Building 5, Room 751A 1900 Kanawha Boulevard, East Charleston, West Virginia 25305-0592

Dear Mr. Ellis:

This is in response to your inquiry on the status of Fayette County Route 82 located in the New River Gorge National River area.

The route you mentioned is in consideration for improvement for approximately 6.6 miles from the US 19 intersection near Fayetteville to the proximity of the Canyon Rim Visitor Center near Lansing. This improvement is separated into two projects. The first is replacement of the bridge over the New River, and the second is improvement of Fayette County Route 82. The improvement to Fayette County Route 82 consists of making approximately 2.3 miles (from US 19 to an existing mine access road on the Fayetteville side) a two-lane, two-way roadway, while the remainder toward the visitor's center will become a one-lane roadway.

Currently, both projects are in the environmental assessment process, which should be completed by late fall of this year, when final design plans can begin. These projects are in a very sensitive area, both environmentally and historically, and completion will depend on this assessment and funding. Attached is a copy of *Environmental Assessment, Fayette Station Bridge and Fayette County Route 82*, which has more detail of what is proposed.

Should you need any further information or have any comments, please contact this office.

Very truly yours,

Fred VanKirk

Commissioner

State Highway Engineer

Vallet

FV:Eki

Attachment

APPENDIX B

TABLE 1
INJURIES REPORTED BY THE WEST VIRGINIA WHITEWATER INDUSTRY

	Injuries	Injuries	Injuries	Customers
	1992	1993	1994	1994
New River (Lower & Upper)				
Appalachian Wildwaters	0	0	0	6,088
American Whitewater Tours	3	0	1	8,378
Mountain River Tours	13	20	11	13,274
North American River Runners, Inc.	0	1	0	11,096
Class VI River Runners	6	10	10	11,587
Cantrell Canoes & Rafts	0	0	0	1,401
New and Gauley River Adventures	0	0	0	2,772
Class VI Ltd.	0	0	0	1,158
West Virginia River Adventures	0	0	0	N/A
Rivers II	0	0	0	9,721
Adv. Expeds. dba New River Rafting	0	0	0	2,257
Passages to Adventure	0	0	0	2,021
Alpine Bible Camp	0	0	0	3,046
Rivermen	1	0	1	8,888
Wildwater Expeditions	0	0	0	3,373
WV Whitewater Inc.	0	0	2	922
Whitewater Info	5	13	1	5,426
New River Scenic Whitewater Tours	0	1	0	3,862
Drift-a-bit	1	2	0	3,714
Ace Whitewater	2	4	1	11,951
New/Gauley Expeditions	2	0	0	2,017
Songer Whitewater	2	2	0	4,914
Adventures dba Rivers	1	0	2	9,603
TOTAL	36	53	29	127,469
AVERAGE	2	2	1	5,542

TABLE 1 CON+TINUED				
Gauley River (Lower &				
<u>Upper)</u>				
Mountain River Tours	9	8	18	5,659
Class VI River Runners	8	14	20	5,538
ACE Whitewater	2	1	6	7,003
Appalachian Wildwaters	0	0	0	4,553
Adventures dba Rivers	0	0	0	3,780
Adv. Expeds. dba New River Rafting	0	0	0	304
Class VI Ltd.	0	0	0	2,101
Mountain Streams & Trails	0	0	0	1,129
New River Scenic Whitewater Tours	0	0	0	1,276
Wildwater Expeditions	0	0	0	1,293
Drift -a- bit	0	1	1	1,461
American Whitewater Tours	1	0	0	1,686
WV River Adventures	2	0	0	N/A
Songer Whitewater	3	2	1	2,879
Passages to Adventure	1	0	0	1,309
New/Gauley Expeditions	2	0	1	1,478
North American River Runners, Inc.	22	0	2	5,769
New & Gauley River Adventures	4	0	0	1,557
The Rivermen	3	2	0	4,391
Rivers II	2	0	0	3,792
Whitewater Info	2	2	1	1,093
West Virginia Whitewater	0	0	2	296
Precision Rafting of the Gauley	0	0	0	459
Alpine Bible Camp	0	0	0	41
North American River Rafters	0	0	0	N/A
TOTAL	61	30	52	58,847
AVERAGE	2	1	2	2,354

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TABLE 1 CONTINUED				
<u>Cheat River</u>				
Mountain Streams & Trails	1	0	0	1,708
Appalachian Wildwaters	0	0	0	1,811
Laurel Highlands River Tours	1	0	0	2,172
Cheat River Outfitters	1	1	1	1,159
Whitewater Adventures Inc.	1	1	0	1,199
Cheat Whitewater World	0	0	0	805
Wildwater Expedition	0	0	0	74
North American River Runners	0	0	0	415
American Whitewater Tours,	0	0	0	2,111
Inc.				
Passages to Adventure	1	0	0	173
Precision Rafting of the Gauley	0	0	0	154
Blackwater Outdoor Center	0	0	0	2,193
TOTAL	5	2	1	13,974
AVERAGE	<1	<1	<1	1,165

SOURCE: DNR, Law Enforcement Section

TABLE 2
PERCENTAGE OF CUSTOMERS INJURED WHILE ON A WHITEWATER TRIP
(1994)

	Injuries 1994	Customers 1994	% of Customers Injured in ''94	Customers Injured Per 1,000 in 1994
New River (Lower & Upper)				
Appalachian Wildwaters	0	6,088	0.00%	0
American Whitewater Tours	1	8,378	0.01%	<1
Mountain River Tours	11	13,274	0.08%	<1
North American River Runners, Inc.	0	11,096	0.00%	0
Class VI River Runners	10	11,587	0.09%	<1
Cantrell Canoes & Rafts	0	1,401	0.00%	0
New and Gauley River Adventures	0	2,772	0.00%	0
Class VI Ltd.	0	1,158	0.00%	0
West Virginia River Adventures	0	N/A	0.00%	0
Rivers II	0	9,721	0.00%	0
Adv. Expeds. dba New River Rafting	0	2,257	0.00%	0
Passages to Adventure	0	2,021	0.00%	0
Alpine Bible Camp	0	3,046	0.00%	0
Rivermen	1	8,888	0.01%	<1
Wildwater Expeditions	0	3,373	0.00%	0
WV Whitewater Inc.	2	922	0.22%	2
Whitewater Info	1	5,426	0.02%	<1
New River Scenic Whitewater Tours	0	3,862	0.00%	0
Drift-a-bit	0	3,714	0.00%	0
Ace Whitewater	1	11,951	0.01%	<1
New/Gauley Expeditions	0	2,017	0.00%	0
Songer Whitewater	0	4,914	0.00%	0
Adventures dba Rivers	2	9,603	0.02%	<1
TOTAL	29	127,469	0.02%	<1
AVERAGE	1	5,542	0.02%	<1

TABLE 2 CONTINUED				
Gauley River (Lower & Upper) Mountain River Tours	18	5,659	0.32%	3
Class VI River Runners	20	•		
ACE Whitewater	6	5,538	0.36%	4
		7,003	0.09%	1
Appalachian Wildwaters	0	4,553	0.00%	0
Adventures dba Rivers	0	3,780	0.00%	0
Adv. Expeds. dba New River Rafting	0	304	0.00%	0
Class VI Ltd.	0	2,101	0.00%	0
Mountain Streams & Trails	0	1,129	0.00%	0
New River Scenic Whitewater Tours	0	1,276	0.00%	0
Wildwater Expeditions	0	1,293	0.00%	0
Drift -a- bit	1	1,461	0.07%	1
American Whitewater Tours	0	1,686	0.00%	0
WV River Adventures	0	N/A	0.00%	0
Songer Whitewater	1	2,879	0.03%	0
Passages to Adventure	0	1,309	0.00%	0
New/Gauley Expeditions	1	1,478	0.07%	1
North American River Runners, Inc.	2	5,769	0.03%	<1
New & Gauley River Adventures	0	1,557	0.00%	0
The Rivermen	0	4,391	0.00%	0
Rivers II	0	3,792	0.00%	0
Whitewater Info	1	1,093	0.09%	1
West Virginia Whitewater	2	296	0.68%	7
Precision Rafting of the Gauley	0	459	0.00%	0
Alpine Bible Camp	0	41	0.00%	0
North American River Rafters	0	N/A	N/A	N/A
TOTAL AVERAGE	52 2	58,847 2,354	0.09% 0.06%	<1 <1

Whitewater Commission October 1995

TABLE 2 CONTINUED				
Cheat River				
Mountain Streams & Trails	0	1,708	0.00%	0
Appalachian Wildwaters	0	1,811	0.00%	0
Laurel Highlands River Tours	0	2,172	0.00%	0
Cheat River Outfitters	1	1,159	0.09%	1
Whitewater Adventures Inc.	0	1,199	0.00%	0
Cheat Whitewater World	0	805	0.00%	0
Wildwater Expedition	0	74	0.00%	0
North American River Runners	0	415	0.00%	0
American Whitewater Tours, Inc.	0	2,111	0.00%	0
Passages to Adventure	0	173	0.00%	0
Precision Rafting of the Gauley	0	154	0.00%	0
Blackwater Outdoor Center	0	2,193	0.00%	0
TOTAL	1	13,974	0.01%	<1
AVERAGE	<1	1,165	0.00%	<1

TABLE 3
FATALITIES RELATED TO WEST VIRGINIA WHITEWATER ACTIVITIES (1982-1994)

	Commercial	Non- Commercial	
Year	Fatalities	Fatalities	Total
1982	N/A	1	1
1983	N/A	1	1
1984	N/A	1	1
1985	N/A	1	1
1986	N/A	1	1
1987	N/A	0	0
1988	N/A	1	1
1989	N/A	4	4
1990	N/A	1	1
1991	N/A	1	1
1992	3	N/A	4
1993	1*	N/A	1
1994	1*	N/A	1

NOTES:

N/A indicates that no data was available.

*The commercial fatalities in 1993 and 1994 were victims of apparent heart attacks.

TABLE 4
WEST VIRGINIA WHITEWATER INDUSTRY ANNUAL ALLOCATIONS,
CUSTOMERS AND USAGE (1994)

	Customers	Daily Allocation	Total Annual Allocation	% of Allocation Used
New River (Lower & Upper)				
Appalachian Wildwaters	6,088	273	99,645	6.11%
American Whitewater Tours	8,378	270	98,550	8.50%
Mountain River Tours	13,274	268	97,820	13.57%
North American River Runners, Inc.	11,096	188	68,620	16.17%
Class VI River Runners	11,587	176	64,240	18.04%
Cantrell Canoes & Rafts	1,401	150	54,750	2.56%
New and Gauley River Adventures	2,772	150	54,750	5.06%
Class VI Ltd.	1,158	150	54,750	2.12%
West Virginia River Adventures	N/A	150	54,750	N/A
Rivers II	9,721	150	54,750	17.76%
Adv. Expeds. dba New River Rafting	2,257	150	54,750	4.12%
Passages to Adventure	2,021	150	54,750	3.69%
Alpine Bible Camp	3,046	150	54,750	5.56%
Rivermen	8,888	150	54,750	16.23%
Wildwater Expeditions	3,373	150	54,750	6.16%
WV Whitewater Inc.	922	150	54,750	1.68%
Whitewater Info	5,426	150	54,750	9.91%
New River Scenic Whitewater Tours	3,862	150	54,750	7.05%
Drift-a-bit	3,714	150	54,750	6.78%
Ace Whitewater	11,951	150	54,750	21.83%
New/Gauley Expeditions	2,017	150	54,750	3.68%
Songer Whitewater	4,914	150	54,750	8.98%
Adventures dba Rivers	9,603	150	54,750	17.54%
TOTAL	127,469	3,875	1,414,375	9.01%
AVERAGE	5,542	168	61,495	8.83%

TABLE 4 CONTINUED		· · · · · · · · · · · · · · · · · · ·		
Gauley River (Lower & Upper)				
Mountain River Tours	5,659	170	62,050	9.12%
Class VI River Runners	5,538	156	56,940	9.73%
ACE Whitewater	7,003	150	54,750	12.79%
Appalachian Wildwaters	4,553	124	45,260	10.06%
Adventures dba Rivers	3,780	120	43,800	8.63%
Adv. Expeds. dba New River Rafting	304	120	43,800	0.69%
Class VI Ltd.	2,101	120	43,800	4.80%
Mountain Streams & Trails	1,129	120	43,800	2.58%
New River Scenic Whitewater Tours	1,276	120	43,800	2.91%
Wildwater Expeditions	1,293	120	43,800	2.95%
Drift -a- bit	1,461	120	43,800	3.34%
American Whitewater Tours	1,686	120	43,800	3.85%
WV River Adventures	N/A	120	43,800	N/A
Songer Whitewater	2,879	120	43,800	6.57%
Passages to Adventure	1,309	120	43,800	2.99%
New/Gauley Expeditions	1,478	120	43,800	3.37%
North American River Runners, Inc.	5,769	120	43,800	13.17%
New & Gauley River Adventures	1,557	120	43,800	3.55%
The Rivermen	4,391	120	43,800	10.03%
Rivers II	3,792	120	43,800	8.66%
Whitewater Info	1,093	120	43,800	2.50%
West Virginia Whitewater	296	120	43,800	0.68%
Precision Rafting of the Gauley	459	90	32,850	1.40%
Alpine Bible Camp	41	0	0	0
North American River Rafters	N/A	120	43,800	N/A
TOTAL	58,847	2,850	1,040,250	5.66%
AVERAGE	2,354	114	41,610	4.97%

TABLE 4 CONTINUED				
<u>Cheat River</u>				
Mountain Streams & Trails	1,708	285	104,025	1.64%
Appalachian Wildwaters	1,811	283	103,925	1.74%
Laurel Highlands River Tours	2,172	199	72,635	3.00%
Cheat River Outfitters	1,159	178	64,970	1.78%
Whitewater Adventures Inc.	1,199	170	62,050	1.93%
Cheat Whitewater World	805	128	46,720	1.72%
Wildwater Expedition	74	60	21,900	0.34%
North American River Runners	415	60	21,900	1.89%
American Whitewater Tours, Inc.	2,111	60	21,900	9.64%
Passages to Adventure	173	40	14,600	1.18%
Precision Rafting of the Gauley	154	20	7,300	2.11%
Blackwater Outdoor Center	2,193	60	21,900	10.01%
TOTAL	13,974	1,543	563,195	2.48%
AVERAGE	1,165	129	46,933	3.08%

TABLE 5 WEST VIRGINIA WHITEWATER INDUSTRY SEASONAL ALLOCATIONS, CUSTOMERS AND USAGE (1994)

	Customers	Daily Allocation	Estimated Seasonal Allocation	% of Seasonal Allocation Used
New River (Lower & Upper)		***************************************		
Appalachian Wildwater	6,088	273	58,422	10.42%
American Whitewater Tours	8,378	270	57,780	14.50%
Mountain River Tours	13,274	268	57,352	23.14%
North American River Runners, Inc.	11,096	188	40,232	27.58%
Class VI River Runners	11,587	176	37,664	30.76%
Cantrell Canoes & Rafts	1,401	150	32,100	4.36%
New and Gauley River Adventures	2,772	150	32,100	8.64%
Class VI Ltd.	1,158	150	32,100	3.61%
West Virginia River Adventures	N/A	150	32,100	N/A
Rivers II	9,721	150	32,100	30.28%
Adv. Expeds. dba New River Rafting	2,257	150	32,100	7.03%
Passages to Adventure	2,021	150	32,100	6.30%
Alpine Bible Camp	3,046	150	32,100	9.49%
Rivermen	8,888	150	32,100	27.69%
Wildwater Expeditions	3,373	150	32,100	10.51%
WV Whitewater Inc.	922	150	32,100	2.87%
Whitewater Info	5,426	150	32,100	16.90%
New River Scenic Whitewater Tours	3,862	150	32,100	12.03%
Drift-a-bit	3,714	150	32,100	11.57%
Ace Whitewater	11,951	150	32,100	37.23%
New/Gauley Expeditions	2,017	150	32,100	6.28%
Songer Whitewater	4,914	150	32,100	15.31%
Adventures dba Rivers	9,603	150	32,100	29.92%
TOTAL	127,469	3,875	829,250	15.37%
AVERAGE	5542	168	36,054	15.06%

TABLE 5 CONTINUED	West was a second secon			
Gauley River (Lower & Upper)				
Mountain River Tours	5,659	170	36,380	15.56%
Class VI River Runners	5,538	156	33,384	16.59%
ACE Whitewater	7,003	150	32,100	21.82%
Appalachian Wildwaters	4,553	124	26,536	17.16%
Adventures dba Rivers	3,780	120	25,680	14.72%
Adv. Expeds. dba New River Rafting	304	120	25,680	1.18%
Class VI Ltd.	2,101	120	25,680	8.18%
Mountain Streams & Trails	1,129	120	25,680	4.40%
New River Scenic Whitewater Tours	1,276	120	25,680	4.97%
Wildwater Expeditions	1,293	120	25,680	5.04%
Drift -a- bit	1,461	120	25,680	5.69%
American Whitewater Tours	1,686	120	25,680	6.57%
WV River Adventures	N/A	120	25,680	N/A
Songer Whitewater	2,879	120	25,680	11.21%
Passages to Adventure	1,309	120	25,680	5.10%
New/Gauley Expeditions	1,478	120	25,680	5.76%
North American River Runners, Inc.	5,769	120	25,680	22.46%
New & Gauley River Adventures	1,557	120	25,680	6.06%
The Rivermen	4,391	120	25,680	17.10%
Rivers II	3,792	120	25,680	14.77%
Whitewater Info	1,093	120	25,680	4.26%
West Virginia Whitewater	296	120	25,680	1.15%
Precision Rafting of the Gauley	459	90	19,260	2.38%
Alpine Bible Camp	41	0	0	N/A
North American River Rafters	N/A	120	25,680	N/A
TOTAL	58,847	2,970	635,580	9.26%
AVERAGE	2,354	119	25,423	8.48%

Whitewater Commission October 1995

TABLE 5 CONTINUED		***************************************		
Cheat River				
Mountain Streams & Trails	1,708	285	60,990	2.80%
Appalachian Wildwaters	1,811	283	60,562	2.99%
Laurel Highlands River Tours	2,172	199	42,586	5.10%
Cheat River Outfitters	1,159	178	38,092	3.04%
Whitewater Adventures Inc.	1,199	170	36,380	3.30%
Cheat Whitewater World	805	128	27,392	2.94%
Wildwater Expedition	74	60	12,840	0.58%
North American River Runners	415	60	12,840	3.23%
American Whitewater Tours, Inc.	2,111	60	12,840	16.44%
Passages to Adventure	173	40	8,560	2.02%
Precision Rafting of the Gauley	154	20	4,280	3.60%
Blackwater Outdoor Center	2,193	60	12,840	17.08%
TOTAL	13,974	1,543	330,202	4.23%
AVERAGE	1,165	129	27,517	5.26%

NOTE: TABLE 5 assumes a whitewater season that includes the months of March through September or total 214 days.

TABLE 6
WEST VIRGINIA WHITEWATER INDUSTRY SEASONAL WEEKEND
ALLOCATIONS, CUSTOMERS AND USAGE (1994)

	Customers	Daily Allocation	Estimated Seasonal Weekend Allocation	% of Seasonal Weekend Allocation Used
New River (Lower & Upper)				
Appalachian Wildwaters	6,088	273	16,380	37.17%
American Whitewater Tours	8,378	270	16,200	51.72%
Mountain River Tours	13,274	268	16,080	82.55%
North American River Runners, Inc.	11,096	188	11,280	98.37%
Class VI River Runners	11,587	176	10,560	109.73%
Cantrell Canoes & Rafts	1,401	150	9,000	15.57%
New and Gauley River Adventures	2,772	150	9,000	30.80%
Class VI Ltd.	1,158	150	9,000	12.87%
West Virginia River Adventures	N/A	150	9,000	N/A
Rivers II	9,721	150	9,000	108.01%
Adv. Expeds. dba New River Rafting	2,257	150	9,000	25.08%
Passages to Adventure	2,021	150	9,000	22.46%
Alpine Bible Camp	3,046	150	9,000	33.84%
Rivermen	8,888	150	9,000	98.76%
Wildwater Expeditions	3,373	150	9,000	37.48%
WV Whitewater Inc.	922	150	9,000	10.24%
Whitewater Info	5,426	150	9,000	60.29%
New River Scenic Whitewater Tours	3,862	150	9,000	42.91%
Drift-a-bit	3,714	150	9,000	41.27%
Ace Whitewater	11,951	150	9,000	132.79%
New/Gauley Expeditions	2,017	150	9,000	22.41%
Songer Whitewater	4,914	150	9,000	54.60%
Adventures dba Rivers	9,603	150	9,000	106.70%
TOTAL	127,469	3,875	232,500	54.83%
AVERAGE	5,542	168	10,109	45.73%

TABLE 6 CONTINUED				
Gauley River (Lower & Upper)				
Mountain River Tours	5,659	170	10,200	55.48%
Class VI River Runners	5,538	156	9,360	59.17%
ACE Whitewater	7,003	150	9,000	77.81%
Appalachian Wildwaters	4,553	124	7,440	61.20%
Adventures dba Rivers	3,780	120	7,200	52.50%
Adv. Expeds. dba New River Rafting	304	120	7,200	4.22%
Class VI Ltd.	2,101	120	7,200	29.18%
Mountain Streams & Trails	1,129	120	7,200	15.68%
New River Scenic Whitewater Tours	1,276	120	7,200	17.72%
Wildwater Expeditions	1,293	120	7,200	17.96%
Drift -a- bit	1,461	120	7,200	20.29%
American Whitewater Tours	1,686	120	7,200	23.42%
WV River Adventures	N/A	120	7,200	N/A
Songer Whitewater	2,879	120	7,200	39.99%
Passages to Adventure	1,309	120	7,200	18.18%
New/Gauley Expeditions	1,478	120	7,200	20.53%
North American River Runners, Inc.	5,769	120	7,200	80.13%
New & Gauley River Adventures	1,557	120	7,200	21.63%
The Rivermen	4,391	120	7,200	60.99%
Rivers II	3,792	120	7,200	52.67%
Whitewater Info	1,093	120	7,200	15.18%
West Virginia Whitewater	296	120	7,200	4.11%
Precision Rafting of the Gauley	459	90	5,400	8.50%
Alpine Bible Camp	41	0	0	N/A
North American River Rafters	N/A	120	7,200	N/A
TOTAL	58,847	2,850	171,000	34.41%
AVERAGE	2,354	114	6,840	30.26%

TABLE 6 CONTINUED				
Cheat River				
Mountain Streams & Trails	1,708	285	17,100	9.99%
Appalachian Wildwaters	1,811	283	16,980	10.67%
Laurel Highlands River Tours	2,172	199	11,940	18.19%
Cheat River Outfitters	1,159	178	10,680	10.85%
Whitewater Adventures Inc.	1,199	170	10,200	11.75%
Cheat Whitewater World	805	128	7,680	10.48%
Wildwater Expedition	74	60	3,600	2.06%
North American River Runners	415	60	3,600	11.53%
American Whitewater Tours, Inc.	2,111	60	3,600	58.64%
Passages to Adventure	173	40	2,400	7.21%
Precision Rafting of the Gauley	154	20	1,200	12.83%
Blackwater Outdoor Center	2,193	60	3,600	60.92%
TOTAL	13,974	1,543	92,580	15.09%
AVERAGE	1,165	129	7,715	18.76%

APPENDIX C

5



Director State Capitol Complex Building 3, Room 669 1900 Kanawha Boulevard, E. Charleston, West Virginia 25305-0660 Telephone (304) 558-2754 FAX (304) 558-2768 TDD 558-1439 TDD 1-800-354-6087



GASTON CAPERTON Governor

CHARLES B. FELTON, JR.

Director

Equal Opportunity Employer

Administration (304) 558-3315 FAX (304) 558-2768

Law Enforcement (304) 558-2783 FAX (304) 558-1170 Parks and Recreation (304) 558-2764 FAX (304) 558-0077 Wildlife Resources (304) 558-2771 FAX (304) 558-3147 Conservation Education and Litter Control (304) 558-3370 FAX (304) 558-2768 Public Information (304) 558-3380 FAX (304) 558-2768 Real Estate Management (304) 558-3225 FAX (304) 558-3680 Wonderful West Virginia Magazine (304) 558-9152 FAX (304) 558-2768

August 31, 1995

Dr. Antonio E. Jones, Director West Virginia Legislature Performance Evaluation and Research Division Capitol Complex, Building 5, Room 751-A 1900 Kanawha Boulevard East Charleston, West Virginia 25305-0592

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RESEARCH AND PERFORMANCE
EVALUATION DIVISION

Dear Dr. Jones:

I have received the preliminary review of the audit conducted by your staff on the West Virginia Whitewater Commission for the Joint Committee on Government Operations. Your staff members were very thorough in gathering and evaluating the materials available and are to be commended for their diligence in this project.

As noted in the report, due to the need to promulgate rules and regulations and provide for the collection of study fees, the mandated whitewater study did not commence until late 1994. We plan to request that the legislature extend the study period by two years to permit the completion of the project.

We also plan to continue collecting use data to aid in future evaluations of the industry so that maximum benefits can be obtained from our resources.

The Whitewater Commission has been a valuable asset to the Division of Natural Resources in our efforts to monitor the whitewater industry and provide safe, enjoyable recreational opportunities for West Virginians and the many tourists who visit our state each year.

Thank you for the patience and kindnesses extended by your staff.

Sincerely,

Charles B. Felton, Jr

Director

CBF/wdh

