

2004 Colorado Angler Survey Summary Report

conducted by

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EXECUTIVE SUMMARY

Introduction

The Colorado Division of Wildlife (CDOW) has spent considerable time and effort over the past eight years conducting statewide angler surveys. The primary purpose of these surveys is to determine current angler preferences and opinions related to their fishing experiences, as well as to assess changes in angler use overtime. The objectives of this study were to: 1) obtain current information about 2004 licensed resident anglers, specifically as to their fishing activities, preferences, opinions, and sources they use for fishing information; 2) provide estimates of angler use and angler recreation days; and 3) compare data, when possible, with a previous study conducted in 1997 to see what, if any, changes have occurred. Where appropriate, questions in the 2004 survey duplicated questions in the 1997 survey to allow results comparisons.

A mail-back questionnaire, designed by CDOW staff, was mailed to 8,000 residents who purchased an Annual fishing, Senior fishing or Combination small game and fishing license in Colorado in 2004. The sample, drawn from CDOW's data base of license buyers, was proportionately distributed across the three resident license types. Three mailings occurred between November, 2004 and January, 2005. A total of 3,983 completed questionnaires were returned (789 were undeliverable), for a return rate of 55.2%. The 3,983 questionnaires included 376 Senior license holders (9% of the total); 1,015 Combination license holders (25% of the total), and 2,550 resident Annual license holders (66% of the total).

The survey focused on the following topics: resident anglers' current fishing activities and their preferences, including the kind of fish and type of waters they like to fish; anglers' levels of satisfaction and crowding; their opinions regarding CDOW's job performance, fishing regulations, fishing law enforcement efforts, and fishing information; and where anglers get their information about fishing. When data is available, a comparison between the 1997 study and this study is provided.

Key Results

1. Colorado Angler Characteristics

- Anglers of all license types report that they started fishing at a very early age, with 85% saying they began fishing at 11 years old or younger (during elementary school or earlier). Among all license types, the average starting age is 8 years old.
- On average, Colorado anglers have been fishing in Colorado for 26 years, with holders of Senior licenses reporting they have been fishing in Colorado for an average of 39 years.
- Three-quarters of respondents report that they purchase a Colorado fishing license every year, another 16% do so most years, with only 3% reported that 2004 was their first time.

- When asked how they would rate their expertise as an angler, 51% of anglers in all license types consider themselves to be Intermediate in their skill level, while another 35% say they are Advanced, 9% say they are Beginners, and 4% didn't know.
- A majority (53%) of all license types say fishing is "extremely" or "very" important relative to other outdoor recreation activities they participate in (42% report "moderately" or "slightly" important, with only 2% reporting "not at all" important).
- Anglers of all license types are mixed in their primary reason why they went fishing in Colorado over the past five years, as 22% report it is "to be close to nature or to be outdoors", 19% is "to have fun", 16% is "to be with family and friends, 14% is "to catch fresh fish to eat", and another 14% say they fish primarily "for relaxation".
- One-third of all license types (36%) report that they "frequently" or "sometimes" hike or backpack to get to their fishing site.
- Fifty-six percent of anglers across all license types usually go fishing in Colorado with their friends or family (and they all fish), while another 25% go with friends or family (but not all of them actually fish), and another 15% of anglers usually go alone.

2. Colorado Angler Preferences

- Trout is the preferred kind of fish for Colorado anglers of all license types, with 78% of Annual and Senior license holders and 74% of Combination license holders saying this is the fish they prefer to fish for most often in Colorado. Walleye/saugeye is the second most preferred fish (between 4% to 8% of anglers), followed by bass (2% to 4% of anglers).
- In Colorado, anglers most often fish in lakes, ponds and reservoirs in the mountains (44%); followed by coldwater streams and rivers (28%); coldwater lakes, ponds and reservoirs at lower elevations (13%); and warmwater lakes, ponds and reservoirs (11%).
- A majority of anglers (51%) said they fished in stocked waters, and 21% said they fish in non-stocked waters, but 26% said they did not know if the water was stocked or not.
- A majority of anglers (57%) reported fishing most often from the shore or bank; while one in five (20%) fish in a boat, float tube or raft; and almost the same percentage (19%) say they fish most often by wading.
- When asked what anglers most often fish with in Colorado, 31% said both bait and lures; 24% said artificial flies, lures and bait; 16% said artificial flies only; 14% said both flies and lures; 7% said bait only, and 6% said artificial lures only.
- Approximately one in five anglers (22%) from all license types say they mostly keep what they catch; 40% say they mostly catch and release; and 35% say they sometimes keep, sometimes release what they catch.

3. Colorado Angler Recreational Effort – Trips Taken and Days Fished

- Ninety-three percent of resident anglers who responded to the survey said they fished in Colorado in 2004.
- The average number of fishing trips taken by resident anglers in Colorado in 2004 is 16 trips per year; the average number of days fished was 20.7 days.

4. Colorado Angler Future Fishing Activity

- Ninety-seven percent of anglers who responded to the survey indicated they were planning on buying a Colorado fishing license in 2005.
- Among the 3% (118) of anglers who reported they were not planning on buying a Colorado fishing license in 2005, the top reasons they gave included a personal change in their interest or attitude toward fishing, lack of time, problems with fishing itself (i.e., the number or size of fish, problems finding or getting to places to go fishing, and problems with crowding or other recreationists), and costs associated with fishing.
- From a list of potential actions that could be taken by the CDOW to encourage anglers to fish more, the strongest ideas include: 1) an emphasis on the fish themselves, including the quality or size, health, habitat and “catchability” of the stock; and 2) an emphasis on increasing access to additional places to fish, including on private land (though this idea is much more popular among Advanced anglers and those who fish very frequently). Also, Beginners want more information on where to go fishing, as well as on how to fish.

5. Colorado Angler Opinions

- Anglers of all license types were quite satisfied with their fishing experiences in Colorado in 2004, with 62% saying they were “strongly” or “somewhat” satisfied with their fishing experiences, another 15% saying they were “slightly” satisfied, and just 13% saying they were “slightly,” “somewhat” or “strongly” dissatisfied; 10% reported they were “neutral”.
- In terms of the specific issue of crowding, 35% of anglers of all license types gave a “1” or “2” rating (“not at all crowded”) on a scale of 1 to 7, with 7 being equal to “very crowded”. Another 40% of anglers gave a score of “3” or “4” (“slightly crowded”). Twenty percent gave a rating of “5” or “6” (“moderately crowded”) and just 8% gave a “7” (“very crowded”).
- Among those anglers who gave a “1” or “2” rating (i.e., they feel “not at all crowded”), 20% say the level of crowding they experience leads to increased enjoyment, and 46% say the level of crowding has no effect on their enjoyment. Among those who gave a “3” or “4” rating (i.e., they feel “slightly crowded”), 59% say the level of crowding they experience decreases their enjoyment. Senior license holders are far more likely to say that the level of

crowding they experience has no effect on their enjoyment, as compared to Annual or Combination license holders.

- The majority of anglers (61%) generally feel the CDOW does a good job managing fishery resources to provide angling opportunity, while 10% either “moderately” or “strongly” disagree with this statement, and 28% report being “neutral” or they didn’t know. There is little intensity to this view, with 19% saying they “strongly agree” and 42% saying they “somewhat agree”.
- Among all license types, slightly more anglers agree that Colorado’s fishing regulations are too complex (24%) than disagree (18%). Senior license holders tend to be more likely to agree (31%, as compared to 22% of Annual and 26% of Combination license holders). A majority of anglers of all license types are either neutral or unsure.
- Nearly half of anglers of all license types report that they have been contacted by a CDOW law enforcement officer in the past 5 years (49% of Senior, 53% of Annual, and 59% of Combination license holders). Of those contacted, most anglers report they have been contacted 2 to 5 times in the past 5 years, and a few (17%) have been contacted just one time. Advanced anglers and those who fish very frequently (i.e., more than 50 days in a typical year) report having more contact with CDOW law enforcement officers.
- Ratings of the CDOW’s law enforcement efforts regarding fishing are generally solid, with 22% of combined license types giving an “excellent” or “very good” rating, a third (32%) giving a rating of “good”, and 19% saying “fair” or “poor”; another 23% say they do not know. Beginner anglers and those who only fish 1 to 5 days a year are more likely to say “don’t know,” with positive scores increasing somewhat in terms of the “excellent/very good” score as expertise and frequency of fishing increases.
- Interest in changing current fishing law enforcement efforts is low, with 25% saying there should be an “increase” in such efforts, and 51% saying the effort should “stay the same”; just 3% say efforts should be “decreased.”

6. Colorado Angler Sources of Information

- The top source for obtaining fishing information in Colorado for 78% of resident anglers is word of mouth from friends and/or family members, followed by the CDOW fishing regulations brochure (53%), and local newspapers (52%). About one-third of anglers say they rely on other CDOW publications and the CDOW website, and magazines or books about fishing. Approximately one in five anglers get their fishing information by watching cable or satellite TV programs, attending sportsmens’ exhibitions, perusing other websites, or talking with CDOW employees. Local television, local radio, videos and/or DVDs, and public meetings or living presentations were listed as a source of information by 12% or less of the anglers.

- When asked to rate the quality of the fishing regulations brochure, resident anglers rated it positively, with 67% saying “excellent”, “very good”, or “good”, and 12% giving a negative rating of “fair” or “poor”. Sixteen percent of anglers were not familiar with the brochure.
- On the specific question of whether the Colorado *Fishing Regulations and Property Brochure* was “easy to understand,” anglers are generally positive, with 38% agreeing it is easy to understand, and 7% disagreeing; a majority (53%) are either neutral, or say they don’t know.
- Fewer resident anglers are familiar with the Colorado fishing map than the brochure; 37% of anglers report not being familiar with the map, as compared to 16% saying they are not familiar with the fishing regulations brochure. For those familiar with the map, scores tend to be positive: 21% say it is “excellent” or “very good,” another 25% say it is “good,” and 12% give the map negative ratings of either “fair” or “poor”.
- One-half of resident anglers (52%) are not familiar with the CDOW’s internet site. The remaining respondents gave the website positive scores, with 19% reporting “excellent” or “very good”, 17% as “good”, and 5% as “fair” or “poor”.
- Two out of five resident anglers say they access the Internet daily, though just 16% of Senior license holders do so (and 41% of them reported never getting online).
- The majority of resident anglers (54%) report being unfamiliar with *Colorado Outdoor* magazine. For those who are familiar with it, they rate the quality of it as “excellent” or “very good”, 17% as “good”, and 6% as “fair” or “poor”.

2004 COLORADO ANGLER SURVEY SUMMARY REPORT

INTRODUCTION

The Colorado Division of Wildlife (CDOW) has spent considerable time and effort over the past eight years conducting statewide angler surveys. The primary purpose of these surveys is to determine current angler preferences and opinions related to their fishing experiences, as well as to assess changes in angler use overtime. The objectives of this study were to: 1) obtain current information about 2004 licensed resident anglers, specifically as to their fishing activities, preferences, opinions, and sources they use for fishing information; 2) provide estimates of angler use and angler recreation days; and 3) compare data, when possible, with a previous study conducted in 1997 (McCollum, et al., 1999*) to see what, if any, changes have occurred.

METHODS

Sample: The target population for this study consisted of Colorado resident anglers who purchased either an Annual or Senior fishing license, or a Combination small game and fishing license in 2004. A systematic sample (every nth) was drawn from the CDOW's Colorado Outdoor Recreation Information System (CORIS) data base of license purchases. The sample was proportionately distributed across Senior fishing, Annual resident fishing, and resident Combination license holders.

Mailing: The first mailing to 8,000 resident anglers was conducted in November 2004, and included a cover letter and survey questionnaire. Two follow-up mailings occurred; a reminder postcard was sent in December 2004, and another cover letter and survey questionnaire was mailed in January 2005 (see Appendix B for the cover letters and postcard; see Appendix C for the survey instrument).

Of the 8,000 originally mailed surveys, 789 were returned as undeliverable, and a total of 3,983 completed questionnaires were returned to the CDOW for processing. This represents a usable return rate of 55.2%. The 3,983 questionnaires included 376 Senior license holders (9 % of the total); 1,015 Combination license holders (25 % of the total), and 2,550 resident Annual license holders (66 % of the total).

Similar to the last statewide angler survey conducted in 1997 (McCollum, et al., 1999*), the 2004 responses contain a small over-sampling of Senior and Combination license holders in relation to the number of questionnaires sent out. As a result, simply adding up the three sub-samples does not result in a representative sample of all resident Annual license holders. If one is interested in expanding the results to the exact representation of all resident Annual

*McCollum, D.W., M.A. Haefele, R.S. Rosenberger. 1999. The Willingness of Colorado Anglers to Incur Increased License Fees (Project Report No. 39). Project Report for the Colorado Division of Wildlife. Fort Collins, CO: Colorado State University, Human Dimensions in Natural Resources Unit.

license holders, the percentages shown in the results section for the various survey questions should be multiplied by the actual proportions of license holders in the population (i.e., 76% Annual, 5% Senior and 19% Combination). A weight was not used on the data set because doing so would have disallowed comparisons with the 1997 data set.

Questionnaire: The mail-back questionnaire was designed by CDOW staff. Questions used in both the 1997 study and this study were identical, unless noted.

With respect to Colorado resident anglers' fishing activities and preferences, anglers were asked when they first went fishing; how many years they have been fishing in Colorado; how often they buy a Colorado fishing license; how many days they fish in Colorado in a typical year; how they would rate their expertise as an angler (beginner, intermediate or advanced); how important fishing is to them (compared to other outdoor recreation activities); what their primary reason has been for fishing in Colorado over the past five years; whether they hike or backpack to their fishing site in Colorado; and who they usually go with to fish. The survey was also designed to understand resident anglers' preferences toward the kind of fish and type of waters they like to fish; whether the water they most often fish in Colorado is stocked; how they like to fish (i.e., shore/bank, pier/dock, boat/raft, wading); what they prefer to use (i.e., bait, lures, flies), and whether they prefer to catch or release fish.

Questions to obtain anglers' levels of satisfaction and crowding were included, as well as what anglers think about CDOW's overall job performance in managing fishery resources, the complexity of its fishing regulations, and fishing law enforcement efforts by the CDOW. Also included were questions designed to determine where anglers get their information about fishing, and how they would rate the quality of some of CDOW's information products, specifically the fishing regulations brochure, the Colorado Fishing map, its' internet site, and *Colorado Outdoors* magazine.

Reporting of data: The results of the survey are presented below in tables for each question asked of anglers. Percents are shown for all license types combined (Annual, Senior and Combination), and separately for each license type. New for data reporting are additional tables that show percents based on the following three sub-groups: gender; self-described angler expertise (Beginner, Intermediate, or Advanced); and frequency of fishing (number of days fishing in a typical year). This allows a reader to interpret results for potential marketing or other analyses. A narrative highlighting the results for each question follows the table. When data is available, a comparison between the 1997 study and this study is provided (this occurs only for questions which were worded identically on the two surveys). While most of the questions provided the respondent with response categories; it is noted if the question was asked in an open-ended format. Percents in the tables may not total 100% due to rounding. Unfortunately, a design flaw in Part B. resulted in a reduced level of responses for Questions # B-7, 8, 9, and 10, and did not allow for an analysis of the number of anglers who went ice-fishing in 2004. Reduced levels of response are noted in the individual table headers.

Management Implications: Management implications of data reported are shown following the Table(s) presentations for each of the six sections in the report.

RESULTS – Part 1. Colorado Angler Characteristics

Results in Tables 1 through 9 provide a general description of Colorado resident anglers. Specific characteristics include: their age when they first went fishing; how many years they have been fishing in Colorado; how often they buy a Colorado fishing license; how many days they fish in Colorado in a typical year; how they would rate their expertise as an angler (beginner, intermediate or advanced); how important fishing is to them (compared to other outdoor recreation activities); what their primary reason has been for fishing in Colorado over the past five years; whether they hike or backpack to their fishing site in Colorado; and who they usually go with to fish.

Table 1: How old were you when you first went fishing?*

	Combined Types	License Types		
		Annual	Senior	Combination
Preschool (Under 5)	24%	23%	8%	31%
Elementary (5-11)	61%	62	60	61
Jr High (12-13)	4%	4	8	3
High School (14-17)	2%	2	6	1
Adult (18+)	7%	7	14	2
Mean	8.16	8.20	12.41	6.53
Median	6.00	6.00	8.00	5.00
Std. Dev.	8.08	7.70	12.98	5.82

*question was asked in an open-ended format

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Preschool	22%	24%	11%	21%	32%	18%	21%	23%	29%	30%
Elementary	53	63	61	63	60	64	62	63	58	58
Jr High	4	4	6	4	3	5	4	4	4	3
High School	4	2	3	3	1	3	3	3	2	1
Adult	14	5	18	7	3	8	8	6	5	5

Highlights:

- The majority of anglers in all three license types report that they first went fishing at a young age, typically between 5 to 11. Combination holders tend to be more likely to say they started under 5 years old than others (31%, as compared to 23% of Annual and 8% of Senior license holders). Senior license holders are more likely to start fishing as adults (14%, as compared to 7% of Annual and 2% of Combination license holders).
- The average starting age for Annual license holders is 8 years, 12 years for Senior license holders, or 6.5 for Combination license holders.
- Anglers' likelihood of having started fishing under the age of 5 rises directly with the number of days a person now fishes, with 18% of those who say they only fish 1 to 5 days, and 30% of those who fish more than 25 days, saying as such.

- Anglers who self-describe their ability as Advanced are significantly more likely to have started fishing when they were under 5 years old (32%, as compared to 11% Beginners and 21% Intermediates).
- Female anglers are more likely to start fishing as adults (14%, as compared to 5% of male anglers).

1997-2004 Comparison: Compared to the responses in 1997 to this question, there has been little change.

Table 2: How many years have you been fishing in Colorado?*

	Combined Types	License Types		
		Annual	Senior	Combination
1 year or less	3%	4%	2%	1%
2 to 5 years	10%	13	6	5
6 to 10 years	9%	10	6	6
11 to 15 years	8%	9	3	7
16 to 20 years	10%	11	5	10
21 to 25 years	10%	10	5	11
26 to 35 years	20%	19	15	25
36 to 50 years	21%	19	24	27
More than 50 years	7%	3	31	7
Mean	26.19	23.1	38.67	29.42
Median	25	22	40.00	30.00
Std. Dev.	16.36	15.15	20.37	14.76

*question was asked in an open-ended format

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1-5 years	18%	11%	48%	11%	7%	22%	13%	10%	11%	9%
6-15 years	20	17	17	18	15	16	17	18	16	16
16-25 years	20	20	15	21	20	18	19	20	20	23
26 to 35 years	17	21	12	21	23	17	19	21	24	20
36+ years	24	30	6	27	35	25	31	29	27	27

Highlights:

- Resident anglers have been fishing in Colorado, on average, for 26 years. Annual license holders have, on average, been fishing in Colorado for 23 years, while those who have a Senior license have been doing so for 39 years, and Combination license holders for 29 years.
- About half of self-described Beginners have been fishing for over 5 years, and 48% of those who say they are Intermediate have been fishing for over 25 years.
- Half of male anglers (51%) and 41% of female anglers have been fishing in Colorado for over 25 years.

1997-2004 Comparison: Compared to 1997 anglers, there is a gradual movement toward greater percentages in the larger year categories, but the changes are very slight and not statistically significant.

Table 3: How often do you buy a Colorado fishing license?

	Combined Types	License Types		
		Annual	Senior	Combination
Every year	74%	70%	77%	85%
Most years	16%	18	14	11
About half the time	2%	2	3	1
Every few years	4%	5	3	1
Almost never	1%	1	2	0
2004 was the first time	3%	4	2	1

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beq (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Every year	65%	77%	44%	70%	90%	48%	69%	82%	88%	85%
Most years	20	15	19	21	8	26	21	13	9	7
Every few + Almost never + first time	14	8	36	9	2	26	9	5	3	3

Highlights:

- The vast majority of respondents (74%) reported that they purchase a Colorado fishing license every year, 16% reported they do so most years, with only 3% saying 2004 was their first time purchasing a fishing license. Combination license holders are more likely to say they buy a license every year (85%, as compared to 70% of Annual and 77% of Senior license holders).
- Those who fish 11 days or more are much more likely to purchase a license every year than those who fish 6 to 10 days, who are in turn much more likely to do so than those who fish 1 to 5 days.
- There is a significant increase in purchasing a license “every year” versus “most years” by expertise level, with 70% of Intermediate and 90% of Advanced anglers saying they buy a fishing license every year.

1997-2004 Comparison: There are some changes in angler behavior when the responses are compared to 1997. The “every year” respondents dropped from 82% in 1997 to 74% in 2004. Correspondingly, the “most years” response showed an increase from 10.6% in 1997 to 16% in 2004. This represents a slight decline in the avidity of resident license buyers.

Table 4: In a typical year, about how many days do you fish in Colorado?*

	Combined Types	License Types		
		Annual	Senior	Combination
1-2 days	3%	3%	3%	4%
3-5	15%	15	13	14
6-10	23%	24	28	22
11-15	12%	12	12	12
16-25	17%	18	14	17
26-35	12%	11	12	14
36-50	7%	7	6	7
51-75	4%	4	4	5
More than 75 days	6%	6	7	5
Mean	24.10	24.49	22.59	23.67
Median	15.00	15.00	14	15.00
Std. Dev.	30.43	32.17	29.80	25.88

*question was asked in an open-ended format

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1-5 days	23%	17%	42%	22%	5%	100%	-	-	-	-
6-10 days	27	23	29	28	15	-	100%	-	-	-
11-25 days	28	29	18	28	32	-	-	100%	-	-
26 to 50 days	13	20	7	14	29	-	-	-	100%	-
51+ days	10	10	4	7	17	-	-	-	-	100%

Highlights:

- On average, license holders of all types go fishing in Colorado 24.1 days in a typical year, with Annual holders at 24.5 days, Combination holders at 23.7 days, and Seniors at 22.6 days.
- Self-described Beginners are most likely to fish just 1 to 5 days in a typical year (42%), though 58% of them report fishing more frequently than that. Half of Intermediate anglers fish less than 10 days a year, while just 20% of Advanced anglers fish 10 days or less a year.

Note: These estimates will vary slightly from the actual 2004 effort reported by anglers that is described in Section 3, Tables 19 and 20 of this report.

Table 5: How would you rate your expertise as an angler?

	Combined Types	License Types		
		Annual	Senior	Combination
Beginner	9%	12%	5%	4%
Intermediate	51%	51	54	48
Advanced	35%	32	35	44
Don't know	4%	4	6	3

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Beginner	21%	6%	100%	-	-	21%	11%	5%	3%	3%
Intermediate	56	49	-	100%	-	63	62	50	38	32
Advanced	15	40	-	-	100%	10	23	39	56	56

Highlights:

- When asked how they would rate their expertise as an angler, 51% of anglers in all license types say they are Intermediate in their skill level (35% were Advanced, 9% were Beginners, and 4% didn't know). Combination license holders are more likely to describe themselves as Advanced (44%, as compared to 32% of Annual and 35% of Senior license holders).
- One in five female anglers say they are a Beginner versus 6% of male anglers.
- Those who fish more than 25 days per year are much more likely to say they are Advanced, while those who fish less than 25 days per year describe themselves as Intermediate in their skill level.

Table 6: Compared to other outdoor recreation activities that you participate in, how important is fishing to you?

	Combined Types	License Types		
		Annual	Senior	Combination
Extremely important	21%	22%	19%	21%
Very important	32%	31	33	36
Moderately important	30%	30	31	29
Slightly important	12%	13	12	11
Not at all important	2%	3	4	2

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Extremely important	16%	23%	3%	13%	39%	3%	9%	23%	36%	44%
Very	28	33	11	32	39	16	30	39	39	34
Moderately	35	29	33	38	19	36	41	30	21	16
Slightly + Not at all	19	14	51	16	3	43	17	8	2	5

Highlights:

- A majority (53%) of all license types say fishing is “extremely” or “very” important relative to other outdoor recreation activities they participate in.
- Those who consider themselves Advanced anglers are three times as likely to say fishing is “extremely” important to them than those who are Intermediate (39% versus 13%). Intermediate anglers are twice as likely as Advanced anglers to say fishing is “moderately” important to them (38% versus 19%).

1997-2004 Comparison: There is little change in this response when compared to 1997.

Table 7: What is the primary reason you went fishing in Colorado over the past five years?

	Combined Types	License Types		
		Annual	Senior	Combination
To be close to nature or to be outdoors	22%	22%	21%	21%
To have fun	19%	19	14	22
To be with family and friends	16%	17	11	14
To catch fresh fish to eat	14%	11	20	16
For relaxation	14%	13	19	12
To catch large fish	4%	4	2	4
Other	6%	6	5	6

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Be close to nature or to be outdoors	19%	22%	21%	22%	22%	22%	26%	22%	19%	16%
Have fun	15	20	14	20	20	19	21	20	19	15
Be with family and friends	26	13	35	17	9	27	20	12	10	8
Catch fresh fish to eat	13	13	11	13	15	13	10	15	13	19
For relaxation	12	14	9	15	13	9	12	16	15	14
Catch large fish	2	4	0	3	7	2	2	4	7	7

Highlights:

- Anglers across the three license types are mixed in the primary reason they cite for going fishing in Colorado over the last five years. The top reason given is “to be close to nature and to be outdoors” (22%), followed by “to have fun” (19%), and “to be with family and friends” (16%).
- Advanced anglers are twice as likely to say “to catch large fish” (though it is only 7% of the Advanced angler sample). Beginners are twice as likely as Intermediate anglers, who are twice as likely as Advanced anglers, to say their primary reason for fishing over the past five years is “to be with family and friends.”

Table 8: How often do you hike or backpack to get to your fishing site in Colorado?

	Combined Types	License Types		
		Annual	Senior	Combination
Frequently	12%	12%	5%	13%
Sometimes	24%	26	14	24
Once in a while	38%	37	36	43
Never	25%	25	44	20

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Frequently	10%	12%	9%	10%	16%	9%	11%	11%	14%	14%
Sometimes	21	25	15	22	31	17	22	26	28	31
Once in a while	36	39	32	40	38	36	38	41	41	33
Never	33	23	44	28	15	37	29	22	17	19

Highlights:

- One-third of all license types (36%) report that they “frequently” or “sometimes” hike or backpack to get to their fishing site; just 19% of Senior license holders report as such.

Table 9: Who do you usually go fishing with in Colorado?

	Combined Types	License Types		
		Annual	Senior	Combination
By myself	15%	14%	16%	18%
With friends or family, and we all fish	56%	58	52	53
With friends or family, but not all of them actually fish	25%	25	27	26
Other	3%	3	4	2

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
By myself	4%	18%	8%	14%	19%	10%	14%	16%	19%	17%
Friends/family, all fish	70	52	58	56	57	55	54	57	58	56
Friends/family, not all fish	22	26	31	27	21	33	29	25	19	17

Highlights:

- Over half (56%) of all angler types report that they usually go fishing in Colorado with friends or family who all fish. One-quarter say they go with friends or family who do not all actually fish, and 15% of all license types say they go alone.
- Just 4% of female anglers report usually going by themselves, as compared to 18% of male anglers.

Management Implications

Within the CDOW, and across the country there has been concern over the steady decline in the number of anglers as a percent of the population, and a lack of increased numbers of participants. Table 1 is telling, in that 75% of anglers on average started fishing before the age of eleven, which highlights the importance of early exposure of youth to fishing. This has long been a goal of Colorado's angler education programs and should continue to be so.

Education of adults to encourage them to take up fishing is also an area that should be considered for increase effort by the Division. When the responses for the primary reasons for going fishing (Table 5), and who you fish with (Table 9), are considered with adults in mind, efforts to increase the fun, family-related, and social aspects of fishing can be a springboard to reaching out to the specific market segments of adults with families, men, women, or specific ethnic groups. Special programs such as Ladies Let's Go Fishing, Women Afield, Take a Family Fishing and Discover Fly Fishing should be continued and expanded.

Colorado anglers are avid anglers and fishing clearly is of importance to them when outdoor activities are considered. The objectives of Colorado's sport fishery management programs should be to continue to provide the diversity of opportunities that encourages fishing participation.

RESULTS – Part 2. Colorado Angler Preferences

Tables 10 through 15 describe Colorado resident anglers' preferences toward the kind of fish and type of waters they like to fish; whether the water they most often fish in Colorado is stocked; how they like to fish (i.e., shore/bank, pier/dock, boat/raft, wading); what they prefer to use (i.e., bait, lures, flies), and whether they prefer to catch or release fish.

Table 10: What one kind of fish do you prefer to fish for most often in Colorado?

	Combined Types	License Types		
		Annual	Senior	Combination
Trout	76%	78%	78%	74%
Walleye/Saugeye	5%	4	5	8
Bass	4%	5	2	4
Catfish	2%	2	2	2
Wiper/White Bass	1%	1	1	1
Salmon (Kokanee)	2%	2	5	2
Crappie	1%	1	2	1
Northern Pike/Tiger Muskie	1%	1	0	1
Other	3%	3	2	3

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+* (10%)
Trout	76%	77%	78%	77%	77%	82%	81%	76%	72%	68%
Bass, Catfish, Wiper/White Bass, Salmon (Kokanee), Walleye/Saugeye, Crappie, Northern Pike/Tiger Muskie	17	16	15	18	17	14	16	19	23	17

*(Among those who fish 51 or more days a year, 8% skipped this question, and 4% said "other")

Highlights:

- Seventy-six percent of all license types report that they prefer to fish for trout. The second most preferred fish is walleye/saugeye (between 4% and 8%); the third most preferred fish is bass (between 4% and 5%).
- Those who fish more frequently are slightly less likely to say that they fish primarily for trout (but still with very strong majorities preferring to fish for trout).

1997-2004 Comparison: There is a stronger preference for trout in 2004 than was recorded in 1997. The popularity of trout as the preferred fish has risen from 71% in 1997 to 76% in 2004. Walleye/saugeye remain the second most preferred species with little change from 1997, 5.6% and 5% respectively. Bass species are the third most preferred, improving slightly from 3.7% in 1997 to 4% in 2004.

Table 11: What one type of water do you most often fish in Colorado?

	Combined Types	License Types		
		Annual	Senior	Combination
Coldwater lakes, ponds, and reservoirs in the mountains	44%	44%	45%	43%
Coldwater streams and rivers	28%	29	23	30
Coldwater lakes, ponds, and reservoirs at lower elevations	13%	13	16	10
Warmwater lakes, ponds, and reservoirs	11%	10	12	13
Private waters	1%	1	2	1
Commercial lakes or ponds	1%	1	1	0

Category Subgroup	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Mountain lakes	51%	42%	47%	47%	39%	46%	47%	43%	40%	39%
Coldwater streams	19	31	21	25	36	29	28	30	30	22
Low elevation lakes	15	12	17	14	9	13	12	11	14	15
Warmwater lakes	9	11	11	10	12	9	9	12	12	13

Highlights:

- A plurality of anglers of all license types (44%) say they most often fish in mountain lakes, ponds and reservoirs; followed by coldwater streams and rivers (28%); lakes, ponds, and reservoirs at lower elevations (13%); and warmwater lakes, ponds, and reservoirs (11%).
- Senior license holders are slightly less than Annual and Combination license holders to fish in coldwater streams and rivers (23%, as compared to 29% and 30%, respectively); and slightly higher to fish in coldwater lakes, ponds, and reservoirs at lower elevations (16%, as compared to 13% and 10%, respectively).
- Advanced anglers are much more likely to fish in coldwater streams and rivers (36%, as compared to 21% of Beginners and 25% of Intermediates). Beginner anglers are more likely to fish most often in low elevation lakes, as compared to Intermediate and Advanced anglers (17%, as compared to 14% and 9%, respectively).
- Male anglers are more likely to fish in coldwater streams and rivers than female anglers (31% versus 19%).

1997-2004 Comparison: There may be a drop in warm waters as a preferred location to fish among all license types when 2004 is compared to 1997; 11% of anglers most often fished in warmwater lakes in 2004 compared to 16% in 2004. (Note: the response categories were slightly different in the two questionnaires).

Table 12: Is the water you most often fish in Colorado stocked?

	Combined Types	License Types		
		Annual	Senior	Combination
Yes, it is stocked	51%	61%	49%	52%
No, it is not stocked	21%	20	15	25
Don't know if it is stocked	26%	27	36	24

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Yes, it is stocked	52%	50%	43%	54%	49%	47%	53%	52%	50%	50%
No, it is not stocked	18	22	18	17	28	21	19	22	22	22
Don't know if stocked	28	25	38	27	20	32	27	24	25	21

Highlights:

- A majority of anglers (51%) of all license types report they fish in stocked water.
- Annual license holders are most likely to report fishing in stocked water (61%, as compared to 49% of Seniors and 52% of Combination license holders).
- Senior license holders are most likely to be unsure as to whether the water they most often fish in Colorado is stocked (36%, as compared to 27% of Annual and 24% of Combination license holders).
- Advanced anglers are more likely to fish in water that has not been stocked (28%, as compared to 18% of Beginners and 17% of Intermediates).

1997-2004 Comparison: Among senior license holders there is an increase in the percentage who do not know if the water they most often fish in Colorado is stocked (36% in 2004 as compared to 24.6% in 1997).

Table 13: In Colorado, do you most often fish...?

	Combined Types	License Types		
		Annual	Senior	Combination
From the shore or bank	57%	59%	59%	49%
In a boat, float tube, or raft	20%	18	23	25
By wading	19%	19	14	20
From a pier or dock/other/left blank	4%	3	4	5

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
From the shore or bank	68%	54%	72%	62%	44%	67%	61%	52%	49%	53%
In a boat, float tube, or raft	18	20	14	19	24	14	16	24	23	20
By wading	10	21	11	15	27	15	19	20	22	18

Highlights:

- A majority of anglers (57%) of all license types fish most often from the shore or bank; while one in five report they fish in a boat, float tube or raft; and nearly the same percent (19%) say they fish by wading.
- Combination license holders are more likely to fish most often by wading or using a boat, float tube or raft (45%, as compared to 37% of Annual and 37% of Senior license holders).
- A majority of Advanced anglers (51%) report wading or using a boat, float tube or raft most often, as compared to 25% of Beginners and 34% of Intermediate anglers).
- Those who fish 10 days or less are more likely to fish most often from the shore or bank; while those who fish more than 10 days are more likely to be evenly split between fishing from the shore or bank, and fishing by wading or using a boat, float tube or raft.

1997-2004 Comparison: There has been little change in these categories since the 1997 Angler Survey.

Table 14: In Colorado, do you most often fish with...?

	Combined Types	License Types		
		Annual	Senior	Combination
Both bait and lures	31%	33%	31%	28%
Artificial flies, lures and bait	24%	24	23	26
Artificial flies only	16%	17	12	15
Both flies and lures	14%	11	14	21
Bait only	7%	8	11	3
Artificial lures only	6%	6	6	6

Category Subgroup	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Both bait and lures	39%	29%	40%	36%	22%	35%	34%	30%	29%	29%
Artificial flies, lures, bait	21	25	19	23	27	19	23	24	27	32
Artificial flies only	10	18	13	12	24	13	15	16	19	16

Highlights:

- Anglers of all license types are mixed in what they use most often to fish, with 31% saying “both bait and lures;” 24% saying “artificial flies, lures and bait;” and about the same percent saying “artificial flies only” (16%) and “both flies and lures” (14%).
- Only 3% of Combination license holders say they most often fish with “bait only”, and are more likely to use “both flies and lures” than Annual and Senior license holders (21%, as compared to 11% and 14%, respectively).
- The more frequently someone fishes, the less likely they are to use “both bait and lures,” and the more likely they are to use “artificial flies, lures and bait.”

1997-2004 Comparison: Changes occurred in the following categories:

“Artificial flies, lures and bait” dropped from 31% in 1997 to 24% in 2004.

“Artificial flies only” rose from 13% in 1997 to 16% in 2004.

“Both flies and lures” and “artificial lures only” each rose about 2% from 1997 to 2004.

Table 15: Do you keep the fish you catch in Colorado or release them?

	Combined Types	License Types		
		Annual	Senior	Combination
I mostly catch and release	40%	42%	27%	41%
Sometimes I keep them, sometimes I release them	35%	35	38	36
I mostly keep what I catch	22%	21	34	21

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Catch and release	31%	43%	40%	37%	47%	37%	39%	41%	44%	41%
Keep some release some	39	34	34	36	35	32	35	37	36	38
Keep what I catch	29	21	25	26	17	27	25	21	19	18

Highlights:

- Approximately one in five anglers (22%) from all license types say they mostly keep what they catch; 40% say they mostly catch and release; and 35% say they sometimes keep, sometimes release what they catch.
- Senior license types are more likely to keep what they catch (34%, as compared to 21% each of Annual and Combination license holders).
- Advanced anglers are more likely to catch and release the fish they catch (47%, as compared to 40% Beginner and 37% Intermediate anglers).
- The more days an angler fishes, the less likely they are to keep their catch.

1997-2004 Comparison: There has been a fairly strong movement toward more catch and release fishing since 1997. In 1997, 33% reported they mostly catch and release fish, in 2004 that number rose to 40%. Conversely, the percentage of anglers that sometimes keep and sometimes release their catch dropped from 41.5% in 1997 to 35% in 2004. The number of anglers reporting they mostly keep their catch also dropped slightly from 24% in 1997 to 22% in 2004.

Management Implications

Anglers as a whole seem to have shifted more to trout as the preferred species, away from use of bait, trending towards more catch and release fishing, and away from low elevation warm waters. This may be reflective of the loss of opportunity at lower elevations as a result of the 2001-2004 drought years, and increased levels of coldwater fish production and stocking since the late 1990's.

The Division's current fisheries management efforts provide a diversity of recreational angling opportunity. The future objectives of the sportfish management programs need to reflect the diverse nature of Colorado anglers as indicated by the data. No big changes in management programs, however, seem to be suggested by this data.

RESULTS – Part 3. Colorado Angler Recreational Effort – Trips Taken and Days Fished

Tables 16 through 20 report the number of fishing trips resident anglers have taken and how many days they fished in Colorado in 2004. Respondents were also asked to list the three sites in Colorado they fished the most and how many days they fished at that particular location. In addition, anglers were asked about their ice fishing activities.

In previous statewide angler surveys conducted by the CDOW, trying to get an accurate reporting on the number of trips taken and days fished from respondents has been somewhat problematic. This was due to end-of-the-year survey timing, where surveys were usually not sent out until several months after the close of the fishing year, raising concerns about respondents' recall. In this 2004 survey, the questionnaire was mailed prior to the end of the year (in November 2004), and anglers were asked how many trips they had taken and how many days they had fished in the year so far, and how many trips and days they thought they would fish between the time they completed the questionnaire and the end of 2004 (the question was worded, "between now and December 31, 2004").

The CDOW uses the number of trips anglers take to go fishing and the number of days they fish for multiple purposes. The water-by-water trip information is coded into a county-by-county matrix, which then describes summed trips on a county-by-county basis (see Figure 1).

This information is, in turn, used to estimate the gross economic impact of fishing in Colorado on a county-by-county basis (BBC Research & Consulting, 2004*). The number of days fished is determined by extrapolating the number of reported days by respondent license type across the total number on licenses sold minus the estimated percentage of those that don't fish.. This method has been used on past surveys, and while not entirely accurate, does allow long-term trend comparison over time. The days fished data, is also used conjunction with the "where people fish" information from Table 11 to estimate total number of user days per water type. This level of information is useful to managers to allow them to assess how well their management activities are succeeding in providing recreational angling opportunity.

There was no supplemental non-respondent inquiry conducted in association with this survey.

*BBC Research & Consulting. 2004. The Economic Impacts of Hunting, Fishing and Watching Wildlife in Colorado. Prepared for the Colorado Division of Wildlife. Denver, CO.

Table 16: Did you actually fish in Colorado in 2004?

	Combined Types	License Types		
		Annual	Senior	Combination
Yes	93%	95%	91%	90%
No	6%	5	8	9

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Yes	93%	93%	92%	92%	96%	83%	93%	95%	97%	97%

Highlights:

- Not everyone who buys a license fishes. Over the years, the percentage of license buyers who say they do not fish has usually been in the 5 to 10% range. The 2004 anglers fall into the normal range, with 6% of combined license types reporting they did not fish in Colorado in 2004.

Table 17: Between now and December 31, 2004, do you plan on fishing in Colorado?

	Combined Types	License Types		
		Annual	Senior	Combination
Yes	39%	38%	25%	46%
No	61%	62	75	54

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Yes	27%	42%	22%	32%	54%	13%	23%	42%	57%	69%

Highlights:

- Among all anglers, 2 in 5 said they planned to fish again in Colorado “now and December 31, 2004”.
- Nearly half (46%) of Combination license holders said at that time that they planned to fish again in 2004.

Table 18: In total, about how many fishing trips did you take in Colorado in 2004? *

	Combined Types	License Types		
		Annual	Senior	Combination
1-2 trips	16%	16%	17%	14%
3-5	28%	28	31	24
6-10	23%	23	21	24
11-15	9%	9	9	10
16-25	11%	10	10	12
26-35	6%	5	6	8
36-50	4%	4	3	4
51-75	2%	2	2	3
76 or more trips	2%	2	1	2
Mean	14.00	13.93	12.49	14.73
Median	7.00	6.00	6.00	8.00
Std. Dev.	22.28	22.81	23.27	20.38

*question was asked in an open-ended format

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)*	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1-2 trips	20%	15%	34%	19%	7%	54%	19%	6%	2%	5%
3-5	33	26	33	34	17	43	47	24	9	7
6-10	23	23	20	23	24	3	32	32	22	9
11-25	14	22	12	16	28	0	1	36	31	25
26+ trips	10	14	4	8	24	0	0	0	35	55

Highlights:

- On average, anglers in all three license types reported that they went on 14 fishing trips in Colorado in 2004 (as of the date they answered the questionnaire).
- Anglers who consider themselves to be Advanced reported far higher numbers of trips taken than Intermediates or Beginners (24% took 26 or more fishing, as compared to 8% and 4%, respectively).

Table 18a: Between now and December 31, 2004, approximately how many fishing trips will you take in Colorado? (n=1,645)

	Combined Types	License Types		
		Annual	Senior	Combination
Zero	11%	10	28	9
1-2	48%	49	42	47
3-5	29%	29	20	32
6-10	8%	9	6	8
11-25	3%	2	5	4
26 or more	1%	1	0	0
Mean	3.3	3.3	2.7	3.5
Median	2.0	2.0	2.0	2.0
Std. Dev.	4.9	5.3	3.8	4.1

Category	Gender		Expertise			Typical # of Days				
	Female (14%)	Male (83%)	Beg (5%)	Int (42%)	Adv (48%)	1-5 (7%)	6-10 (16%)	11-25 (31%)	26-50 (27%)	51+ (17%)
Zero	17%	10%	16%	14%	8%	31%	20%	10%	7%	6%
1-2	49	48	67	54	41	62	66	61	36	22
3-5	25	30	15	25	35	6	12	25	44	40
6 or more	8	12	2	7	16	1	2	4	12	32

- Among all anglers, 2 in 5 (39%) said they planned to fish again in Colorado between the Fall of 2004 (when they filled out the survey questions) and December 31, 2004. Nearly half of Combination license holders said at that time that they planned to fish again in 2004. This number of trips translates to approximately 4 additional fishing days for the last 2 months in 2004.

1997-2004 Comparison: In 1997, the estimated number of trips by anglers per year was slightly more than 16 trips per angler (16.12 trips). With the addition of the estimated number of trips anglers would take during the last 2 months in 2004, the total number of trips per angler in 2004 would be slightly less than the 1997 estimates (16 trips).

County-by-County Trip distribution

Figure 1. shows the number of trips distributed by water location in counties when anglers were asked the question (PART B. #7.):

*So that we can get an idea of how fishing is spread across the state, please tell us about **the three sites in Colorado** that you fished the most and about how many days you fished there in 2004. Some rivers and streams are long, so please tell us the nearest town so we can have better idea where you fished (for example, the South Platte River in the Denver area and the South Platte River in Deckers would be two different sites).*

Figure 1. County Distribution of Fishing Trips

NUMBER OF TRIPS BY COUNTY

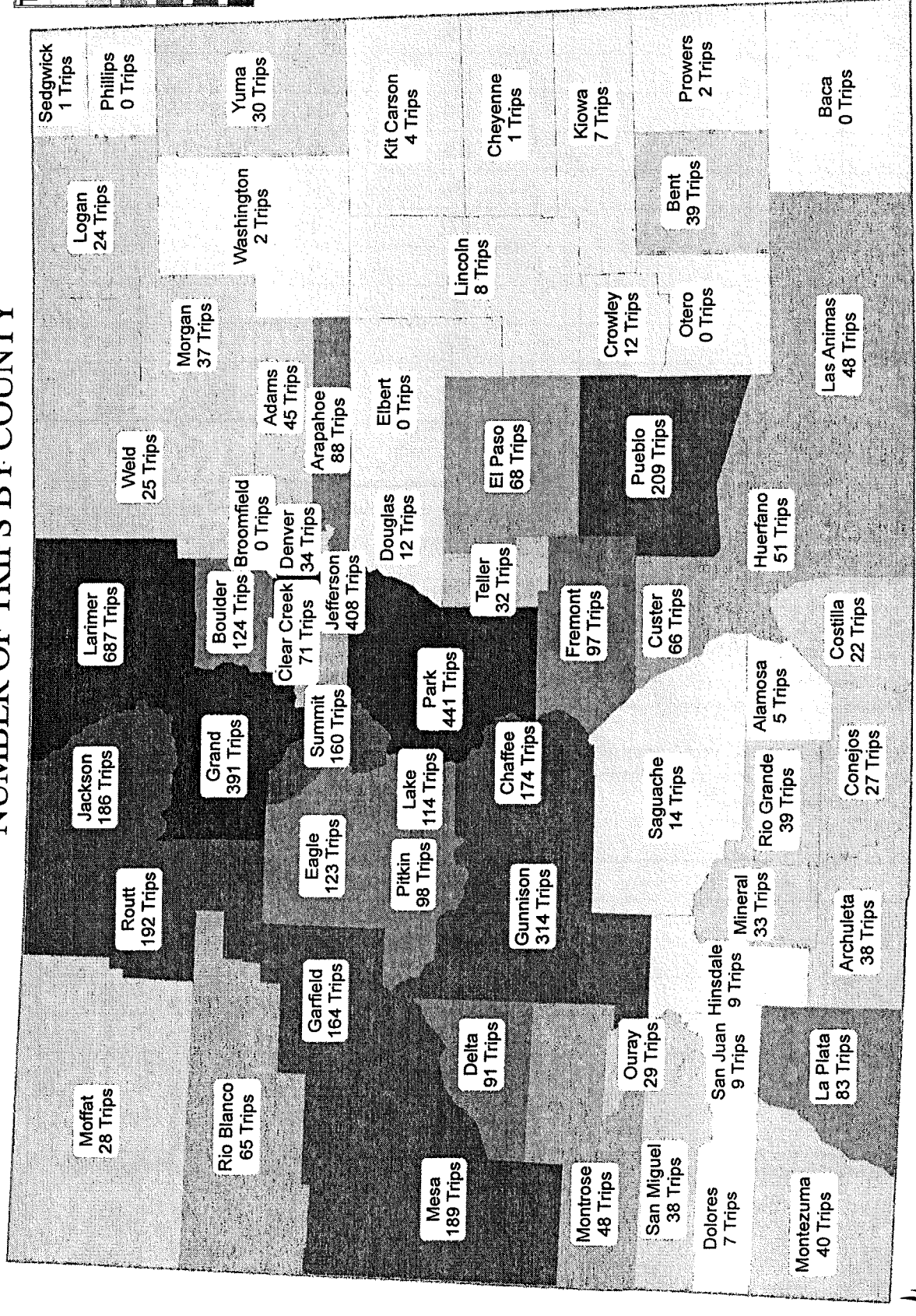
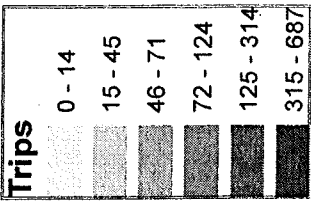


Table 19: In total, about how many days did you fish in CO in 2004? *

	Combined Types	License Types		
		Annual	Senior	Combination
1-2 days	11%	11%	13%	11%
3-5	19%	19	20	16
6-10	23%	24	26	20
11-15	11%	11	10	11
16-25	15%	14	11	17
26-35	9%	8	9	11
36-50	6%	6	5	6
51-75	3%	3	3	4
76 or more days	3%	3	3	4
Mean	19.12	18.89	18.13	20.11
Median	10.00	10.00	10.00	12.00
Std. Dev.	26.75	26.97	29.04	25.22

*question was asked in an open-ended format

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1-2 days	13%	10%	26%	13%	5%	41%	11%	3%	3%	4%
3-5	22	18	30	23	9	51	28	9	3	6
6-10	28	22	25	27	17	7	55	23	8	8
11 - 25	23	26	13	24	32	1	6	62	23	10
26+ days	13	23	6	14	37	0	0	3	64	73

Table 20: Between now and December 31, 2004, approximately how many fishing days will you take in Colorado?*
(N = 1,645)*

	Combined Types	License Types		
		Annual	Senior	Combination
0 days	11%	9%	29%	9%
1-2	38%	40	30	35
3-5	32%	32	27	34
6-10	14%	14	9	15
11-25	4%	3	5	5
26 or more days	1%	1	1	1
Mean	4.2	4.1	3.4	4.6
Median	3.0	3.0	2.0	3.0
Std. Dev.	6.2	6.2	4.8	6.3

*question was asked only to anglers who planned on fishing "between now and December 31, 2004"

Highlights:

- Colorado anglers of all license types reported fishing for an average of 19.12 days.
- Similar patterns emerge as with the number of trips, with those who consider themselves to be Advanced reporting far higher numbers of fishing days than Intermediates and Beginners (37% reported fishing 26 days or more, as compared to 14% and 6% respectively).

Days fished "between now and December 31":

- For those anglers who intended to fish again in 2004 after filling out the survey, they reported that they planned to fish for an average of 4.2 more days in the remaining portion of 2004.
- Based on the 39% of anglers who said they would fish 4.2 additional days in 2004, a new mean number of days was calculated to be 20.7 days for the respondent population:

Management Implications

Estimate of total days fished

Using a formula that takes into account the number of license types that did not fish (Table 16.) and the number of anglers who said they would fish a certain number of days after they completed the survey (Table 19). The total estimate for days fished in 2004 by licensed resident anglers in 2004 is 7,903,364 days.

The Division has attempted over time to measure recreation days on the statewide scale through a variety of survey instruments. There is an inherent built-in problem with the methodology that creates an error in the estimates. As time progresses past the end of an angling year, the factor known as "recall bias" enters into any estimates of year-long recreation by anglers, i.e. the longer the time-span between the end of fishing and the start of surveys, the larger the bias. In the 2004 Angler survey, we attempted to reduce the bias by beginning the survey in November of the fishing year, rather than the February after, which historically has taken place. The comparisons always include the caveat that estimates have to be considered biased towards being overly descriptive of the number of days actually fished.

The 1997 estimate for angler days (McCollum, et al. 1999) was 9,112,392 days for 432,509 resident anglers. The 2004 estimate of 7,903,300 angler days is for 405,782 resident anglers. The decrease in days is not totally unexpected, due to the loss of combination and resident annual license buyers since the drought impact of 2002. There has been a loss of 35,000 anglers in those categories, which fish 20 and 19 days respectively on the average.

Hopefully, our continuing management strategies of increasing the quality of fishery populations, and seeking new angling access will help boost both the number of anglers and the number of days fished in the future.

Using estimates of the number of days fished by non-resident license types from previous surveys, an additional 673,300 days can be added to the resident days fishing, for a combined total estimate of 8,576,600 fishing days in 2004.

RESULTS – Part 4. Colorado Angler Future Fishing Activity

Tables 21, 22 and 23 look at Colorado resident anglers' future fishing activity by asking: 1) whether they plan on buying a Colorado fishing license in 2005; 2) what are the reasons why they were not planning on buying a 2005 license (only asked of those who answered "no" to the first question); and 3) what are some actions anglers think the CDOW could do that would encourage them and other anglers to fish more.

	Combined Types	License Types		
		Annual	Senior	Combination
Yes	97%	97%	97%	98%
No	3	3	3	2

Note: Only respondents who said they **were not planning** on buying a Colorado fishing license in 2005 were then asked to select the reasons listed below that applied to them.

	Combined Types
(N = 118)*	
Change in interest or attitude toward fishing	25%
Number or size of fish	23%
Lack of time	21%
Problems with finding or getting to places to go fishing	21%
Problems with crowding or other recreationists	19%
Costs associated with fishing	12%
Whirling disease or the health of fish populations	11%
Problems with fishing regulations	8%
Don't have anybody to go fishing with	6%
Problems with the facilities (boat ramps, etc.)	5%
Problems with fishing law enforcement	5%
Age or health makes it difficult	4%
Weather conditions, drought or forest fire	3%
Poor conditions due to pollution or trash	3%
Difficulty finding a convenient place or location to buy a license	0%
Other	41%
Don't know	2%

Highlights:

- Those anglers who responded to the survey are overwhelmingly likely to purchase a Colorado fishing license again in 2005; 97% say yes, with consistently high scores across all license types and subgroups.
- Among the 118 anglers who reported they were not planning on buying a Colorado fishing license in 2005, the top reasons they gave included a personal change in their interest or attitude toward fishing, lack of time, problems with fishing itself (i.e., the number or size of fish, problems finding or getting to places to go fishing, and problems with crowding or other recreationists), and costs associated with fishing.

Table 23: Please indicate from the list below the most important things that the Colorado Division of Wildlife could do with its fisheries program that would encourage you and other anglers to fish more. (select all that apply)

(N = 1,471)*

	Combined Types	License Types		
		Annual	Senior	Combination
Improve the quality or size of fish	50%	51%	40%	51%
Increase access to fishing locations on private land	48%	46	41	53
Improve fish habitat	44%	45	35	44
Increase access to fishing locations on public land	43%	64	6	29
Stock more catchable trout (10")	35%	38	45	26
Provide better information on where to fish	32%	35	32	25
Add additional waters to fly and lure fishing	30%	31	25	29
Improve the health of fish	29%	31	19	26
Make the bag limits higher	21%	20	39	17
Improve facilities at fishing access points	18%	20	24	14
Offer different types of licenses (family licenses, 10-day, etc.)	17%	19	11	14
Open fly and lure only waters to bait fishing	16%	17	19	14
Make the bag limits lower	16%	16	7	17
Put more information about fishing opportunities on the internet	16%	18	8	12
Provide better information on how to fish	12%	14	10	8
Simplify fishing regulations	7%	6	9	7
There is nothing that the Colorado Division of Wildlife can do	1%	1	0	2
Other	18%	18	11	19
Don't know	4	4	7	4

*Note: Due to a questionnaire design flaw, only 37% (1,471) of the total number of respondents (3,983) answered this question (anglers who responded that they did not plan on fishing in Colorado between “now and December 31, 2004” were erroneously asked to skip this question).

Category Subgroup	Gender		Expertise			Typical # of Days				
	Female (13%)	Male (85%)	Beg (5%)	Int (41%)	Adv (50%)	1-5 (6%)	6-10 (14%)	11-25 (32%)	26-50 (28%)	51+ (19%)
Improve fish quality/size	46%	51%	43%	50%	52%	47%	41%	47%	53%	59%
Increase private land access	39	49	31	41	55	30	36	49	54	52
Improve fish habitat	39	45	38	38	51	27	40	42	49	48
Increase public land access	41	43	31	42	44	30	35	41	46	50
Stock more catchable trout	44	33	43	38	31	43	33	30	34	39
Provide better info on where to fish	35	31	38	38	27	27	32	30	31	38
Add additional waters to fly/lure fishing	19	32	14	21	40	14	22	29	37	30
Improve the health of fish	34	29	22	27	32	27	26	28	29	33
Make bag limits higher	21	20	11	22	20	14	17	16	20	31
Improve facilities at access spots	26	17	15	20	17	5	16	15	22	22
Offer different types of licenses	26	16	15	19	16	16	17	16	15	23
Open fly/lure waters to bait	21	15	16	17	16	16	14	14	17	19
Make bag limits lower	9	17	1	9	23	6	7	15	20	18
Put more info on opportunities on the Internet	14	16	18	18	14	18	16	16	14	18
Provide better info on how to fish	14	12	30	17	8	12	12	12	13	12
Simplify regulations	7	7	3	6	8	10	7	6	4	12
There is nothing the CDOW could do	2	1	0	2	1	1	0	1	1	1
Other	17	18	11	14	22	8	16	16	20	23
Don't know	6	4	9	5	2	6	5	4	3	4

Highlights:

- From a list of potential actions that could be taken by the CDOW to encourage anglers to fish more, resident anglers' responses focused on two areas: improving the fish and their habitat, and giving anglers increased access to the fish.
- Improving fish and habitat: Improving the quality or size of fish was chosen by 50% of anglers as a step to be taken, improving fish habitat by 44%, stocking more catchable trout by 35%, and improving the health of the fish by 29% of anglers.
- Increasing fishing access: Increasing access to fishing locations on private land was chosen by 48% of anglers as a step to be taken, increasing access to fishing locations on public land (43%), providing better information about where to fish (32%), and adding additional waters to fly and lure fishing (30%).
- Making the bag limits higher or lower were less popular ideas. The one exception is that Senior license holders place a higher emphasis on making bag limits higher.

Management Implications

In filling out the questionnaire, some respondents after completing question Part B. No.4, did not fill out questions 5 through 10 of Part B. This was an error of design in the questionnaire that was not identified in the pre-test.

Therefore, though the total number of survey respondents was 3,983, only 1,471 anglers completed the questions relating to completed questions 5 through 10 in Part B.

Of the top 5 reasons for not buying a license listed above, 3 are beyond the control of the Division of Wildlife, but the second and fourth most commonly cited reasons are capable of being addressed by the Division. The number and size of fish are continually being addressed by the Division as we address size of fish through manipulation of populations through regulation and seeking to maximize the productivity of our waters and provide suitable hatchery products for stocking.

This multiple response question about what the CDOW could do to encourage fishing was asked only of those anglers who reported that they were planning to fish again in 2005 (the question was supposed to be asked of all anglers). Thus, the sample tends to be considerably skewed toward Advanced and more frequent anglers. For that reason, it is critical to evaluate responses among subgroups to identify the strongest strategies for encouraging Beginners and Intermediates, and lower-frequency anglers, to increase their number of trips and days fishing in Colorado in the future.

- Beginners want to see more information not just on where to fish, but also on how to fish.
- Intermediate anglers, women, and those who currently fish fewer than 11 days in a typical year, are much less concerned with increased access to fishing locations on private land.
- Those who fish more than 5 days in a typical year are more concerned with habitat (those who fish less than 5 days are possibly not as educated on such issues).

These questions, although not responded to by all of the anglers in the survey, none-the-less provide some insight into what the Division should consider in the future for insuring the fishing opportunities we do provide take into consideration the expressed desire for improved quality of numbers and size of fish, improving fish habitat, increasing access, providing better information on where to fish.

Part 5. Colorado Angler Opinions

Tables 24 through 33 explore Colorado resident anglers' opinions on a variety of topics, including their levels of satisfaction and crowding with their fishing experiences, and what they think about the CDOW's overall job performance in managing fishery resources, the complexity of its fishing regulations, and fishing law enforcement efforts by the CDOW.

Table 24: Overall, how satisfied or dissatisfied were you with your fishing experiences in Colorado in 2004?

(N = 2,211)*

	Combined Types	License Types		
		Annual	Senior	Combination
Strongly satisfied	24%	27%	21%	19%
Somewhat satisfied	38%	37	38	40
Slightly satisfied	15%	13	15	17
Neutral	10%	9	14	12
Slightly dissatisfied	7%	8	7	6
Somewhat dissatisfied	4%	4	3	3
Strongly dissatisfied	2%	2	1	2

*Note: Due to a questionnaire design flaw, only 56% (2,211) of the total number of respondents (3,983) answered this question (anglers who responded that they did not plan on fishing in Colorado between "now and December 31, 2004" were erroneously asked to skip this question).

Subgroup	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beq (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Strongly satisfied	32%	23%	24%	23%	26%	20%	21%	22%	27%	30%
Somewhat satisfied	30	39	30	38	39	32	36	41	39	35
Slightly satisfied/neutral	25	25	32	27	21	35	30	23	22	21
Slightly, somewhat, and strongly dissatisfied	14	13	15	12	13	12	12	14	11	15

Highlights:

- A majority of holders of all license types (77%) reported they were "strongly" to "slightly" satisfied with their fishing experiences in Colorado in 2004. Just 6% said they were "strongly" or "somewhat" dissatisfied.
- Those who fish more than 25 days in a typical year are more likely to be "strongly" satisfied than those who fish 25 days or less.
- There are no significant differences between Intermediate and Advanced anglers' satisfaction with their experiences.

1997-2004 Comparison: No comparison can accurately be made due to a questionnaire design flaw (see above note).

Table 25: In the area you fish most in Colorado, how crowded do you feel while you are fishing?

	Combined Types	License Types		
		Annual	Senior	Combination
1 – Not at all crowded	15%	15%	21%	13%
2	20%	20	19	20
3 – Slightly crowded	29%	28	35	30
4	11%	12	8	10
5 – Moderately crowded	15%	15	13	16
6	5%	5	2	6
7 – Very crowded	3%	4	1	3

Category Subgroup	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beq (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 or 2	36%	35%	46%	37%	30%	43%	38%	33%	29%	31%
3	28	29	25	30	29	26	31	30	29	28
4 or 5	26	26	19	25	29	23	24	28	30	26
6 or 7	8	8	7	6	11	6	6	8	11	11

Highlights:

- While 35% of Colorado anglers rated their fishing spot as “not at all crowded” (a 1 or 2 rating), 40% said it is “slightly crowded” (a 3 or 4 rating), and 23% said it is “moderately” or “very” crowded (a 5, 6 or 7 rating).
- Advanced anglers and those who fish very frequently (over 10 days in a typical year) tend to feel more crowded in the area they fish most in Colorado.

1997-2004 Comparison: Among combined license types, anglers in 2004 reported feeling less crowded in the areas they fish most in Colorado compared to anglers in 1997 (23% of anglers in 2004 reported feeling “moderately” or “very” crowded versus 35% of anglers in 1997).

Table 26: Does the specific level of crowding you circled (while you are fishing in Colorado) have any effect on the enjoyment of your fishing trips?

	Combined Types	License Types		
		Annual	Senior	Combination
Increases my enjoyment	8%	9%	7%	7%
Has no effect on my enjoyment	35%	33	52	35
Decreases my enjoyment	54%	56	38	55

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Increases enjoyment	8%	8%	10%	8%	7%	12%	7%	7%	7%	7%
No effect	34	35	39	37	32	32	36	35	37	38
Decreases enjoyment	54	54	48	52	59	52	55	56	55	50

Highlights:

- Among combined license types, 54% of anglers reported that the amount of crowding they experience (even if it is not severe) tends to decrease their enjoyment (54%). Senior license holders are far more likely to say the level of crowding they experience has “no effect” on their enjoyment than Annual and Combination license holders (52%, as compared to 33% and 35%, respectively).

1997-2004 Comparison: Compared to 1997, less anglers in 2004 reported that the level of crowding they experienced decreased their enjoyment (54% in 2004 compared to 61% in 1997).

Table 27: Please tell us if you agree or disagree with the following statement: "The Colorado Division of Wildlife does a good job in managing fishery resources to provide angling opportunity".

	Combined Types	License Types		
		Annual	Senior	Combination
Strongly agree	19%	19%	19%	18%
Moderately agree	42%	42	42	41
Neutral	21%	21	16	22
Moderately disagree	7%	7	7	7
Strongly disagree	3%	2	2	4
Don't know	7%	7	10	5

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Strongly agree	17%	19%	18%	18%	21%	17%	18%	19%	21%	18%
Moderately agree	41	42	30	45	43	36	44	45	43	36
Neutral/Don't know	34	26	46	29	19	38	28	25	21	27
Moderately and strongly disagree	6	10	5	6	16	6	8	10	13	15

Highlights:

- Overall, the CDOW gets positive ratings on the job that it does "managing fishery resources to provide angling opportunity", with 61% of combined license types giving the CDOW a positive rating. However, just 19% say they "strongly agree" and 42% report the softer "moderately agree". Ratings are consistent across holders of all license types.
- Beginner and infrequent (1 to 5 days a year) anglers register higher "neutral" or "don't know" responses.
- Advanced anglers are more likely to disagree with the statement (16%) than Beginners (5%) and Intermediate anglers (6%); though overall positive ratings from Advanced anglers are in line with the other 2 groups, indicating that when presented with a choice they are opting more for the negative choice than the neutral position.

1997-2004 Comparison: While this question was worded slightly differently in 1997 ("The Division of Wildlife does a good job managing sport fishing in Colorado"), it is possible to compare with caution. Compared to 1997, those in the neutral category decreased by 6%, while those responding "moderately agree" rose 6%, and those rating "strongly agree" rose by 2% from 1997. These are encouraging numbers considering the challenges faced by fishery managers in the past three years leading to the survey.

Note: The following 3 questions were asked to provide some insight to regulations during the 2005 fishing regulation development process. The data was summarized and mentioned during the process for Wildlife Commission consideration. The data are presented as part of the overall survey questioning.

Table 28: Please tell us if you agree or disagree with the following statement: "Colorado's fishing regulations are too complex."

	Combined Types	License Types		
		Annual	Senior	Combination
Strongly agree	5%	5	7	6
Moderately agree	19%	17	24	20
Neutral	49%	49	47	51
Moderately disagree	9%	10	6	9
Strongly disagree	9%	10	4	8
Don't know	7%	8	11	4

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beq (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Strongly and Moderately agree	21%	24%	13%	25%	25%	23%	25%	24%	22%	25%
Neutral and Don't know	59	56	72	57	51	62	57	55	53	55
Strongly and Moderately disagree	18	19	14	17	23	14	17	20	23	19

Highlights:

- Among all license types, slightly more anglers agree that Colorado's fishing regulations are too complex (24%) than disagree (18%). Senior license holders tend to be more likely to agree (31%, as compared to 22% of Annual and 26% of Combination license holders). A majority of anglers of all license types are either neutral or unsure.
- Advanced anglers tend to be more split with 25% agreeing and 23% disagreeing that Colorado's fishing regulations are too complex.

Table 29: In Colorado, the current statewide daily bag limit for trout is 4. Is the current daily bag limit for trout at the right number?

	Comb Types	License Types		
		Annual	Senior	Combination
Strongly agree	17%	19	15	15
Moderately agree	26%	25	24	27
Neutral	27%	26	25	30
Moderately disagree	13%	13	17	13
Strongly disagree	10%	11	11	10
Don't know	5%	5	6	4

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Agree	45%	43%	44%	45%	41%	41%	46%	45%	42%	37%
Neutral/Don't know	32	31	45	33	25	43	33	28	28	24
Disagree	22	25	9	20	32	15	19	25	28	36

Highlights:

- Anglers, including those who are neutral, of all license types lean toward agreeing that the current daily bag limit is set at the right number, but with under a majority (70%). But this is not a particularly solid view, with just 17% “strongly” agreeing on this issue.
- Advanced anglers, and those who fish more than 50 days a year, are significantly more likely to disagree (disagreement increases with expertise and with number of days).

Table 30: “The Colorado Division of Wildlife should add restrictive regulations to additional waters (such as fly and lure only fishing, size limits, etc.)”

	Comb Types	License Types		
		Annual	Senior	Combination
Strongly agree	11%	11	6	13
Moderately agree	11%	11	11	13
Neutral	41%	40	47	41
Moderately disagree	12%	12	9	13
Strongly disagree	14%	14	13	13
Don't know	8%	10	10	5

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Agree	13%	24%	10%	17%	35%	15%	19%	24%	28%	26%
Neutral/Don't know	55	49	64	54	39	57	51	47	48	42
Disagree	30	24	23	27	23	25	27	27	21	28

- Anglers lean toward disagreeing with more restrictive regulations on additional waters, with 26% disagreeing and 22% agreeing. Most say they are neutral on this issue.
 - Advanced anglers tend to agree, while Intermediate anglers tend to be more unsure or disagree. In terms of frequency, the only pattern is that those who fish more often are more likely to have an opinion, but there is no consistency to what that opinion will be.

Table 31: Within the past 5 years, while fishing in Colorado, approximately how many times have you been contacted by a Division of Wildlife law enforcement officer?*

	Combined Types	License Types		
		Annual	Senior	Combination
Never	46%	47%	51%	41%
1 time	17%	18	16	16
2-5 times	26%	24	24	30
6-10 times	5%	4	3	7
11-19 times	1%	1	1	1
20 or more times	2%	2	1	2

*question was asked in an open-ended format

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beq (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Never	53%	45%	65%	50%	36%	66%	54%	41%	35%	30%
1-5	38	44	28	40	50	30	40	49	47	44
6 or more	6	8	1	7	10	1	3	6	13	21

Highlights:

- Nearly half of holders of all license types report that they have never been contacted by a CDOW law enforcement officer. Combination license types are more likely to have been contacted, with just 41% saying “never”, compared to 47% of Annual and 51% of Senior license holders.
- Of those contacted, 26% reported being contacted 2 to 5 times by a CDOW law enforcement officer in the past five years.
- Advanced anglers have had much more contact with CDOW law enforcement officers than Beginner or Intermediate anglers (60%, as compared to 29% and 47%, respectively). Frequent anglers have also had more contact, in particular those who fish more than 50 days a year (with 21% saying they have been contacted 6 or more times).

Table 32: How would you rate the Colorado Division of Wildlife's law enforcement efforts regarding fishing?

	Combined Types	License Types		
		Annual	Senior	Combination
Excellent	6%	6%	5%	6%
Very good	16%	16	20	17
Good	32%	32	26	35
Fair	13%	16	14	13
Poor	6%	6	4	7
Don't know	23%	23	26	19

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Excellent and Very good	22%	22%	14%	22%	25%	16%	20%	23%	27%	28%
Good	32	32	28	34	30	28	32	36	31	32
Fair and Poor										
Don't know	26	22	43	24	15	41	27	17	13	12

Highlights:

- Ratings of the CDOW's law enforcement efforts regarding fishing are generally solid, with 22% of combined license types giving an "excellent" or "very good" rating, a third (32%) giving a rating of "good", and 19% saying "fair" or "poor"; another 23% say they do not know.
- Beginner anglers and those who only fish 1 to 5 days a year are more likely to say "don't know," with positive scores increasing somewhat in terms of the "excellent/very good" score as expertise and frequency of fishing increases.

Table 33: In your opinion, should fishing law enforcement efforts by the Colorado Division of Wildlife ...?

	Combined Types	License Types		
		Annual	Senior	Combination
Be increased	25%	25%	22%	25%
Stay the same	51%	50	53	53
Be decreased	3%	3	1	4
Don't know	18%	18	22	16

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Be increased	20%	26%	14%	20%	35%	13%	20%	26%	33%	35%
Stay same	53	51	45	55	49	49	52	55	51	46
Be decreased										

Highlights:

- There is a general sense among anglers that fishing law enforcement efforts should be left about where they are today, with 51% of holders of all license types responding as such. While only 3% say fishing law enforcement efforts should “be decreased”, 25% say they should “be increased”.
- Advanced anglers are most likely to want to see increased efforts (35%, as compared to 14% of Beginners and 20% of Intermediate anglers), as well as those who fish more than 51 days a year.

Management Implications

The key three areas in this section of inquiry were: 1) anglers opinions about how satisfied they were with their fishing, and how good a job the CDOW is at providing fishing opportunities; 2) anglers opinions about fishing regulations; and 3) anglers experience and opinions about fishing law enforcement.

Because of the extensive work required to sustain many of Colorado’s important recreational fisheries, assessment of angler satisfaction has been an objective of the fisheries program. Angler satisfaction can be applied to many situations. Queries are most often used to measure angler satisfactions with overall program performance; quality of fishing experiences; satisfaction with the number, kind, and sizes of fish caught; and similar such items either on a statewide or water-by water basis.

Overall fishing experiences

As stated earlier, the CDOW routinely queries anglers about their satisfactions with the statewide fish management program and their fishing experiences since that is the group of fish the majority of our anglers seek to catch. Although the design flaw noted above resulted in only about half of the anglers responding to the satisfaction question, the results none-the-less can be

compared to the 1997 survey. In that survey, 59% of anglers said they were slightly to strongly satisfied with their fishing experience, with 28 % expressing dissatisfaction. In 2004, the numbers improved quite a bit, with 77% saying they were slightly to strongly satisfied, and only 13 % expressing dissatisfaction.

There was also improvement in the positive responses to the question that asked if the CDOW was doing a good job in managing resources to provide angling opportunity. However, the fact that 28% of respondents said they were neutral or “didn’t know” on that question is reason enough for the Division to keep working for ways to improve recreational fishing opportunity, especially in light of a fee increase and a new habitat stamp.

Fishing regulations

These questions were asked to provide public input during the regulation development process that occurred in 2005. The responses would seem to indicate that no big changes were suggested, but the Division needs to continually work on the complexity issue, and as discussed in the next section, the quality of the Fishing Regulations and Property Brochure.

Law Enforcement

It is encouraging to note that over one-half of resident anglers have been contacted by a Division of Wildlife Officer in the past 5 years. There has been an increased effort on fishing law enforcement the past several years that seems to be yielding good results. Ratings of the law enforcement effort appear to be good, and only 3% want the effort to be decreased.

RESULTS – Part 6. Colorado Angler Sources of Information

Tables 34 through 40 report on where resident anglers get their information about fishing; and how they would rate the quality of CDOW's fishing regulations brochure, the Colorado Fishing map, its' internet site, and *Colorado Outdoors* magazine as information sources about fishing. Additional questions included whether they think the CDOW's fishing regulations brochure is easy to understand and how often they access the Internet (in general, not just CDOW's internet site). See Appendix C for more detailed data pertaining to specifics surrounding exactly how anglers used (or didn't use) various media information sources.

Table 34: About how often do you obtain information about fishing in Colorado from each of the following sources? Note: % equals respondents selecting a 3, 4, or 5 on a scale of 1 to 5, where 1 = "never", 3 = "sometimes", and 5 = "often".

	Combined Types	License Types		
		Annual	Senior	Combination
Friends and/or family members/word of mouth	78%*	80%*	72%*	81%*
CDOW fishing regulations brochure	53%	52	48	62
Local newspapers	52%	50	47	53
Other CDOW publications	34%	32	28	42
Fishing/outdoor magazines and/or books	32%	31	26	36
CDOW internet website	30%	31	11	34
Cable or satellite TV programs	20%	21	11	24
Sportsmen exhibitions or boat, sport and travel shows	19%	18	16	23
Other internet websites	18%	20	4	18
CDOW employees	17%	16	12	20
Publications of conservation groups	13%	12	11	15
Local television	12%	13	10	10
Local radio	10%	9	7	13
Fishing/outdoor videos and/or DVDs	9%	7	4	11
Public meetings or live presentations about fishing	8%	8	9	8

Highlights:

- The top source of information for Colorado anglers about fishing is friends and/or family members/word of mouth, followed by the CDOW fishing regulations brochure, and their local newspapers (majorities use each of these sources regularly).
- Other key sources of fishing information (but certainly with room for growth) include other CDOW publications and its internet website, and fishing/outdoor magazines and/or books (these are each used by about one-third of resident anglers). Approximately one in five anglers get their fishing information by watching cable or satellite TV programs, attending sportsmens' exhibitions, perusing other websites, or talking with CDOW employees.

- In general, Combination license holders are more frequent consumers of media regarding fishing for most of the sources of information listed. Senior license holders are much less likely to look online for information, or to watch cable/satellite TV shows, than Annual and Combination license holders.
- As one might expect, more frequent and Advanced anglers tend to be much heavier consumers of the diverse kinds of fishing information than others, but mainstays like the CDOW fishing regulations brochure, or the local paper, are used just as widely by infrequent and Intermediate anglers.

Table 35: How would you rate the quality of the fishing regulations brochure?

	Combined Types	License Types		
		Annual	Senior	Combination
Excellent	8%	9%	8%	7%
Very good	24%	23	24	25
Good	35%	34	37	38
Fair	11%	11	12	14
Poor	1%	11	1	2
Not familiar with it	16%	19	11	10

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beq (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Excellent and Very good	35%	31%	24%	33%	33%	27%	30%	35%	33%	31%
Good	32	36	30	36	37	34	38	34	36	34
Fair and Poor										
Not familiar with it	20	14	37	14	12	23	18	13	11	12

Highlights:

- When asked to rate the quality of the CDOW's fishing regulations brochure, 32% of combined license types rated it "excellent" or "very good", and another 35% rated the quality of the brochure as "good". Twelve percent gave it "fair" or "poor" ratings, with 16% of all resident anglers indicating they were "not familiar with it."

Table 36: Please tell us if you agree or disagree with the following statement: "The Colorado Fishing Regulations & Property Brochure is easy to understand."

	Combined Types	License Types		
		Annual	Senior	Combination
Strongly agree	8%	9%	8%	7%
Moderately agree	30%	28	33	32
Neutral	35%	34	36	37
Moderately disagree	5%	4	6	7
Strongly disagree	2%	2	2	2
Don't know	18%	21	14	13

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Strongly and Moderately Agree	38%	38%	27%	38%	41%	32%	36%	39%	43%	41%
Neutral and Don't know	55	53	69	53	49	59	55	53	47	49
Strongly and Moderately Disagree	5	7	3	7	7	7	7	6	8	7

Highlights:

- Scores regarding the ability of Colorado anglers to easily understand the *Colorado Fishing Regulations & Property Brochure* are generally positive, with 38% agreeing and 7% disagreeing with this statement. A majority are either neutral (35%) or say they don't know (18%).
- Beginners are least likely to have an opinion (69%, as compared to 53% of Intermediate and 49% of Advanced anglers).
- Anglers who consider themselves to be Advanced or fish more frequently tend to be more familiar with the brochure and rate the brochure more positively.

Table 37: How would you rate the quality of the Colorado Fishing map?

	Combined Types	License Types		
		Annual	Senior	Combination
Excellent	5%	6%	5%	5%
Very good	16%	17	16	15
Good	25%	25	20	27
Fair	10%	9	10	12
Poor	2%	1	1	2
Not familiar with it	37%	38	36	34

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Subgroup										
Excellent and Very good	21%	22%	15%	21%	23%	15%	20%	25%	24%	24%
Good	23	26	18	25	28	21	24	26	28	27
Fair and Poor										
Not familiar with it	44	35	57	38	29	51	43	34	28	24

Highlights:

- Fewer resident anglers are familiar with the Colorado fishing map than the brochure; 37% of anglers report not being familiar with the map, as compared to 16% saying they are not familiar with the fishing regulations brochure. For those familiar with the map, scores tend to be positive.

Table 38: How would you rate the quality of the Division of Wildlife internet site?

	Combined Types	License Types		
		Annual	Senior	Combination
Excellent	5%	6%	1%	5%
Very good	14%	15	7	16
Good	17%	17	9	20
Fair	4%	4	3	6
Poor	1%	1	1	2
Not familiar with it	52%	54	64	45

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Subgroup										
Excellent and Very good	18%	20%	14%	19%	22%	15%	16%	22%	22%	20%
Good	15	18	13	17	19	15	16	19	19	17
Fair and Poor										
Not familiar with it	60	50	67	53	48	60	58	48	47	47

Highlights:

- One-half of resident anglers (52%) are not familiar with the CDOW's internet site. The remaining respondents gave the website positive scores, with 19% reporting "excellent" or "very good", 17% as "good", and 5% as "fair" or "poor".
- Nearly half of the Advanced anglers and those who fish very frequently are also among those who are unfamiliar with the internet site.

Table 39: Would you say that you access the Internet:

	Combined Types	License Types		
		Annual	Senior	Combination
Daily	40%	44%	16%	37%
Often	18%	19	15	18
Sometimes	15%	15	12	18
Rarely	11%	10	12	12
Never	14%	11	41	13

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Subgroup										
Daily	41%	40%	48%	40%	40%	48%	43%	41%	33%	28%
Often and Sometimes	37	34	31	35	34	30	33	34	35	36
Rarely and Never	26	27	22	26	27	22	23	26	30	31

Highlights:

- Two out of five resident anglers say they access the Internet daily, though just 16% of Senior license holders do so (and 41% of them reported never getting online).

Table 40: How would you rate the quality of Colorado Outdoor magazine?

	Combined Types	License Types		
		Annual	Senior	Combination
Excellent	4%	4%	4%	5%
Very good	11%	9	9	16
Good	17%	15	16	23
Fair	5%	5	3	7
Poor	1%	11	11	2
Not familiar with it	54%	60	51	42

Category	Gender		Expertise			Typical # of Days				
	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
Excellent and Very good	13%	15%	7%	15%	19%	10%	12%	17%	17%	19%
Good	13	19	8	16	22	13	16	20	20	20
Fair and Poor										
Not familiar with it	65	52	79	57	45	67	62	51	47	41

Highlights:

- The majority of resident anglers (54%) report being unfamiliar with *Colorado Outdoor* magazine. For those who are familiar with it, they rate the quality of it as “excellent” or “very good”, 17% as “good”, and 6% as “fair” or “poor”.
- Beginner anglers and those who fish less than 26 days per year are more likely to be unfamiliar with the magazine.

Management Implications

This data set offers some interesting insights to what anglers think about the CDOW’s publications, and other things we do to try to encourage fishing through the so-called Information Highway. The results would seem to indicate that we are less successful than we think we are, and the number of anglers who are “not familiar with” the fishing regulation brochure is downright disturbing.

The anglers rely most heavily on friends and family, and only a little more than half get information from the fishing regulation brochure and newspapers. About 30 % use other CDOW publications and the CDOW Internet site sometimes to often. This survey was conducted in late 2004 and early 2005. There is an assumption that since then internet use has grown, and will continue to grow in the future. However, the fact that about one-half of anglers report just one year ago that they did not use the web site, nor were they familiar with it, argues that our information and education efforts about angling and associated programs should continue to use **all** forms of media for distribution and outreach to our anglers.

RESULTS – Part 7. Colorado Angler Demographics

Table 41: Are you...?

	Combined Types	License Types		
		Annual	Senior	Combination
Female	20%	25%	20%	6%
Male	80%	75	80	94

Table 42: How old are you?*

	Combined Types	License Types		
		Annual	Senior	Combination
18-25	7%	8%	0%	6%
26-35	15%	16	0	16
36-55	50%	56	0	53
56-65	16%	16	14	17
66-75	9%	1	70	6
Over 75	1%	0	11	0

*question was asked in an open-ended format

Table 43: What is the highest grade you have completed in school?

	Combined Types	License Types		
		Annual	Senior	Combination
Grades 1-12, but no high school diploma	6%	6%	10%	5%
High school graduate or equivalent	17%	16	22	18
Some college or trade school	34%	34	32	36
College graduate	26%	27	16	26
Graduate or professional degree	15%	16	17	13

Table 44: What race or ethnic background do you consider yourself?

	Combined Types	License Types		
		Annual	Senior	Combination
White or Caucasian, but not of Hispanic origin	83%	82%	83%	87%
Hispanic, Spanish, or Latino	8%	9	7	4
Native American	2%	2	2	2
Black or African-American, but not of Hispanic origin	1%	1	1	0
Asian American	1%	1	2	0

1997-2004 Comparison: Compared to 1997, the number of male and female respondents stayed about the same (80% male and 20% female), while the mean age of respondents increased slightly (46 years old in 1997 versus 48 years old in 2004). The education of respondents basically remained unchanged, as did the ethnicity of the respondents as percentages of those responding.

Table 45: Do you belong to any sportsmen's or conservation organizations?

	Combined Types	License Types		
		Annual	Senior	Combination
Yes	27%	20%	22%	47%
No	71%	78	74	49

Table 46: Membership in organizations

(select all that apply)
(N = 1,075)*

	Combined Types	License Types		
		Annual	Senior	Combination
National Rifle Association	13%	7%	12%	30%
Rocky Mountain Elk Foundation	6%	3	2	15
Trout Unlimited	6%	6	5	8
Ducks Unlimited	5%	2	1	13
The Nature Conservancy	3%	3	4	2
BASS	2%	2	1	3
Pheasants Forever	2%	1	0	5
Sierra Club	2%	2	2	1
Defenders of Wildlife	1%	1	1	0
National Audubon Society	1%	1	1	1
National Wild Turkey Federation	1%	1	1	3
National Wildlife Federation	1%	1	2	1
World Wildlife Fund	1%	1	0	1
Mule Deer Foundation	1%	0	1	2
Walleyes, Inc.	1%	0	0	1
Buckmasters	0	0	0	1
Muskies, Inc.	0	0	0	0
Izaak Walton League of America	0	0	0	0

*Note: Only respondents who said they belonged to a sportsmen's or conservation organization were then asked to check the organizations listed above that they belonged to.

1997-2004 Comparison: Compared to 1997, the number of respondents indicating organizational affiliation has increased from 19% to 27%.

Management Implications

Overall, the age, gender, and ethnicity of Colorado licensed resident anglers have changed little since the 1997 Angler Survey was completed.

The Division needs to expand on inquiries about what can be done to increase the number of minorities and females who fish, especially considering that nation-wide, these two demographics are considered to have the highest probability for expanding the numbers of anglers.

The key might lie in seeking to develop outreach materials and educational techniques that promote the family and social aspects of angling recreation to minorities and females. Special programs such as school-based angler education, adult angler education programs such as Ladies Let's Go Fishing and Women Afield, family fishing events, and increased advertising and outreach on where to go fishing should be expanded and developed to help maintain growth in the number of anglers.

Appendix A:
**Communication sources (detailed tables) where Colorado resident anglers go
for information about fishing.**

Table A-1 Local Newspapers

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	32%	34	24	30
2	12%	11	10	13
3 – Sometimes	32%	30	36	34
4	10%	10	8	9
5 – Often	10%	10	13	10

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	54%	42%	66%	44%	37%	55%	45%	40%	40%	38%
3, 4 and 5	43	54	29	51	60	37	51	57	57	55

Table A-2: Local radio

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	69%	71	61	68
2	10%	10	7	10
3 – Sometimes	8%	8	7	10
4	1%	1	0	2
5 – Often	1%	0	0	1

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	82%	79%	86%	80%	77%	82%	82%	80%	77%	69%
3, 4 and 5	10	10	6	9	12	7	8	11	12	14

Table A-33: Local television

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	65%	66	61	67
2	13%	13	8	16
3 – Sometimes	10%	11	9	9
4	1%	1	1	1
5 – Often	1%	1	0	0

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	78%	80%	85%	79%	78%	82%	83%	79%	77%	70%
3, 4 and 5	14	12	8	12	14	7	10	14	15	16

Table A-4: Cable or satellite TV programs like OLN, Outdoor Channel and ESPN

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	59%	60	61	57
2	11%	11	7	13
3 – Sometimes	14%	15	9	14
4	4%	4	1	6
5 – Often	2%	2	1	4

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	74%	69%	79%	73%	65%	77%	76%	71%	65%	56%
3, 4 and 5	19	21	14	19	26	12	15	22	28	28

Table A-5: Colorado Division of Wildlife Internet website

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	52%	53	68	46
2	11%	10	5	14
3 – Sometimes	17%	17	7	20
4	7%	8	2	8
5 – Often	6%	6	2	6

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	70%	62%	74%	64%	59%	71%	68%	61%	58%	55%
3, 4 and 5	24	31	20	30	34	20	26	33	37	34

Table A-6: Other Internet websites

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	63%	62	69	62
2	9%	9	3	12
3 – Sometimes	10%	11	2	12
4	5%	6	1	4
5 – Often	3%	3	1	2

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	77%	70%	77%	74%	67%	79%	75%	71%	69%	61%
3, 4 and 5	13	19	14	15	22	10	14	20	20	21

Table A-7: Fishing/outdoor magazines and/or books

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	45%	47	46	39
2	16%	16	10	17
3 – Sometimes	21%	21	21	23
4	7%	7	2	8
5 – Often	4%	3	3	5

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	67%	59%	75%	64%	53%	71%	66%	59%	55%	46%
3, 4 and 5	27	33	18	29	41	20	27	35	38	42

Table A-8: Fishing/outdoor videos and/or DVDs

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	72%	74	64	69
2	9%	9	5	11
3 – Sometimes	6%	5	3	8
4	2%	1	1	2
5 – Often	1%	1	0	1

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	85%	80%	86%	83%	77%	86%	84%	83%	78%	69%
3, 4 and 5	6	9	5	6	11	2	5	7	12	14

Table A-9: CO Division of Wildlife fishing regulations brochure

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	26%	28	24	20
2	13%	14	13	13
3 – Sometimes	27%	27	24	31
4	14%	14	12	15
5 – Often	12%	11	12	16

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	40%	38%	54%	37%	38%	48%	40%	38%	37%	31%
3, 4 and 5	54	55	39	56	56	43	54	57	57	60

Table A-10: Other CO Division of Wildlife publications

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	41%	43	40	34
2	16%	17	11	17
3 – Sometimes	20%	20	18	23
4	9%	8	7	11
5 – Often	5%	4	3	8

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	58%	57%	67%	57%	55%	66%	60%	54%	55%	44%
3, 4 and 5	34	35	24	35	36	24	31	38	37	42

Table A-11: CO Division of Wildlife employees

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	60%	63	58	56
2	15%	14	12	17
3 – Sometimes	13%	12	10	16
4	3%	3	2	3
5 – Often	1%	1	0	1

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	76%	75%	83%	75%	73%	80%	77%	76%	75%	61%
3, 4 and 5	17	17	9	17	19	10	15	18	19	26

Table A-12: Publications of conservation groups, like Trout Unlimited or BASS

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	68%	69	61	67
2	10%	10	6	11
3 – Sometimes	9%	8	8	10
4	3%	3	2	3
5 – Often	1%	1	1	2

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	84%	77%	85%	81%	73%	84%	83%	78%	74%	66%
3, 4 and 5	9	13	6	10	18	5	9	14	19	19

Table A-13: Friends and/or family members, word of mouth

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	8%	9	10	7
2	7%	7	7	8
3 – Sometimes	30%	29	41	31
4	26%	27	17	29
5 – Often	22%	24	14	21

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	14%	16%	24%	15%	13%	23%	18%	13%	12%	11%
3, 4 and 5	83	79	73	79	82	71	78	83	84	80

Table A-14: Sportsmen exhibitions or boat, sport and travel shows

	Combination Types	License Types		
		Annual	Senior	Combination
1 – Never	57%	59	52	53
2	16%	16	11	17
3 – Sometimes	14%	13	13	17
4	3%	3	1	4
5 – Often	2%	2	2	2

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	77%	72%	81%	75%	67%	81%	78%	71%	68%	61%
3, 4 and 5	15	19	11	16	24	10	14	23	24	26

Table A-15: Public meetings/live presentations about fishing, like talks by CO Division of Wildlife personnel, angler roundtables

	Comb. Types	License Types		
		Annual	Senior	Combination
1 – Never	74%	76	68	72
2	11%	10	9	13
3 – Sometimes	6%	6	7	7
4	1%	1	1	1
5 – Often	1%	1	1	0

Category	Gender		Expertise			Typical # of Days				
Subgroup	Female (19%)	Male (79%)	Beg (9%)	Int (51%)	Adv (35%)	1-5 (18%)	6-10 (23%)	11-25 (29%)	26-50 (19%)	51+ (10%)
1 and 2	88%	84%	88%	87%	82%	87%	89%	84%	84%	74%
3, 4 and 5	6	9	4	6	11	3	5	8	10	14

Appendix B:
**Cover Letter and Post Card That Accompanied the 2004 Angler Mail-out
Survey**

STATE OF COLORADO

Bill Owens, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE

AN EQUAL OPPORTUNITY EMPLOYER

Bruce McCloskey, Director
6060 Broadway
Denver, Colorado 80216
Telephone: (303) 297-1192



*For Wildlife-
For People*

October 31, 2004

Dear Colorado Angler:

Periodically, the Colorado Division of Wildlife sends a mail-out questionnaire to a randomly selected group of anglers to assess their thinking about the state's sportfishing recreation program. As someone who bought a 2004 Colorado fishing license, you are one of those lucky anglers who are being asked about your fishing experiences this year. **Even if you did not fish in 2004, your input and opinions are important to us.**

With the ongoing challenges of drought, fluctuating water levels in our reservoirs, and decreased budgets, your input will help the Division determine how to best utilize our staff and operating dollars to meet your angling preferences. Enclosed is a questionnaire that we would like for you to fill out and return to us.

In developing management plans for Colorado's fishing resources, wildlife managers review biological information about various fish species, habitat conditions and recreational use patterns. Wildlife managers also take into consideration the comments and information they receive from interested anglers like you. As someone who bought a 2004 Colorado fishing license, we would like to hear from you. We are interested in your opinions even if you do not have strong feelings about angling or wildlife management.

When you are finished answering the questions, please fold the questionnaire in half and return it to us in the enclosed postage-paid business reply envelope. **Please try to get your questionnaire back in the mail by November 30, 2004.**

If you have any questions about this questionnaire, please contact Robin Knox at 303-291-7362. Thank you for your support of Colorado's sportfishing resources.

Sincerely,

Linda Sikorowski
Assessment Coordinator
Policy and Regulations Section

Robin Knox
Colorado Sportfish Program Manager
Aquatic Resources Section

STATE OF COLORADO

Bill Owens, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
AN EQUAL OPPORTUNITY EMPLOYER

Bruce McCloskey, Director
6060 Broadway
Denver, Colorado 80216
Telephone: (303) 297-1192



*For Wildlife-
For People*

December 6, 2004

Dear Colorado Angler,

About four weeks ago, we sent you a survey seeking responses about your fishing experiences and opinions as a Colorado angler. As of today, we have not yet received your completed survey. If you have completed the survey in the last few days and mailed it back to us, please accept our sincere thanks.

We are writing to you again because every survey is very important to the results of this study. Without your help, the conclusions that we draw from the surveys that have already been returned may not be representative of Colorado anglers. The enclosed survey is your chance to have a say in what happens with respect to angling issues.

In case you misplaced the last questionnaire, we have included another one for you here. Please complete this survey, place it in the enclosed addressed and postage-paid envelope and mail it back to us.

Thank you very much for your response. Your input is very important and your help is greatly appreciated.

Sincerely,

Linda Sikorowski
Assessment Coordinator
Policy and Regulations Section

Robin Knox
Colorado Sportfish Program Manager
Aquatic Resources Section

P.S. Just to let you know this is the final mailing relating to the angler survey.

Thanks again for your input.

Dear Colorado Angler,

About ten days ago, we sent you a survey seeking your opinions about your fishing experiences in Colorado. If you have already completed the survey and mailed it back to us, please accept our sincere thanks.

If you have not already done so, we hope that you will respond soon. Your response is very important.

If you did not receive the survey or it was misplaced, please ask for another copy by contacting Linda Sikorowski at the Colorado Division of Wildlife, 303-291-7279.

Thank you for your cooperation!

Linda Sikorowski
Policy and Regulations Section
Colorado Division of Wildlife
6060 Broadway
Denver, CO 80216

Appendix C.

2004 Colorado Angler Survey

Colorado Angler Survey



*For Wildlife-
For People*

November 2004

ABOUT THIS QUESTIONNAIRE

- The purpose of this survey is to learn more about the preferences and fishing experiences of anglers, such as yourself. In developing management plans for Colorado's fishing resources, we review biological information and take into consideration comments that we receive from anglers.
- Your opinion is important to us. We want to hear from everyone who receives this questionnaire, not just people with strong opinions about angling or wildlife management.
- It is important that the person to whom this was addressed fill out the questionnaire, even if someone else in your family is a more active angler. This will ensure that the results accurately represent all anglers.
- The survey is being conducted cooperatively by the Colorado Division of Wildlife's Aquatic Resources Section and Policy and Regulations Section.
- Your answers will be kept confidential. The questionnaire has an identification number so we can check your name off the mailing list when you return your questionnaire, and we won't send out a duplicate survey to you. Your name will not be associated with your answers.

FILLING OUT THE QUESTIONNAIRE

- For each item on the questionnaire, please choose the answer that is most true for *you*.
- Do *not* write your name on the questionnaire.
- The survey is voluntary. If you do not want to participate, please check here _____ and return your blank questionnaire. That way we won't send you additional mailings.
- Please return the questionnaire in the pre-addressed, postage-paid envelope provided.
- If you have questions about this questionnaire, contact Robin Knox at 303-291-7362 or Linda Sikorowski at 303-291-7279.

THANK YOU FOR YOUR HELP!

We realize that asking you to complete this survey is no small effort. We want to assure you that the information will be used responsibly and for the benefit of making good management decisions. It is important for us to periodically evaluate our fishing seasons and programs from anglers' perspectives and to collect anglers' opinions on possible management issues that affect anglers and the resource. This survey is your opportunity to participate in our management decision process.

PART A - First, we would like to ask you some questions about the kind of fishing you do and where and how often you fish in Colorado.

1. How old were you when you first went fishing?

_____ years old

2. How many years have you been fishing in Colorado? _____ years

3. What is the primary reason you went fishing in Colorado over the past five years?

(Circle one number)

1 To catch fresh fish to eat

2 To be with family and friends

3 To have fun

4 To catch large fish

5 To be close to nature or to be outdoors

6 For relaxation

7 Other – please specify: _____

4. Compared to other outdoor recreation activities that you participate in, how important is fishing to you? *(Circle one number)*

1 Extremely important

2 Very important

3 Moderately important

4 Slightly important

5 Not at all important

6 Don't know

5. How would you rate your expertise as an angler? *(Circle one number)*

1 Beginner

2 Intermediate

3 Advanced

4 Don't know

6. What type of Colorado fishing license did you buy in 2004? *(Circle one number)*

- 1 Resident Annual License
- 2 Resident Senior License
- 3 Resident Combination Fishing/Small Game Hunting License
- 4 I did not buy a Colorado fishing license in 2004

7. How often do you buy a Colorado fishing license? *(Circle one number)*

- 1 Every year
- 2 Most years
- 3 About half the time
- 4 Every few years
- 5 Almost never
- 6 2004 was the first time

8. In a typical year, about how many days do you fish in Colorado? _____ days

9. Who do you usually go fishing with in Colorado? *(Circle one number)*

- 1 I usually go fishing by myself.
- 2 I usually go fishing with friends or family, and we all fish.
- 3 I usually go fishing with friends or family, but not all of them actually fish.
- 4 Other – please specify: _____

10. How often do you hike or backpack to get to your fishing site in Colorado? *(Circle one number)*

- 1 Frequently
- 2 Sometimes
- 3 Once in a while
- 4 Never

11. What **one kind** of fish do you prefer to fish for **most often** in Colorado? *(Circle one number)*

- | | | | |
|---|------------------|---|----------------------------------|
| 1 | Trout | 7 | Crappie |
| 2 | Bass | 8 | Northern Pike/Tiger
Muskie |
| 3 | Catfish | 9 | Other.- please specify:
_____ |
| 4 | Wiper/White Bass | | _____ |
| 5 | Salmon (Kokanee) | | |
| 6 | Walleye/Saugeye | | |

12. What **one type** of water do you **most often** fish in Colorado? *(Circle one number)*

- 1 Coldwater lakes, ponds, and reservoirs in the mountains
- 2 Coldwater lakes, ponds, and reservoirs at lower elevations
- 3 Coldwater streams and rivers
- 4 Warmwater lakes, ponds, and reservoirs
- 5 Private waters
- 6 Commercial lakes or ponds

13. Is the water you **most often** fish in Colorado stocked? *(Circle one number)*

- 1 No, the water I most often fish is not stocked
- 2 Yes, the water I most often fish is stocked
- 3 I don't know if the water I most often fish is stocked
- 4 Other - please specify: _____

14. In Colorado, do you **most often** fish ... *(Circle one number)*

- 1 From the shore or bank
- 2 From a pier or dock
- 3 By wading
- 4 In a boat, float tube, or raft
- 5 Other - please specify: _____

15. In Colorado, do you **most often** fish with... (Circle one number)

- 1 Artificial flies only
- 2 Artificial lures only
- 3 Both flies and lures
- 4 Bait only
- 5 Both bait and lures
- 6 Artificial flies, lures and bait

16. Do you keep the fish you catch in Colorado or release them? (Circle one number)

- 1 I mostly keep what I catch.
- 2 I mostly catch and release.
- 3 Sometimes I keep them, sometimes I release them.

17. Please tell us if you agree or disagree with the following statement: "The Colorado Division of Wildlife does a good job in managing fishery resources to provide angling opportunity". (Circle one number)

Strongly agree 1	Moderately agree 2	Neutral 3	Moderately disagree 4	Strongly disagree 5	Don't know 6
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If moderately or strongly disagree, please explain: _____

18. In the area you fish **most** in Colorado, how crowded do you feel while you are fishing? (Circle one number)

Not at all crowded 1	2	Slightly crowded 3	4	Moderately crowded 5	6	Very crowded 7
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19. Does the specific level of crowding you circled in Question 18 (while you are fishing in Colorado) have any effect on the enjoyment of your fishing trips? (Circle one number)

- 1 That level of crowding **increases** my enjoyment.
- 2 That level of crowding **has no effect** on my enjoyment.
- 3 That level of crowding **decreases** my enjoyment

20. About how often do you obtain information about fishing in Colorado from each of the following sources? (Circle one number for each statement that most closely matches your response)

Source	Never	Sometimes	Often		
a. Local newspapers	1	2	3	4	5
b. Local radio	1	2	3	4	5
c. Local television	1	2	3	4	5
d. Cable or satellite tv programs – for example: Outdoor Life Network (OLN), Outdoor Channel, ESPN	1	2	3	4	5
e. Colorado Division of Wildlife internet website	1	2	3	4	5
f. Other internet websites	1	2	3	4	5
g. Fishing/outdoor magazines and/or books	1	2	3	4	5
h. Fishing/outdoor videos and/or DVDs	1	2	3	4	5
i. Colorado Division of Wildlife fishing regulations brochure	1	2	3	4	5
j. Other Colorado Division of Wildlife publications	1	2	3	4	5
k. Colorado Division of Wildlife employees	1	2	3	4	5
l. Publications of conservation groups - for example, Trout Unlimited, BASS	1	2	3	4	5
m. Friends and/or family members/word of mouth	1	2	3	4	5
n. Sportsmen exhibitions or boat, sport and travel shows	1	2	3	4	5
o. Public meetings or live presentations about fishing – for example, talks by Colorado Division of Wildlife personnel, angler roundtables	1	2	3	4	5

21. How would you rate the quality of the following information sources about fishing from the Colorado Division of Wildlife? (Circle one number for each item)

	Excellent	Very Good	Good	Fair	Poor	Not familiar with it
Division of Wildlife internet site	1	2	3	4	5	6
fishing regulations brochure	1	2	3	4	5	6
Colorado fishing map	1	2	3	4	5	6
Colorado Outdoor magazine	1	2	3	4	5	6

If you answered “fair” or “poor” to any of the above items, please explain:

PART B - Now, we would like to ask you some questions about your fishing experiences in Colorado during 2004.

1. Did you actually fish in Colorado in 2004?

- _____ No Even if you did not fish during 2004, we still need your responses to the rest of the questionnaire. Please skip to PART C.
- _____ Yes Please continue.

2. In total, about how many fishing **trips** did you take in Colorado in 2004?
(Please count each fishing trip, no matter how long it was - one day or several days - as one trip).

_____ total fishing trips

3. In total, about how many **days** did you fish in Colorado (on all your trips) in 2004?

_____ days

4. Between now and December 31, 2004, do you plan on fishing in Colorado?

- _____ No Please skip to PART C.
- _____ Yes Please continue.

5. Between now and December 31, 2004, approximately how many fishing **trips** will you take in Colorado?

_____ total fishing trips

6. Between now and December 31, 2004, approximately how many **days** will you spend fishing in Colorado?

_____ days

7. So that we can get an idea of how fishing is spread around the state, please tell us about the **three sites in Colorado** that you fished the most and about how many days you fished there in **2004**. Some rivers and streams are long, so please tell us the nearest town so we can have a better idea where you fished (for example, the South Platte River in the Denver area and the South Platte River in Deckers would be two different sites).

Name of Lake/Reservoir/ River/Stream	<u>Nearest Town</u>	Number of days fished in 2004
--	---------------------	---

Site #1 _____

Site #2 _____

Site #3 _____

8. Overall, how satisfied or dissatisfied were you with your fishing experiences in Colorado in **2004**?
(Circle one number)

Strongly satisfied 1	Somewhat satisfied 2	Slightly Satisfied 3	Neutral 4	Slightly Dissatisfied 5	Somewhat Dissatisfied 6	Strongly Dissatisfied 7
--------------------------------	----------------------------	----------------------------	--------------	-------------------------------	-------------------------------	-------------------------------

If dissatisfied, why? _____

9. Do you ice fish in Colorado?

_____ No
_____ Yes

If yes, how many days did you ice fish in Colorado last winter?
_____ days

10. Please indicate from the list below the most important things that the Colorado Division of Wildlife could do with its fisheries program that would encourage you and other anglers to fish more. (*Please circle all that apply*)

- a. Offer different types of licenses (family licenses, 10-day, etc.)
- b. Increase access to fishing locations on public land
- c. Increase access to fishing locations on private land
- d. Improve fish habitat
- e. Improve the quality or size of fish
- f. Improve the health of fish
- g. Stock more catchable trout (10")
- h. Open fly and lure only waters to bait fishing
- i. Add additional waters to fly and lure fishing
- j. Make the bag limits higher
- k. Make the bag limits lower
- l. Provide better information on where to fish
- m. Provide better information on how to fish
- n. Simplify fishing regulations: Please specify: _____

- o. Improve facilities at fishing access points
- p. Put more information about fishing opportunities on the internet
- q. There is nothing the Colorado Division of Wildlife can do
- r. Don't know
- s. Other – please specify: _____

PART C - Next, we would like to ask you a few questions about Colorado's fishing regulations. Colorado has statewide regulations for size and bag limits for most kinds of fish, and there are also special regulations that apply to specific waters for a variety of management purposes.

1. Please tell us if you agree or disagree with the following statement: "Colorado's fishing regulations are too complex." (Circle one number)

Strongly agree 1	Moderately agree 2	Neutral 3	Moderately disagree 4	Strongly disagree 5	Don't know 6
---------------------	-----------------------	--------------	--------------------------	------------------------	-----------------

If you disagree, why? _____

2. Please tell us if you agree or disagree with the following statement: "The *Colorado Fishing Regulation & Property Brochure* is easy to understand." (Circle one number)

Strongly agree 1	Moderately agree 2	Neutral 3	Moderately disagree 4	Strongly disagree 5	Don't know 6
---------------------	-----------------------	--------------	--------------------------	------------------------	-----------------

If you disagree, why? _____

3. In Colorado, the current statewide daily bag limit for trout is 4. Do you agree or disagree that the current daily bag limit for trout is at the right number? (Circle one number)

Strongly agree 1	Moderately agree 2	Neutral 3	Moderately disagree 4	Strongly disagree 5	Don't know 6
---------------------	-----------------------	--------------	--------------------------	------------------------	-----------------

If you disagree, why? _____

4a. On some waters, especially streams, there are special regulations that may require size limits, the use of flies or lures only, catch and release of caught fish. Some anglers have suggested that the Division allow bait fishing to increase fishing opportunity. Do you agree or disagree with the following statement: "The Colorado Division of Wildlife should open some of the special regulation water to allow fishing with bait"? (Circle one number)

Strongly agree 1	Moderately agree 2	Neutral 3	Moderately disagree 4	Strongly disagree 5	Don't know 6
---------------------	-----------------------	--------------	--------------------------	------------------------	-----------------

4b. Please describe why you agree or disagree: _____

5a. Do you agree or disagree with the following statement: "The Colorado Division of Wildlife should add restrictive regulations to additional waters (such as, fly and lure only fishing, size limits, etc.)"? (Circle one number)

Strongly agree 1	Moderately agree 2	Neutral 3	Moderately disagree 4	Strongly disagree 5	Don't know 6
---------------------	-----------------------	--------------	--------------------------	------------------------	-----------------

5b. Please describe why you agree or disagree: _____

6. Within the past 5 years, while fishing in Colorado, approximately how many times have you been contacted by a Division of Wildlife law enforcement officer?

_____ # of times (put 0 if never been contacted)

7. How would you rate the Colorado Division of Wildlife's law enforcement efforts regarding fishing? (Circle one number)

Excellent 1	Very Good 2	Good 3	Fair 4	Poor 5	Don't know 6
----------------	----------------	-----------	-----------	-----------	-----------------

8. In your opinion, should fishing law enforcement efforts by the Colorado Division of Wildlife be increased, stay the same, or be decreased? (Circle one number)

- 1 Be increased
- 2 Stay the same
- 3 Be decreased
- 4 Don't know

PART D – The next few questions ask you about your fishing plans for 2005.

1. Are you planning on buying a Colorado fishing license in 2005?

_____ Yes Please skip to PART E.

_____ No . Please continue.

2. What are some of the main reasons you do not plan on buying a Colorado fishing license in 2005? *(Please circle all that apply)*

- a. Change in interest or attitude toward fishing
- b. Lack of time
- c. Don't have anybody to go fishing with
- d. Problems with finding or getting to places to go fishing
- e. Weather conditions, drought or forest fire
- f. The number or size of fish
- g. Poor conditions due to pollution or trash
- h. Costs associated with fishing
- i. Problems with the facilities (boat ramps, etc.)
- j. Age or health makes it difficult
- k. Difficulty finding a convenient place or location to buy a license
- l. Problems with fishing regulations
- m. Whirling disease or the health of fish populations
- n. Problems with crowding or other recreationists
- o. Problems with fishing law enforcement
- p. Don't know
- q. Other - please specify: _____

3. Is there anything the Colorado Division of Wildlife can do to encourage you to buy a fishing license in 2005?

_____ No

_____ Yes - please explain: _____

PART E - Finally, we would like to ask you a few questions about yourself to help us understand the different characteristics of anglers and to allow us to compare your answers as a group with those of other anglers. Again, your answers are totally confidential.

1. Would you say you access the internet: *(Circle one number)*

- 1 Daily
- 2 Often
- 3 Sometimes
- 4 Rarely
- 5 Never

2. Do you belong to any sportsmen's or conservation organizations?

_____ No

_____ Yes – *(Circle all that apply)*

- | | |
|------------------------------------|-------------------------------------|
| a. BASS | j. Pheasants Forever |
| b. Buckmasters | k. Rocky Mountain Elk Foundation |
| c. Defenders of Wildlife | l. Sierra Club |
| d. Ducks Unlimited | m. The Nature Conservancy |
| e. Izaak Walton League of America | n. Trout Unlimited |
| f. National Audubon Society | o. World Wildlife Fund |
| g. National Rifle Association | p. Walleyes, Inc. |
| h. National Wild Turkey Federation | q. Muskies, Inc. |
| i. National Wildlife Federation | r. Mule Deer Foundation |
| | s. Other - please specify:
_____ |

3. Are you:

_____ Female

_____ Male

4. How old are you? _____ years old.

5. What is the highest grade you have completed in school? *(Circle one number)*

- 1 Grades 1 – 12, but no high school diploma
- 2 High school graduate or equivalent
- 3 Some college or trade school
- 4 College graduate
- 5 Graduate or professional degree

6. What race or ethnic background do you consider yourself? *(Circle one number)*

- 1 Hispanic, Spanish, or Latino
- 2 White or Caucasian, not of Hispanic origin
- 3 Black or African American, not of Hispanic origin
- 4 Native American
- 5 Asian American
- 6 Other - please specify: _____

Thank you for completing this survey, your input is very important.
Please fold the questionnaire in half and return it in the enclosed postage-paid
business reply envelope.

If you misplaced the return envelope, please mail the survey to:

Linda Sikorowski
Policy and Regulations Section
Colorado Division of Wildlife
6060 Broadway
Denver, CO 80216

