2002 Opinion Survey of U.S. Virgin Island Commercial Fishers and the Marine Recreational Industry

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INTRODUCTION

Biological surveys are only one part of any assessment of fisheries and marine resources when developing management strategies. It is also important that the opinions and insights of user groups be heard and considered. Without such input, assessment and management of these resources would be incomplete.

In 2001, at the request of the St. Thomas/St. John Fisheries Advisory Committee, the Division of Fish & Wildlife (DFW) completed an opinion survey of commercial fishers (see Uwate et al 2001). The results identified issues the user group views as problems and priorities.

In FY 2002, the U.S. Fish & Wildlife Service mandated that each state (and territory) develop a strategic plan for fish and wildlife. In response to this mandate, DFW initiated work on a U.S. Virgin Islands fish and wildlife strategic plan.

As part of this plan, user group opinions and insights were solicited and obtained through opinion surveys. This report documents the opinions of two user groups: commercial fishers and the marine recreational industry, both on the islands of St. Thomas/St. John and St. Croix, U.S. Virgin Islands (USVI).

METHODOLOGY

<u>The Universe</u> — Two separate user groups were targeted in the USVI. One group included commercial fishers. The other group included private sector companies that relate to marine recreational uses (such as dive operations, fishing equipment stores, water sport rentals, etc.) Not only were two user groups targeted, there was also a geographical split. St. Thomas and St. John was one location and St. Croix another.

A list of marine recreational industry companies was compiled by looking through the phone book and word of mouth. St. Thomas/St. John marine recreational industry companies are listed in Appendix A. St. Croix marine recreational industry companies are listed in Appendix B. The universe of commercial fishers included all licensed commercial fishers (DFW files).

<u>The Questionnaire</u> - Two questionnaires were developed to target separate user groups, but addressed similar issues. The questions were based on the questionnaire used by Uwate et al (2001). The questionnaire was a single page so that it would not be a burden to respondents. A copy of the commercial fisher questionnaire is attached in Appendix C. A copy of the marine industries questionnaire is attached in Appendix D.

<u>Fielding</u> - The commercial fisher questionnaire was distributed during the annual commercial fisher registration periods. The St. Thomas registration was held at the Division of Environmental Enforcement office at the St. Thomas airport from July 15

to 19, 2002. The St. John registration was held at the Department of Planning and Natural Resources Building in Cruz Bay, St. John from July 21 to 23, 2002. In St. Croix registration was during the same time as St. Thomas (July 15 to 19, 2002), and was held at the Division of Environmental Enforcement office in St. Croix. The period for response was extended to July 31, 2002 to accommodate fishers who registered late at DFW offices. Participation in this survey was voluntary.

From August to September 2002, a similar questionnaire was fielded to the marine recreational businesses on St. Thomas, St. John, and St. Croix. Two contractors were hired to field this survey. Again, participation in this survey was voluntary.

RESULTS

<u>Responses</u> – By the end of July 2002, a total of 147 St. Thomas/St. John commercial fishers had registered. Of these, 62 responded to the questionnaire. During the same period, 237 St. Croix commercial fishers registered. Of these, 147 responded to the questionnaire.

For the marine recreational industry survey, a total of 53 businesses for St. Thomas/St. John were approached, however, 51 businesses responded to the survey. Three (6 percent) St. Thomas/St. John businesses did not participate in the survey. On the island of St. Croix, a total of 43 businesses were approached, but only 33 businesses responded to the survey. Ten (23 percent) St. Croix businesses did not participate in the survey. Non-participation was due to seasonal closure of businesses (during the off season), companies out of business, or company staff were unavailable (see Appendix A for St. Thomas/St. John and Appendix B for St. Croix list of non-participants).

Survey responses from St. Thomas and St. John were lumped together and treated separately from responses from St. Croix. The reasons for this have to do with the differences in geographical location, geology, and socio-economics. For example, St. Croix has a narrower shelf with shallower water depths than St. Thomas/St. John. In St. Croix, the shelf area extends only about ≤3 nm from the shoreline, and the shelf depth is generally <12 m. The shelf around St. Thomas and St. John extends much farther (8 nm to the south, and 20 nm to the north), and is primarily between 25 to 45 m deep. Additionally, the islands of St. Thomas and St. John draw more tourism, provide better job opportunities, and have a lower poverty rate than St. Croix. There are also more commercial fishers on St. Croix than on the islands of St. Thomas and St John.

<u>Commercial Fisher Responses</u> - Of the 62 fishers from St. Thomas and St. John that completed the questionnaire, 12 (19 percent) were from St. John and 50 (81 percent) were from St. Thomas (Question 1). All of the respondents that completed the questionnaire in St. Croix were from St. Croix.

Fishing gear types used by commercial fisher respondents include traps, hook and line, diving, and nets (Question 2, Table 1). Hook and line was used by majority of the

commercial fisher respondents in the territory (49 percent for St. Thomas/St. John and 36 percent for St. Croix). The remaining St. Thomas/St. John respondents fished with traps (30 percent), nets (13 percent), and dive gear (9 percent). St. Croix respondents also fished by using traps (23 percent), dive gear (24 percent), and nets (17 percent). Thirty-four percent of the St. Thomas/St. John respondents, and 64 percent of the St. Croix respondents used more than one type of fishing gear.

Of the 56 St. Thomas/St. John respondents that answered question 3, 59 percent considered themselves full-time fishers, 36 percent considered themselves part-time fishers, and 5 percent fished occasionally (Question 3, see Table 2). Of the 145 St. Croix fishers who responded, 70 percent considered themselves full-time fishers, 28 percent considered themselves part-time fishers, and 1 percent fished occasionally (Table 2). The distinction between full-time and part-time fishers was not defined in the questionnaire, therefore, a fisher's status or title was determined by the respondent.

Respondents rated their fishing (Question 4) as poor, fair, good or excellent. Results are presented in Table 3. For both St. Thomas/St. John and St. Croix, most rated their fishing as "fair" or "good". For St. Thomas/St. John, when these rating categories are converted to numerical values (with poor =1, fair = 2, good = 3, and excellent 4), the average rating is 2.66 (variance 0.61). This overall rating is good (good = 3). For St. Croix, when rating categories are converted to numerical values, the average rating is 2.28 (variance 0.64). This overall rating is fair (fair = 2).

Commercial fisher respondents provided their opinions on the major issues and problems regarding fishing in the U.S. Virgin Islands (Question 5, see Table 4). The top three areas of concern for St. Thomas/St, John included: (1) overfishing (16 percent), (2) too many fish pots (14 percent), and (3) water pollution (11 percent). Top issues for the island of St. Croix include: (1) too many gillnets (23 percent), (2) overfishing (10 percent), and (3) too many closures and stolen pots and/or pot catch (8 percent).

Respondents also made various suggestions on how to improve fishing in the U.S. Virgin islands (Question 6, see Table 5). Top three solutions for St. Thomas/St. John included: (1) increase enforcement (19 percent), (2) pot quantity limits (11 percent), and (3) seasonal rotation of closures (8 percent). Most St. Croix commercial fisher respondents also suggested an increase in enforcement (17 percent), as well as banning and/or regulating gillnets (12 percent).

Respondents then identified priority areas for marine resources that need to be addressed (Question 7, see Table 6). Of the fishers that provided their comments to question 7, 5 percent suggested that the main priority area to be addressed in St. Thomas/St. John is habitat destruction. Coastal development, too many fishers, jet ski regulations, overfishing, and pollution were all the second suggested priority (3 percent). On St. Croix, top priorities for marine resources that need to be addressed are pollution (25 percent), too many closures (9 percent), and too many gillnets (4 percent).

Question 8 asked about their awareness or possible involvement in the Fisheries

Advisory Committee (FAC) (see Table 7). On the islands of St. Thomas and St. John, 44 percent of the respondents were not aware of the FAC, yet only 11 percent of all the respondents were willing to join. More than 50 percent of St. Croix respondents were aware of the FAC and all were willing to join (52%).

Respondents were then asked about their willingness to have their catch sampled by Division of Fish & Wildlife staff (Question 9, see Table 8). Fifty percent of the commercial fisher respondents were willing to participate on St. Thomas/St. John, while 88 percent of St. Croix commercial fisher respondents indicated that they would cooperate.

Commercial fisher respondent opinions about the current fishing license moratorium were sought (Question 10, see Table 9). The majority of the commercial fisher respondents in the territory approve of the moratorium on issuing new commercial fishing licenses. Approximately 50 percent of the respondents in St. Thomas/St. John approved and 76 percent of the respondents in St. Croix approved.

Question 11 refers to the suggestions of the commercial fisher respondents for new boat ramps (see Table 10). On the islands of St. Thomas and St. John commercial fisher respondents most wanted repairs and maintenance to existing boat ramps, as well as installation of additional ramps in general. Commercial fisher respondents on St. Croix felt that Great Pond Ramp (14 percent), Salt River Lagoon (10 percent), and Frederiksted Ramp (9 percent) either needed ramp replacement or repairs.

Commercial fisher respondents also indicated their interest in a workshop on rules and regulations (Question 12, see Table 11). Approximately 50 percent of the St. Thomas/St, John respondents would participate in a marine resource workshop. Many respondents on St. Croix were also willing to participate (85 percent).

Lastly, commercial fisher respondents gave any additional comments that they might have (Question 13, see Table 12).

<u>Marine Recreational Industry Responses</u> - Fifty-one business respondents were based on St. Thomas and St. John. Thirty-three business respondents were based on St. Croix.

Respondents were asked to indicate what type of marine recreational business they were in. (Question 2, see Table 13). On the islands of St. Thomas and St. John, only 7 of the 51 businesses participated in more than one type of business (range 1 to 5). Many respondents on St. Croix (16 of 33) participated in more than one type of business in the marine recreational industry (range 1 to 5).

Most (80 percent) St. Thomas/St. John respondents rated the fishing resources as "fair" (39 percent) or "good" (41 percent) (Question 3, see Table 14). For St. Thomas/St. John, when these rating categories are converted to numerical values (with poor =1, fair = 2, good = 3, and excellent = 4), the average rating is 2.50 (variance 0.65). This overall rating is between fair and good. Fifty percent of St. Croix respondents rated the fishing

resources as "fair" and 27% rated it as "poor". For St. Croix, when rating categories are converted to numerical values, the average rating is 2.0 (variance = 0.62). This overall rating is fair.

Respondents provided their opinion, as well as their view of their customers' opinions, on the major fisheries problems in U.S. Virgin Islands (Question 4, see Table 15). Respondents also provided their opinions on how these major fisheries problems could be resolved (Question 4b, see Table 16).

Respondents also rated diving/marine resource conditions as poor, fair, good, and excellent (Question 5, see Table 17). Once again, rating categories are converted to numerical values (with poor = 1, fair = 2, good = 3, and excellent = 4). The average rating for St. Thomas and St. John is 2.8 (variance 0.46). This overall rating is good (good 3). Average rating for St. Croix is 3.0 (variance = 0.59). St. Croix's overall marine resource rating is good (good = 3).

Major diving/marine resource problems as perceived by respondents and their customers were identified (Question 6, see Table 18). St. Thomas/St. John respondents thought pollution was a major problem (14 percent). An equal percentage of respondents also thought habitat destruction and lack of moorings were major resource problems (12 percent). On St. Croix major resource issues included overfishing (17 percent), pollution (35 percent), and habitat destruction (13 percent). Respondents provided suggestions on how these problems could be resolved (see Table 19). The most popular suggestions overall for the territory were enforcement (16 percent) and more education (13 percent).

Respondents were then asked about their awareness or possible involvement in the Fisheries Advisory Committee (Question 7, see Table 20). Approximately 40 percent of St. Thomas/St. John fisher respondents did not know about the FAC, no respondents were willing to participate. There were more respondents on the island of St. Croix (64 percent) that did not know about the FAC, however, 52 percent were willing to participate.

Suggestions for new boat ramps were also made (Question 8, see Table 21). St. Thomas/St. John recreational industry thought that the east end of St. Thomas needed additional boat ramp installation (21 percent). St. Croix recreational industry felt that ramp maintenance (36 percent) and additional ramps (no specific location) (30 percent) were needed.

The marine recreational respondents were asked if they would like to participate in a workshop regarding fishing rules and regulations (Question 9, see Table 22). Fifty-six percent of St. Thomas/St. John respondents and 73 percent of St. Croix respondents said "yes".

Some respondents gave additional comments (Question 10, see Table 23). The need for more education (26 percent overall) and enforcement (14 percent on St. Croix) were the top two comments given.

DISCUSSION

Problems

Overfishing was the single most important issue/problem identified by commercial fisher respondents (see Table 4). In fact, 37 percent of all responses regarding major problems on the islands of St. Thomas and St. John were related concerns of overfishing. On St. Thomas/St. John, many commercial fisher respondents (14 percent) believe there are too many fish pots. On the island of St. Croix, 45 percent of all responses regarding major problems were also related to overfishing. For example, St. Croix commercial fisher respondents (23 percent) cited gillnets as the biggest problem. Other major problems specific to St. Thomas/St. John are water pollution, and lack of enforcement. Other major problems specific to St. Croix included stolen pots and/or pot catch, and too many closures.

St. Thomas/St. John marine recreational industry respondents also identified enforcement, overfishing, and too many pots as problems (see Table 15). On St. Croix, enforcement and overfishing were also identified as problems.

Solutions

Many commercial fisher respondents thought that the best way to improve the fishery was to improve enforcement (19 percent on St. Thomas; 16 percent on St. Croix, see Table 5). Common suggestions were to hire additional enforcement officials, increase patrols, and increase site inspections. As in 2001 (see Uwate et al 2001), many St. Croix respondents (12 percent, see Table 5) also suggested that gillnets be banned or regulated.

St. Croix marine recreational industry respondents suggested educational programs (10 percent, see Table 16) and enforcement (19 percent, see Table 16) as ways to fix major fisheries problems. Workshops, advertising, and public announcements are some of the suggested educational options. There was also a 38 percent call for education within the additional comments provided by the St. Croix maritime businesses (see Table 23). The lack of information and communication in the territory may help explain why almost half of the commercial fisher respondents (for St. Thomas/St. John and St. Croix, see Table 7), and recreational industry respondents (for St. Thomas/St. John and St. Croix, see Table 20) did not know about the FAC.

Results of these surveys provide insights into the priority areas as perceived by marine user groups. These priorities are real to the respondents, but may be unknown or not yet significant to policy makers. Opinion surveys such as those completed here should provide policy makers with new insights and perceptions of problems and solutions for fisheries and marine resource management. Also, it is evident that St. Thomas/St. John is fundamentally different from St. Croix and therefore the Division of Fish and Wildlife's management strategy (strategic plan) should recognize this. St. Thomas and St. John priority issues may have to be approached differently than those of St. Croix because of

the different priorities expressed by respondents from each district to this survey.

REFERENCES CITED:

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	Table 1. Fishing Gear Types used by Commercial Fishers									
(Commercial Fisher Survey, Question 2 *)										
	STT/STJ STX TOTAL									
	No.	% No. No. %								
Hook&Line	43	48.9	110	35.7	153	38.6				
Trap	26	29.5	71	23.1	97	24.5				
Net	11	12.5	53	17.2	64	16.2				
Diving 8 9.1 74 24.0 82 20.7										
Total	88	100.0	308	100.0	396	100.0				

^{*}Note: Respondents provided multiple responses to this survey question.

Table 2. Fishing Status of the Commercial Fishers (Commercial Fisher Survey, Question 3)										
	STT/STJ STX TOTAL									
	No.	No. % No. % No.								
Full time	33	58.9	102	70.3	135	67.2				
Part time	20	35.7	41	28.3	61	30.3				
Occasional 3 5.4 2 1.4 5 2.										
Total	56	100.0	145	100.0	201	100				

Tabl	Table 3. Commercial Fishers Rating of Fishing Quality (Commercial Fisher Survey, Question 4)									
	STT/STJ STX TOTAL									
	No. % No. % No. %									
Poor	3	5.7	24	16.7	27	13.7				
Fair	19	35.8	62	43.1	81	41.1				
Good	24	45.3	51	35.4	75	38.1				
Excellent	7	13.2	7	4.9	14	7.1				
Total	53	100.0	144	100.0	197	100.0				

Table 4. List of Major Issues and Problems Identified by Commercial Fishers									
(Commercial Fisher Survey, Question 5)									
Major Issues/Problems	STT/			ГХ		ΓAL			
•	No.	%	No.	%	No.	%			
Bad weather			4	2.3	4	1.5			
Blue Marlin bag limit needed			1	0.6	1	0.4			
Boat access- need more			9	5.2	9	3.5			
Boat access crowded (kids swimming)	1	1.2	2	1.1	3	1.2			
Fishing gear damage		1.2	2	1.1	3	1.2			
BVI controversy	1	1.2			1	0.4			
Conch (illegal harvest)	2	2.5			2	0.8			
Conch shell litter			3	1.7	3	1.2			
Cooperation & Assistance needed			1	0.6	1	0.4			
Divers take everything / ban harvest	3	3.7	4	2.3	7	2.7			
Education (workshops needed, more communication)			4	2.3	4	1.5			
Enforcement (lacking, no contact)	8	9.9	4	2.3	12	4.6			
FADs (additional deployments)			4	2.3	4	1.5			
Fishing - illegal harvest (fish, lobster,. & conch)			9	5.2	9	3.5			
Fishing restrictions (too many / not enough)	4	4.9	5	2.9	9	3.5			
Fish sales (low sales, fixed prices, can't sell total catch)	1	1.2	5	2.9	6	2.3			
Foreign fishing in international waters	2	2.5			2	0.8			
Gillnets, (too many, regulations needed)			40	23.0	40	15.4			
Habitat destruction	2	2.5			2	0.8			
Jet Skis (kill birds, chase fish away)	5	6.2	1	0.6	6	12.3			
Lobster (illegal harvest, low numbers)				1.7	3	1.2			
Nets (too many net fishers)			1	0.6	1	0.4			
NO COMMENT (*1)	7	8.6	22	12.6	29	11.2			
No place to fish (too many closures)	2	2.5	13	7.5	15	5.8			
Overfishing (no fish, decline in recruits, few baitfish,	13	16.0	7	9.8	30	11.6			
too many boats, too many fishers, too many fishers)	13	10.0	/	7.0		11.0			
Pollution (coastal runoff, sewage, rum discharge)	9	11.1	6	3.4	15	5.8			
Pots stolen / Pot catch stolen	4	4.9	13	7.5	17	6.7			
Pots too numerous too many fishers & strings)	11	13.6	3	1.7	14	5.4			
Research needed	1	1.2			1	0.4			
Seine net depleting bait			1	0.6	1	0.4			
Sharks eat catch	1	1.2	-			1			
Spearing of adult fish	3	3.7			3	1.2			
Vessels in fishing grounds (crowded fishing areas)			1	0.6	1	0.4			
Total # of responses (*2)	81		178		259				
Total # of respondents to question (*3)	55		125		180				

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 5. Commercial Fishers Suggestio (Commercial Fisher Survey			IIX FI	snery	rroble	ems
Suggestions		/STJ	STX	ζ.	TO	TAL
	No.	%	No.	%	No.	%
Area closure - rotate them	5	8.1	7	4.6	12	5.6
Area closure - reopen some			4	2.6	4	1.9
Artificial reef (conch shells, tires, other debris)			2	1.3	2	0.9
Blue marlin - regulations needed			1	0.7	1	0.5
Boat access - repair & create more			4	2.6	4	1.9
Catch - only catch what can be sold, prevent waste			1	0.7	1	0.5
Conch - use shell for artificial reefs			2	1.3	2	0.9
Conch - increase closed season	1	1.6	1	0.7	2	0.9
Cooperative system (fishers communicating &			7	4.6	7	3.3
working together)						
Diving - ban it for commercial fishing			2	1.3	2	0.9
Enforcement (patrol, patrol pots, stop pot theft,	12	19.4	24	15.7	36	16.7
inspect, more control, site inspections)	12	19.4	24	15.7	30	10.7
Environmental protection (sewage cleanup & control,			6	3.9	6	2.8
& fines)			O	3.9	0	2.0
FADs - additional deployments			4	2.6	4	1.9
Fishers - education	1	1.6	3	2.0	4	1.9
Fishers - separate full and part-timers	1	1.6	2	1.3	3	1.4
Fishing - regulate it better	1	1.6	8	5.2	9	4.2
Gillnets - ban them			13	8.5	13	6.1
Gillnets - regulate them			12	7.8	12	5.6
Hatchery for lobster	1	1.6			1	0.5
Jet ski control	1	1.6			1	0.5
Less restrictions	2	3.2	2	1.3	4	1.9
Lobster season - establish one			2	1.3	2	0.9
Net fishing - regulate it			1	0.7	1	0.5
NO COMMENT (*1)	23	37.1	35	22.9	58	27.0
Pollution - control	2	3.2			2	0.9
Pot identification improvement			1	0.7	1	0.5
Pot quantity limits	7	11.3	2	1.3	9	4.2
Regulations - eliminate for commercial fishers			3	2.0	3	1.4
Regulations - make them more flexible			4	3.2	4	1.9
Research - more needed	3	4.8			3	1.4
Spear fishing regulations	1	1.6			1	0.5
Whelk harvest closure	1	1.6			1	0.5
Total # of responses (*2)	62		153		215	
Total # of respondents to question (*3)	39		112		151	

- "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted. Some respondents provided multiple responses to this survey question. 1.
- 2.
- Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire. 3.

Table 6. Priority areas for marine resources that need to be addressed (Commercial Fisher Survey, Question 7)

Priorities	STI	T/STJ	S	TX	TO	TAL
	No.	%	No.	%	No.	%
Boat ramp access			2	1.3	2	1.0
Closures - too many	1	1.7	14	9.3	15	7.2
Coastal development (creating runoff)	2	3.4			2	1.0
Conch - illegal harvest			3	2.0	3	1.4
Conch shell litter			2	1.3	2	1.0
Diving - need regulations and limitation			1	0.7	1	0.5
Education - more meetings, updates, workshops			5	3.3	5	2.4
Enforcement	1	1.7	4	2.7	5	2.4
FADs - additional installments	1	1.7	5	3.3	6	2.9
Fishers - too many	2	3.4	3	2.0	5	2.4
Fishing tournaments - high mortality, more	1	1.7	1	0.7	2	1.0
regulations needed						
Gillnets - too many			6	4.0		2.9
Habitat destruction / need preservation	3	5.1	2	1.3	5	2.4
Jet Ski regulations	2	3.4			2	1.0
Lobster - illegal harvest			2	1.3	2	1.0
Lobster - more regulation			2	1.3	2	1.0
Marine reserves needed			1	0.7	1	0.5
NO COMMENT (*1)	39	66.1	46	30.7	85	40.7
Overfishing	2	3.4	4	2.7	6	2.9
Pollution - raw sewage and rum discharge	2	3.4	37	24.7	39	18.7
Pots -too many	1	1.7	1	0.7	2	1.0
Pots / Pot catch stolen			2	1.3	2	1.0
Regulations - more needed	1	1.7	5	3.3		2.9
Research needed			2	0.6	2	1.0
Spear fishing regulations		1			1	0.5
Total # of responses (*2)	59		150		209	100
Total # of respondents to question (*3)	23		101		124	

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 7. Commer	Table 7. Commercial Fishers Awareness of the Fisheries Advisory Committees (Commercial Fisher Survey, Question 8)										
	STT/STJ STX TOTAL										
	No.	%	No.	%	No.	%					
Aware	32	56.1	77	52.4	109	53.4					
Not Aware	25	43.9	70	47.6	95	46.6					
Total	57	100.0	147	100.0	204	100.0					
		<u> </u>									
Willing to join	6	10.5	77	52.4	83	40.7					
Not willing to join	51	89.5	70	47.6	121	59.3					
Total	57	100.0	147	100.0	204	100.0					

Table 8	Table 8. Commercial Fishers Willingness to Participate in Bio-Statistical Sampling (Commercial Fisher Survey, Question 9)										
	S T T/STJ STX TOTAL										
	No. % No. No. %										
Yes	28	49.1	129	87.8	157	77.0					
No	29	50.9	18	12.2	47	23.0					
Total	otal 57 100.0 147 100.0 204 100.0										

Table 9. Commercial Fishers Opinions about Fishing License Moratorium (Commercial Fisher Survey, Question 10)											
	STT/STJ STX TOTAL										
	No. % No. % No. %										
No Comment	25	43.9	15	10.2	40	19.6					
Don't Approve	4	7.0	20	13.6	24	11.8					
Approve	Approve 28 49.1 112 76.2 140 68.6										
Total											

Table 10A. Commercial Fishers Suggestions for new Boat Ramps and Public Jetties in STT/STJ (Commercial Fisher Survey, Question 11)							
Cuanations	STT/STJ						
Suggestions	No.	%					
Coki point - ramp placement		1.7					
Coral Bay – ramp placement	2	3.4					
Existing Ramps - repairs and maintenance needed	4	6.8					
French Town - repairs needed	4	6.8					
Hull Bay Ramp - not usable / repairs needed	3	5.1					
More ramps needed (in general)	4	6.8					
NO COMMENT (*1)	36	61					
Pot Authority Ramp - not accessible	1	1.7					
Red Hook Docks - repairs needed	2	3.4					
Salt Pond - ramp placement	1	1.7					
Smith Bay - needs fishing gear storage	1	1.7					
Total # of responses (*2)	59						
Total # of respondents to question (*3)	26						

- "NO COMMENT" includes those questions that were left blank, or the 1. words "no comment", "none", or "not available" were noted. Some respondents provided multiple responses to this survey question.
- 2.
- Respondents that answered this question plus "NO COMMENT" respondents equals 3. the total number of registered commercial fishers that filled out the questionnaire.

	STX		
	No.	%	
Altona Bay (needs sand to be cleaned out)	3	1.5	
Anguilla Beach - ramp placement	2	1.0	
Boat Ramp Access (access to existing ramps)	7	3.6	
Campo Rico Area - ramp placement	1	0.5	
Cane Bay Ramp - repairs needed	2	1.0	
Castle Nugent - repairs to existing ramp & ramp placement	11	5.7	
Chabut Beach - ramp placement	1	0.5	
Cotton Valley – ramp placement	2	1.0	
Cramers Plot - ramp placement	1	0.5	
Divi Bay - ramp placement	5	2.6	
East End St. Croix - more ramps needed	4	2.1	
Existing Ramps - repairs and maintenance needed	6	3.1	
Fish Market (fishing facilities with ice)	1	0.5	
Frederiksted Ramp and Pier - repairs needed	17	8.8	
Gallows Bay Ramp - ramp placement	1	0.5	
Grape Tree – ramps needed	3	1.5	
Great Pond Ramp - repairs needed	28	14.4	
Long point - ramp placement	6	3.1	
Molasses Ramp - repairs needed	6	3.1	
More ramps needed (in general)	2	1.0	
NO COMMENT (* 1)	32	16.5	
Old Fisherman's Plot - ramp placement	15	7.7	
Salt River Lagoon - parking lot needed	1	0.5	
Salt River Lagoon - ramp placement	19	9.8	
Turner Hole - access needed	7	3.6	
Turner Hole - parking lot needed	2	1.0	
White Bay Ruben's Beach - ramp placement	2	1.0	
Yacht Club Area - more ramps needed	7	3.6	
Total # of responses (*2)	194		
Total # of respondents to question (*3)	115		

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 11. Commercial Fishers Responses: would you like to participate in a workshop about fishing rules and regulations (Commercial Fisher Survey, Question 12)

Response	STT/STJ STX		STT		X		TOTAL
	No.	%	No.	%	No.	%	
Yes	29	51.0	125	85.0	154	75.5	
No	28	49.0	22	15.0	50	24.5	

Table 12. Commercial Fisher Respondents Additional Comments
(Commercial Fisher Survey, Question 13)

(Commercial Fisher Survey, Question 13)								
C	ST	STTISTJ		TX	T	OTAL		
Comments	No.	%	No.	%	No.	%		
Boat access crowded (kids swimming)			3	2.1	3	1.4		
Buoys - reflectors needed			1	0.7	1	0.5		
Conch shell litter (clean up)			1	0.7	1	0.5		
Cooperative system / Fish market - needed for selling	2		3	2.1		1.4		
Division of Fish & Wildlife - doing good job!	1	1.8	1	0.7	2	1.0		
Education (workshops, more public information)	2		6	4.1	6	2.9		
Enforcement needed			4	2.8	4	1.9		
Facilities needed - French Town restrooms	1	1.8			1	0.5		
FADs - additional deployments			1	0.7	1	0.5		
Fish sales (can't sell total catch)			1	0.7	1	0.5		
Fishers - too many			5	3.4	5	2.4		
Fishing - illegal harvest			3	2.1	3	1.4		
Frederiksted Ramp and Pier - repairs needed			1	0.7	1	0.5		
Gillnets - ban them			1	0.7	1	0.5		
Jet Skis - need regulations	2	1.8			1	0.5		
Lobster close season needed			2	1.4	2	1.0		
NO COMMENT (*1)	50	91.1	101	69.7	152	73.4		
Overfishing			1	0.7	1	0.5		
Pollution - sewage & rum discharge	1		1	0.7	1	0.5		
Research (more needed)	2	3.6			2	1.0		
Restricted fishing - too many closures	1		9	6.2	9	4.3		
Total # of responses (*2)	62		145		207			
Total # of respondents to question (* 3)	12		46		58			

Table 13. Types of Marine Recreational Businesses Surveyed						
(Marine Recreational Industry Type of Marine Recreational Business						
Type of Francisc Teer envious Business	No.	%	No.	%	No.	%
Charter Fishing Company	8	11.0	9	14.8	17	12.7
Snorkeling Tours	4	5.5	9	14.8	13	9.7
Sport Diving Company	18	24.7	9	14.8	27	20.1
Kayak Rental/Sales/Tours	2	2.7	7	11.5	9	6.7
Fishing/Diving Gear Sales	7	9.6	5	8.2	12	9.0
Marina	4	5.5	5	8.2	9	6.7
Boat Construction/Repair/Storage	3	4.1	4	6.6	7	5.2
Boat Rentals/Charters	12	16.4	4	6.6	16	11.9
Rentals, Other Water Activities	4	5.5	3	4.9	7	5.2
(e.g. windsurfers)						
Research/ Scientific Diving	0	0.0	2	3.3	2	1.5
Recreational Boat Sales	6	8.2	1	1.6	7	5.2
Sailing Club / Sailing, School	1	1.4	1	1.6	2	1.5
U/W Video Productions	0	0.0	1	1.6	1	0.7
Yacht Club	1	1.4	1	1.6	2	1.5
Jet Ski Rentals	2	2.7	0	0.0	2	1.5
Marine Aquaria	1	1.4	0	0.0	1	0.7
Total # of responses*	73		61		134	
Total # of business respondents to question	51		33		84	

^{*}Notes: Some respondents provided multiple responses to this survey question.

Table 14. Marine	Table 14. Marine Recreational Industry Rating of Fishing Resources in USVI Recreational Industry Survey, Question 3)								
	STT/S	STJ	STX		TC	TAL			
	No.	%	No.	%	No.	%			
Poor	5	9.8	8	26.7	13	16.0			
Fair	20	39.2	15	50.0	35	43.2			
Good	21	41.2	6	20.0	27	33.3			
Excellent	5	9.8	1	3.3	6	7.4			
Total	51	100.0	30	100.0	81	100.0			

Table 15. Major Fisheries Problems with Marine Recreational Industry (Marine Recreational Industry Survey, Question 4)							
(Warine Recreational Industry		ey, Que F/STJ		•) ΓΧ	TO	TAL	
Major Issues/Problems	No.	%.	No.	%	No.	%	
Artificial reefs - more needed	2	2.9			2	1.1	
Catch - limited consumers			4	3.4	4	2.1	
Closures not enough)			2	1.7	2	1.1	
Closures (too many)			2	1.7	2	1.1	
Conch - decline in numbers observed	1	1.4			1	0.5	
Conch - regulations needed			2	1.7	2	1.1	
Conservation	1	1.4			1	0.5	
Coral World - harvesting fish in Coki Beach	1	1.4			1	0.5	
Enforcement (lack of patrolling and personnel)	5	7.1	19	16.1	24	12.8	
FADS - additional deployment	1	1.4	1	0.8	2	1.1	
Fishing - at public beaches (e.g. Coki Beach)	4	5.7			4	2.1	
Ghost traps / lost traps	2	2.9	3	2.5	5	2.7	
Gillnet fishing			7	5.9	7	3.7	
Lobster - decline in numbers observed / regs needed	2	2.9	2	1.7	4	2.1	
Lobster - size shift from large to small	1	1.4			1	0.5	
Management - poor management plan	1	1.4	5	4.2	6	3.2	
Marine health (decline in marine life & growth)	1	1.4			1	0.5	
Markets (more needed to sell fish)			3	2.5	3	1.6	
NO COMMENT (*1)	17	24.3	6	5.1	23	12.2	
Over population	1	1.4			1	0.5	
Overfishing	5	7.1	21	17.8	26	14.0	
Pollution			7	5.9	7	3.7	
Pots - too many / regulations needed	8	11.4	10	8.5	18	9.6	
Pots - trapping of small fish	2	2.9	5	4.2	7	3.7	
Restrictions (too many)	1	1.4	11	9.3	12	6.4	
Spear fishing - in swimming areas	1	1.4			1	0.5	
Spearfishing - regulations needed	2	2.9	4	3.4	6	3.2	
Fishing supply store - more needed	1	1.4			1	0.5	
Fish - decline in large reef fish	4	5.7			4	2.1	
B.V.I. customs - difficulty clearing	2	2.9			2	1.1	
Habitat degradation / destruction	1	1.4	1	0.8	2	1.1	
Weather (bad for fishing)	1	1.4			1	0.5	
Longlining	1	1.4	3	2.5	4	2.1	
Marlin - high death rates	1	1.4			1	0.5	
Total # of responses (*2)	70		118		188		
Total # of business respondents to question (*3)	34		27		61		

[&]quot;NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted. 1.

^{2.}

Some respondents provided multiple responses to this survey question. Respondents that answered this question plus "NO COMMENT" respondents equals the 3. total number of registered commercial fishers that filled out the questionnaire.

Table 16. Marine Recreational Industry Suggestions on how to fix Major Fisheries Problems (Marine Recreational Industry Survey, Question 4B)							
		/STJ		ГХ		TAL	
Suggestions	No.	%	No.	%	No.	%	
Artificial reefs - more needed			1	1.1	1	0.7	
B.U.I letter of agreement	1	2.0			1	0.7	
Closures (seasonal/rotate them)	1		5	5.4	6	4.2	
Conservation	1	2.0			1	0.7	
Education (workshops, fliers, public education)	1	2.0	9	9.7	10	7.0	
Enforcement (personnel, funding, patrolling needed)	1	2.0	18	19.4	19	13.3	
FADs - additional deployment			2	2.2	2	1.4	
Fishers - limit number			6	6.5	6	4.2	
Fishing - regulations needed	2	4.0			2	1.4	
Gillnets - ban them			6	6.5	6	4.2	
Longlining - ban it			1	1.1	1	0.7	
Management - needs improving	1	2.0	4	4.3	5	3.5	
Marlin - fishing regulations needed			1	1.1	1	0.7	
Marine Sanctuary - (more needed)	1	2.0	5	5.4	6	4.2	
NO COMMENT (*1)	35	70.0	5	5.4	40	28.0	
Pots - ban them			5	5.4	5	3.5	
Pots - bigger mesh size and fewer pots	3	6.0	1	1.1	4	2.8	
Pots - no pots at dive sites	1	2.0			1	0.7	
Pollution - sewage plants and increased fines			2	2.2	2	1.4	
Regulations (bag limits and size limits needed)	2	4.0	18	19.4	20	14.0	
Scuba - ban fishing			3	3.2	3	2.1	
Spearfishing - ban it			1	1.1	1	0.7	
Total # of responses (*2)	50		93		143		
Total # of business respondents to question (*3)	16		28		44		

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 17. Marine Recreational Industry Rating of Diving/Marine Resources in USVI (Marine Recreational Industry Survey, Question 5)								
	ST	Γ/STJ	S	TX	TO	OTAL		
	No.	%	No.	%	No.	%		
Poor	1	2.0	2	6.0	3	3.6		
Fair	11	22.0	5	15.2	16	19.3		
Good	27	54.0	20	60.6	47	56.6		
Excellent	11	22.0	6	18.2	17	20.5		
Total	50	100.0	33	100.0	83	100.0		

Table 18. Major Diving /Marine Resource Problems with Marine Recreational Industry (Marine Recreational Industry Survey, Question 6)							
		r/STJ	ST		TC	TAL	
Major Issues/Problems	No.	%	No.	%	No.	%	
Education - lacking	2	3.0	3	2.9	5	3.0	
Enforcement (lack of patrolling & personnel)	2	3.0	8	7.8	10	5.9	
Facilities - storage facilities needed			1	1.0	1	0.6	
Fishing - hooks found in mouths of fish	1	1.5			1	0.6	
Fishing - more commercial regulations	2	3.0	2	1.9	4	2.4	
Ghost traps/ lost traps	2	3.0			2	1.2	
Gillnets (too many fishers, kill too many fish)			4	3.9	4	2.4	
Habitat degradation and destruction	8	12.1	13	12.6	21	12.4	
Illegal harvest of marine resources (e.g. conch)	1	1.5	2	1.9	3	1.8	
Jet Skis - ban them	1	1.5			1	0.6	
Management - increase management			2	1.9	2	1.2	
Marine resources - major decline	1	1.5	4	3.9	5	3.0	
Marlin - population decline	1	1.5			1	0.6	
Moorings - additional deployment	8	12.1	7	6.8	15	8.9	
NO COMMENT (*1)	13	19.7	3	2.9	16	9.5	
Overfishing	3	4.5	17	16.5	20	11.8	
Overpopulation	2	3.0			2	1.2	
Pollution (sewage & litter)	9	13.6	36	35.0	45	26.6	
Pots - more regulations	4	6.0	1	1.0	5	3.0	
Reef Fish - population decline	5	7.6			5	3.0	
Marine reserves - more needed	1	1.5			1	0.6	
Total # of responses (*2)	66		103		169		
Total # of business respondents to question (*3)	38		30		68		

- "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted. 1.
- 2.
- Some respondents provided multiple responses to this survey question.

 Respondents that answered this question plus "NO COMMENT" respondents equals the 3. total number of registered commercial fishers that filled out the questionnaire.

Table 19. Marine Recreational Industry Suggestions on how to fix Major Problems with Diving and Marine Resources (Marine Recreational Industry Survey, Question 6B)

Suggestions		STT/STJ		STX		TAL
		%	No.	%	No.	%
Closures - rotate them			4	3.5	4	2.4
Compensate fishers			4	3.5	4	2.4
Cooperationlcommunication amongst fishers			3	2.6	3	1.8
Education (workshops, public, education))	1	2.0	20	17.4	21	12.7
Enforcement (more patrolling & personnel)	1	2.0	25	21.7	26	15.7
Fishing - more commercial regulations	2	3.9	10	8.7	12	7.2
Gillnets - ban them			9	7.8	9	5.4
Management - better planning	1	2.0	6	5.2	7	4.2
Marine reserves - more needed			2	1.7	2	1.2
Moorings - additional deployment	2	3.9	3	2.6	5	3.0
NO COMMENT (*1)	36	70.6	6	5.2	42	25.3
Pollution (sewage plants and control needed)	5	9.8	15	13.0	20	12.0
Pots - ban them			4	3.5	4	2.4
Pots - more regulations	2	3.9			2	1.2
Scuba - ban fishing	1	2.0	2	1.7	3	1.8
Spearfishing - ban fishing			2	1.7	2	1.2
Total # of responses (*2)	51		115		166	
Total # of business respondents to question (*3)	15		27		42	

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 20. Marine Recreational respondents that know about the Fisheries Advisory Committee (Marine Recreational Industry Survey, Question 7)								
D	STT/STJ		S	ГХ	TOTAL			
Response	No.	%	No.	%	No.	%		
Know about the FAC	31	60.8	12	36.4	43	51.2		
Do not know about the FAC	20	39.2	21	63.6	41	48.8		
Would like to participate Would not like to participate	0 43	0.0 100.0	17	51.5 48.5	17 59	22.4 77.6		

Table 21A. Marine Recreational Industry Suggestions for new Boat Ramps and Public Jetties in STT/STJ (Marine Recreational Industry Survey, Question 8)							
Suggestions	STT/S	STJ					
Suggestions	No.	%					
Boat Access - more access needed	1	2.1					
Coki Beach Ramp - repairs needed	1	2.1					
Coral Bay Ramp, St. John - ramp installation needed	2	4.2					
East End, St. Thomas - installation needed	10	20.8					
Frederiksted Ramp and Pier – repairs needed							
Fishing Piers – installation needed	1	2.1					
Maintenance to existing ramps	4	8.3					
Marina on South Shore							
More ramps needed (no specific location)	1	2.1					
NO COMMENT (*1)	28	58.3					
South Shore, St. Croix - ramp installation needed							
Total of responses (*2)	48						
Total # of business respondents to question (*3)	23						

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 21B. Marine Recreational Industry Suggestic		-
Public Jetties in STX (Marine Recreational Indu Suggestions	ST	
	No.	%
Frederiksted Ramp and Pier – repairs needed	2	4.3
Maintenance to existing ramps	17	36.2
Marina on South Shore	2	4.3
More ramps needed (no specific location)	14	29.8
NO COMMENT (*1)	8	17.0
South Shore, St. Croix - ramp installation needed	4	8.5
Total # of responses (*2)	47	
Total # of business respondents to question (*3)	25	

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2. Some respondents provided multiple responses to this survey question.
- 3. Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire.

Table 22. Marine Recreational Industry Responses that would you like to participate in a Workshop about Marine Resources (Marine Recreational Industry Survey, Question 9) STT/STJ STX TOTAL Response **% % %** No. No. No. Yes 28 52 62.7 **56.0** 24 72.7 9 No 22 44.0 27.3 31 37.3

Table 23. Marine Recreational Industry	•			mments	1	
		T/STJ	,	STX	TO	ΓAL,
Comments	No.	%	No.	%	No.	%
Alternative livelihood for fishers			2	1.8	2	1.2
Artificial reefs - more needed	1	1.8			1	0.6
Boat ramp access			2	1.8	2	1.2
Conservation	1	1.8	4	3.6	5	3.0
Conch - illegal harvest	1	1.8			1	0.6
Dive boat moorings - installation needed	2	3.6	1	0.9	3	1.8
Diving industry - decline in industry	1	1.8			1	0.6
Education (workshops, COOP., more info, public			42	38.2	42	25.5
announcements)						
Enforcement - more patrolling	8	14.5	15	13.6	23	13.9
FADS - additional deployment	1	1.8			1	0.6
Fishing regulations - more needed	2	3.6	4	3.6	6	3.6
Gillnets - big problem			1	0.9	1	0.6
Jet Skis - regulate them	1	1.8			1	0.6
Lobster - illegal harvest	1	1.8			1	0.6
Management - better planning			5	4.5	5	3.0
Mangrove pollution - clean up	2	3.6			2	1.2
Marine reserves - more needed	1	1.8	14	12.7	15	9.1
NO COMMENT (*1)	25	45.5	5	4.5	30	18.2
Pollution - great concern of coral die-off	1	1.8	2	1.8	3	1.8
Pots - ban them	1	1.8			1	0.6
Reef degradation	2	3.6	1	0.9	3	1.8
Regulations needed			8	7.2	8	4.8
Research needed			2	1.8	2	1.2
Restrictions - too many			1	0.9	1	0.6
Spear fishing - regulate it		1.8			1	0.6
Swim buoys - installation needed	1	1.8			1	0.6
Thanks for sharing concern	1	1.8			1	0.6
Whelk - illegal harvest	1	1.8			1	0.6
Wildlife conservation			1	0.9	1	0.6
Total # of responses (*2)	55		110		165	
Total # of business respondents to question (*3)	26		28		54	

- 1. "NO COMMENT" includes those questions that were left blank, or the words "no comment", "none", or "not available" were noted.
- 2.
- Some respondents provided multiple responses to this survey question.
 Respondents that answered this question plus "NO COMMENT" respondents equals the total number of registered commercial fishers that filled out the questionnaire. 3.

APPENDIX A. Lis	st of St. Thomas/St. John Marine Recreational l Approached to Participate in this Survey	Industry Co	mpanies
Name	Address	Phone (340)	Business Type (*1)
Abigale II	6501 Red Hook Plaza # Suite 72, St. Thomas, VI 00802	775-6147	FC
Admiralty Dive Center	PO Box 307065, St. Thomas, VI 00802	777-9802	DC
	17 E. Estate Enighed, St. John, VI 00831	693-8000	SC
American Yacht Harbor	American Yacht Harbor, Red Hook Qrt. # 2, St. Thomas, VI 00802	775-6454	M
Aqua Action	6501 Red Hook, Plaza # 2, St. Thomas, VI 00802	775-6285	DC
Atlantis Submarine	8168 Sub base # 4 Crown Bay Marina, St. Thomas, VI 00802	776-9552	О
Awesome Powerboat Rentals	6186 Frydenhoj, St. Thomas, VI 00802	775-0860	BR
Barefoot Divers	PO Box 9438, St. Thomas, VI 00801	775-2038	DC
Bite Me Charters	No business address	693-5823	FC
Blue Island Divers	Suite 505 Crown Bay Marina Sub Base, St, Thomas, VI 00802	774-2001	DC
Bluefin	6538 Estate Nazareth, St. Thomas, VI 00802	775-6691	FC
BOB's	6501 Red Hook Plaza # 201, St. Thomas, VI 00802	775-0348	DC
Budget Marine	PO Box 7937, St. Thomas, VI 00801	774-2667	M
Caribbean Parasail	PO Box Red Hook Plaza # 201, St. Thomas, VI 00802	775-9360	О
Chris Sawyer Diving Center	6300 Estate Frydenhoj, St. Thomas, VI 00802	777-7804	DC
Coki Beach Dive Club	PO Box 502096, St. Thomas, VI 00805	775-4220	DC
Compass Point Marina	6300 Estate Frydenhoj # 22, St. Thomas, VI 00802	779-1660	M
Coral World	6450 Estate Smith Bay, St. Thomas, VI 00802	775-1555	О
Crown Bay Marina	Siute 528 Parcel 8168 Sub base, St. Thomas, VI 00802	774-6082	M
Cruz Bay Watersports	PO Box 2520, St. John, VI 00831	776-234	О
Dave's Diesel Service	6300 Estate Frydenhoj # 22, St. Thomas, VI 00802	775-9912	M
Dive In	PO Box 503180, St. Thomas, VI 00805	775-6100	DC
Dive World	PO Box 12140, St. Thomas, VI 00801	775-5971	DC

`	inued). List of St. Thomas/St. John Marine Re npanies Approached to Participate in this Sur		ndustry
Name	Address	Phone (340)	Business Type (*l)
Double Header	6501 Red Hook Plaza PMB 221, St. Thomas, VI 00802	77-77317	FC
Fin Stalker (*2)	6624 Estate Nazareth, St. Thomas, USVI 00802	775-9982	FC
Fish Hawk	6935 Vessup 9A-19, St. Thomas, VI 00802	775-9058	FC
Gone Ketchin	PO Box 1492, St. John, VI 00831	714-1175	FC
HI-TEC Divers	PO Box 2180, St. Thomas, VI 00803	774-1350	DC
Independent Boat Yard	6249 Estate Frydenhoj, St. Thomas, VI 00802	776-0466	M
Island Marine Supply	12 Crown Bay, St. Thomas, VI 00802	776-0753	M
Lady Carol	PO Box 502356, St. Thomas, VI 00805	775-4645	FC
Liquid Adrenaline Divers	PO Box 9438, St. Thomas, VI 00801	775-2038	DC
Low Key Watersports	PO Box 7164, St. John, USVI 00803	693-8999	О
Marlin Prince	American Yacht Harbor 6100 Red Hook Quarters # 2 St. Thomas, VI 00802	693-5929	FC
Nauti Nymph	6501 Red Hook Plaza # 201, St. Thomas, VI 00802	775-5066	BR
Neptune Fishing Supplies	American Yacht Harbor Red Hook Plaza # 7, Qut. St. Thomas, VI 00802	775-0115	FG
Noah's Little Ark Dingy Rental (*2)	PO Box 1646, St. John, VI 00830	693-9030	BR
Ocean Runner	PO Box 141, St. John, VI 00831	693-8809	BR
Offshore Marine	162 Sub base, St. Thomas, VI 00802	776-5432	BS
Paradise Watersports	Caneel Bay, St. John	779-4999	BR
Patagon Divers	PO Box 10894, St. Thomas, VI 00801	775-333	DC
Perfections Rentals	PO Box 2968 Veterans Drive, St. Thomas, VI 00803	775-5447	0
Power Distributors Inc.	14 Sub base, St. Thomas, VI 00802	774-8780	M
Prowler	6501 Red Hook Plaza #201 PMB 185, St. Thomas, 00802	779-2515	FC
Sea Trek	6450 Estate Smith Bay, St. Thomas, VI 00802	775-1555	DC
See & Ski	6501 Red Hook Plaza PMB 201, St. Thomas, VI 00802	775-6265	FC
St. Thomas Diving Club	7147 Bolongo Bay, St. Thomas, VI 00802	776-2381	DC

APPENDIX A (continued). List of St. Thomas/St. John Marine Recreation	al Industry (Companies
Name	Approached to Participate in this Survey Address	Phone (340)	Business Type (*1)
Tropical Marine	674 7 Estate Nadir, St. Thomas, VI 00802	714-4189	M
Underwater Safari	5300 Long Bay Road, St. Thomas, VI 00802	774-1350	DC
V.I. Watersports	6415 Estate Nadir # 10, St. Thomas, VI 00802	776-0899	JS
VI Ecotours	#2 Nadir	779-2155	KR
Waters Edge Sports	6501 Red Hook Plaza # 201 PMB 536, St. Thomas, VI 00802	771-7356	BR/BC
Woods Guide Service	PO Box 37, St. John, VI 00831	776-5468	FC
World Class (*2)	St. John, USVI 00831	779-4281	FC

- 1. Fishing Charter (FC), Fishing Gear (FG), Boat Rental/Boat Charter (BR/BC), Boat Sales (BS), Dive Company (DC), Kayak Rental (KR), Yacht Club (TC), Sailing Club (SC), Boat Construction (BC), Marina (M), Jet Ski (JS), Other (O).
- 2. Marine recreational businesses that did not complete the questionnaire due to the business being closed, unavailable, or out of business.

APPENDIX B. List of St. Croix Marine Recreational Industry Companies Approached to Participate in this Survey Name Address Phone **Business** (340)**Type (*1)** Adventures Over The 442 Strand Street 772-0505 DC Edge (*2) Annapolis Sailing School 31-E King Cross Street, St. Croix, USVI 773-4709 SC Anchor Dive. P.O. Box 5588 Sunny Isle, 00823 778-1522 DC Salt River Beach Shack 5001 Tamarind Reef, Christiansted, St. 773-4455 KR Croix, USVI 00820-4230 Big Beard's Adventure P.O. Box 224534, Christiansted, 773-4482 BR U.S.V.I 00822 **Tours** Belinda Charters (*2) N/A N/A BR/BC Bryan's Marine Service 713-0544 180 Upper Love, Frederiksted, St. BCCroix, USVI 00850 P.O. Box 4510, Kingshill, St. Croix, Cane Bay Dive Shop 773-9913 DC U.S.V.I. 00851 Captain Pete's P.O. Box 222877, Christiansted, 773-1123 FC U.S.V.I. 00822 Sportfishing Caribbean Adventure P.O. Box 5302 Kingshill, St. Croix, VI 773-4599 KR Tours 00851 Green Cav FC Catch 22 (*2) 778-6987 Chenay Bay Beach Resort, P.O. Box Chenay Bay Beach 773-2918 KR 24600 GBS, Christiansted, VI 00824 Watersports Cruzan Divers 7721852 DC Christiansted **Diva Charters** Green Cay 778-4675 BR Dive Experience P.O. Box 4254, Christiansted, St. Croix, 773-3307 DC VI 00822-4254 Fish Tale (*2) N/A FC Christiansted Gold Coast Yachts Salt River 778-1004 BC Green Cay Marina 773-1453 Green Cav M J & T Enterprises (*2) King Street, Frederiksted 772-3178 FG Leisure Lady Green Cay 778-5738 BR FC Lisa Ann Charters Green Cay 773-3712 Yacht Club 773-9027 Llewellyn's Charter BR 59 Kings Wharf, Christiansted, U.S.V.I. Mile Mark Charters 773-0754 00820

Name	Address	Phone	Business
		(340)	Type (*1)
Mocko Jumbie	Christiansted	771-6244	FC
Outboards Only	Calquohon	772-0300	FG
Poolworks	St. Croix Marine Inc.	773-5225	FG
Salt River Marina	Salt River	778-9650	M
SCORE/VI Divers (*2)	36A Strand Street	773-6045	DC
SCUBA	14 Caravelle Arcade, Christiansted, St. Croix, VI 00820	773-5994	DC
Scuba Shack	PO Box 3221, Frederiksted, VI 00841- 3221	772-DIVE	DC
SCUBAWEST	330 Strand Street, Frederiksted, St. Croix,	772-3701	DC
Shabeen (*2)	Green Cay	773-7185	BR/BC
St. Croix Aquarium (*2)	Caravelle Arcade	773-8995	О
St. Croix Marine	P.O. Box 24730, Gallows Bay, St. Croix VI 00824	773-0289	BS
St. Croix Watersports (*2)	Protestant Cay	773-7060	О
St. Croix Yacht Club	Teague Bay	773-9531	YC
Tarponshark VI Divers (*2)	Christiansted	N/A	DC
TERORO II	Box 25273 GBS, St. Croix, VI 00824	773-3161	BR
UnderSee Productions	Cane Garden Bay	778-5057	О
United Sporting Goods	Christiansted	773-0761	FG
Up and Under Charters	161 Estate Smithfield Frederiksted, VI 00840	513-4797	FC
Virgin Kayak Co.	4696 Kingshill, St. Croix, USVI 00851	778-0071	KR
Watersport @ Divi Carina Bay	25 Estate Turner Hole, Christiansted, St. Croix, USVI 00820	773-6808	О

- 1. Fishing Charter (FC), Fishing Gear (FG), Boat Rental/Boat Charter (BR/BC), Boat Sales (BS), Dive Company (DC), Kayak Rental (KR), Yacht Club (TC), Sailing Club (SC), Boat Construction (BC), Marina (M), Jet Ski (JS), Other (O).
- 2. Marine recreational businesses that did not complete the questionnaire due to the business being closed, unavailable, or out of business.

Appendix C.

COMMERCIAL FISHERMEN'S OPINION SURVEY JULY 2002

The Division of Fish & Wildlife is asking for your opinions regarding fisheries and marine resources issues in the U.S, Virgin Islands. Please take a moment and answer this questionnaire. Your responses will be compiled together and will provide DFW with insight into the priorities and problems identified by you the fisherman. This will assist DFW in designing projects to address priority issues,

1.	What island do you fish from?	ST. THON	MAS ST. JOHN ST. CF	ROIX	
2.	What type of fishing do you do?	TRAP	HOOK & LINE	DIVING	NET
3.	Do you fish:	FULL TIN	ME? PART TIME?	OCCASIO	NAL?
4.	How would you rate fishing condi EXCELLENT	tions in the	U.S. Virgin Islands? PO	OOR FAIR GO	OOD
5.	What are the major fisheries problem	ns that you s	ee?		
6.	What can be done to fix these prol	olems?			
7.	What are the priority areas for ma	rine resource	es that need to be addre	essed?	
8.	Do you know about the Fisheries A FAC sheet). Would you be interested to YES (please print your name	volunteer to	be on the Fisheries Ad	-	
9.	Would you be willing to have your and Wildlife staff? The information YES (please print your name	you will pro	ovide is strictly confide	ntial.	h NO
10.	How do you feel about the current NO COMMENT	moratorium DON'T Al		ercial fishing l ROVE	icenses?
11.	Do you have any suggestions for no	ew boat ram	os and public jetties?		
12.	Would you like a workshop to lear	n about fishi	ng rules and regulation	s? YES N	O
13.	Do you have any additional commo	ents?			

Appendix D.

MARINE RECREATIONAL INDUSTRY OPINION SURVEY **AUGUST 2002**

The Division of Fish & Wildlife is asking for your opinions regarding fisheries and marine resources issues in the U.S. Virgin Islands. Please take a moment and answer this questionnaire. Your responses are confidential. They will be compiled together and will provide DFW with insight into the priorities and problems identified by you, the marine recreational industry. This will assist DFW in designing projects to address priority issues.

On what island are you based	on? ST. THOMAS	ST. JOHN	ST. CROIX
What type of marine recreation Sport Diving Company Charter Fishing Company Recreational Boat Sales	onal business are you Jet Ski Rentals Boat Rentals Marina Other (specify):	involved in? Yacht Club Sailing Club Boat construction	Fishing Gear Sales Kayak Rentals/Sales
How would you/your custom POOR	ners rate fishing resour FAIR GOOD	_	
What are the major fisheries	problems that you/you	ur customers see? He	ow can they be fixed?
How would you/your custom	ers rate the diving/ma	rine resource condit	ions in the U.S. Virgin
How would you/your custom Islands? POOF What are the major diving/mar fixed?	R FAIR	GOOD EXC	CELLENT
Islands? POOF What are the major diving/man fixed? Do you know about the Fishe Would you be interested to you	rine resource problems eries Advisory Comm	that you/your custon ittee? YES NO (Pleatisheries Advisory Co	CELLENT mers see? How can they be ase take the FAC sheet).
Islands? POOF What are the major diving/man fixed? Do you know about the Fishe Would you be interested to vo YES (please pr	rine resource problems eries Advisory Comm blunteer to be on the F rint your name/contact	that you/your custon ittee? YES NO (Pleatisheries Advisory Cat number:	CELLENT mers see? How can they be ase take the FAC sheet).
Islands? POOF What are the major diving/man fixed? Do you know about the Fishe Would you be interested to vo YES (please pr NO	eries Advisory Commolunteer to be on the Frint your name/contacts for new boat ramps and a workshop to learn	that you/your custon ittee? YES NO (Pleatisheries Advisory Cat number: and public jetties?	mers see? How can they be ase take the FAC sheet).