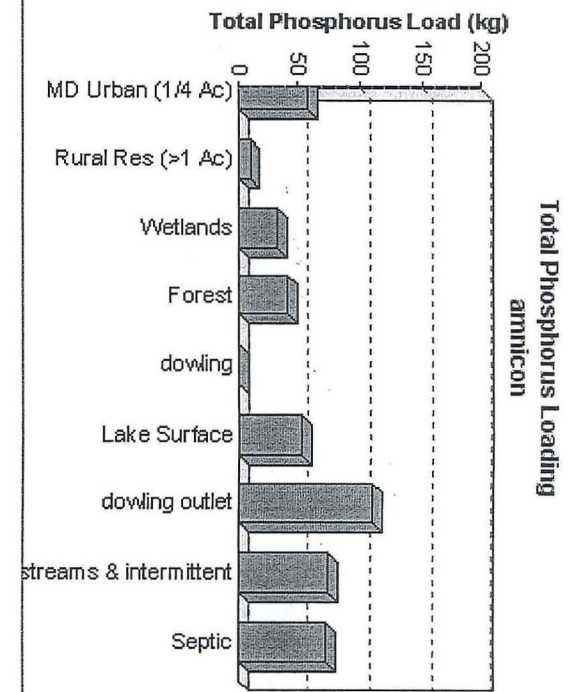
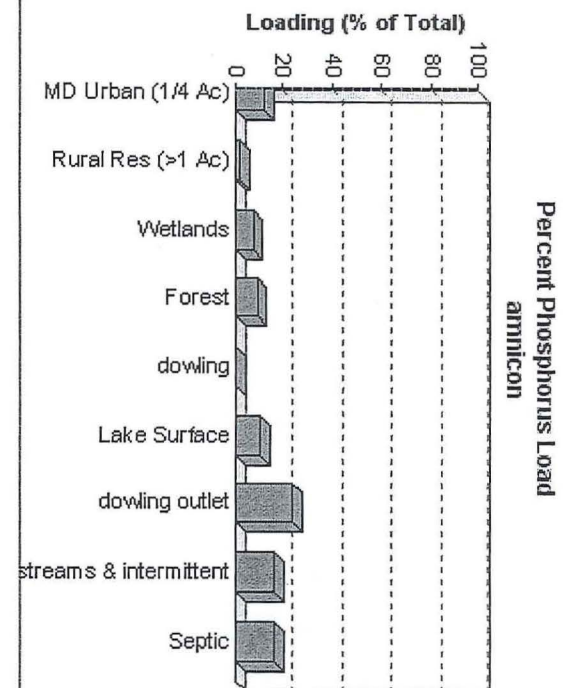


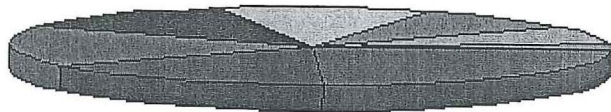
Appendix 1

Amnicon Loading Sources and Totals

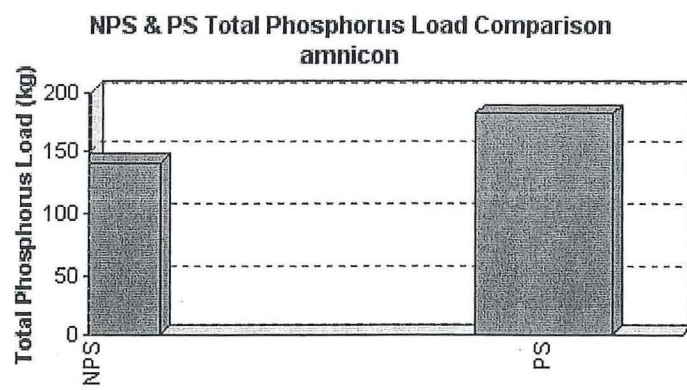




**Percent Phosphorus Load
amnicon**



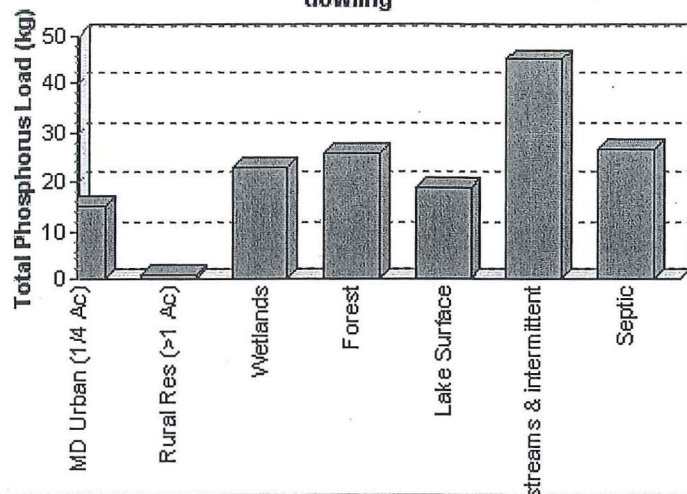
0	dowling
2.3	Rural Res (>1 Ac)
7.2	Wetlands
9.1	Forest
11.5	Lake Surface
12.9	MD Urban (1/4 Ac)
16.2	Septic
16.3	streams & intermittent
24.4	dowling outlet

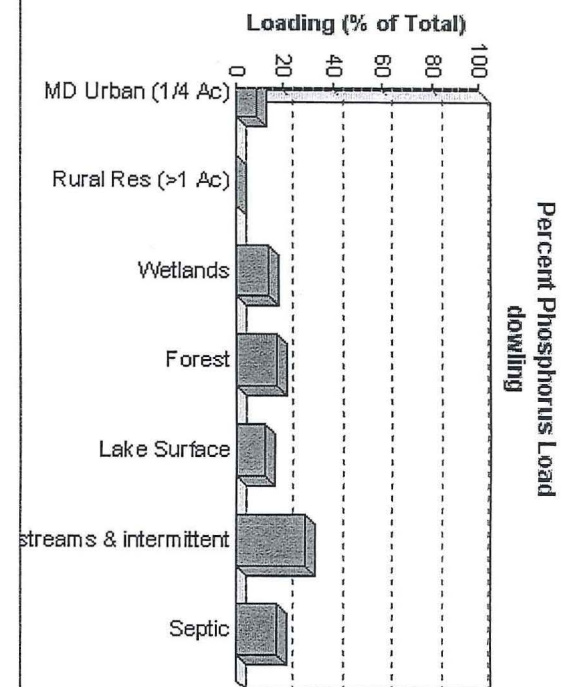


Appendix 2

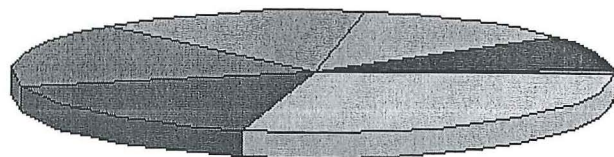
Dowling Loading Sources and Totals

**Total Phosphorus Loading
dowling**

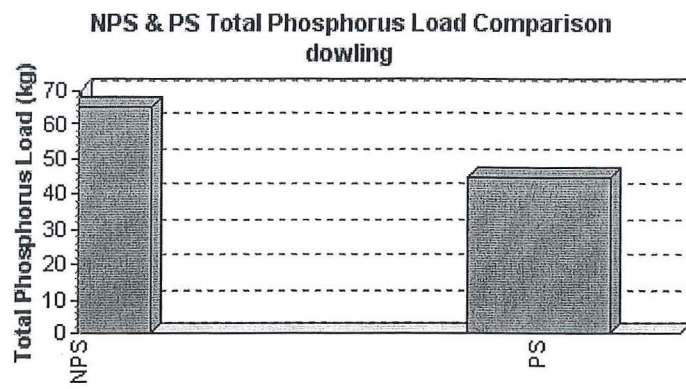




**Percent Phosphorus Load
dowling**



0.8 Rural Res (>1 Ac)
9.5 MD Urban (1/4 Ac)
12 Lake Surface
14.7 Wetlands
17 Forest
17.1 Septic
29 streams & intermittent

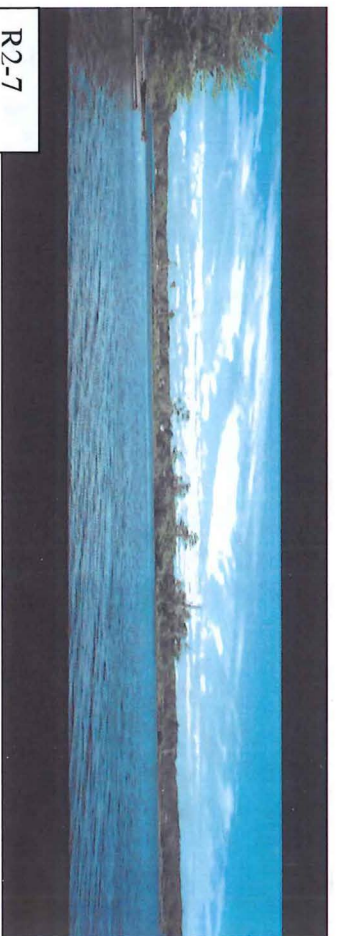


Appendix 3

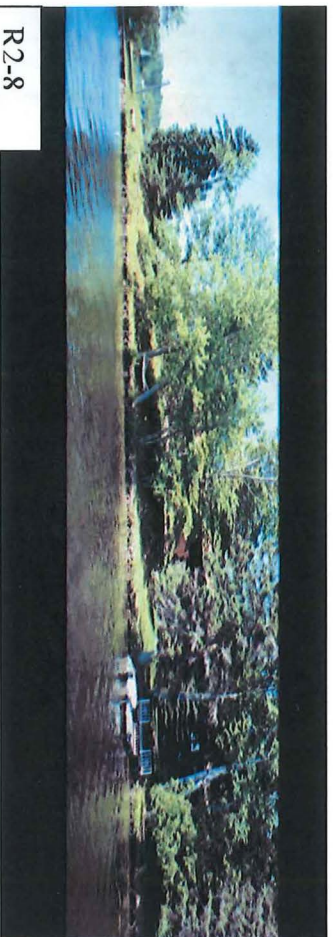
Shoreland Inventory Photographs



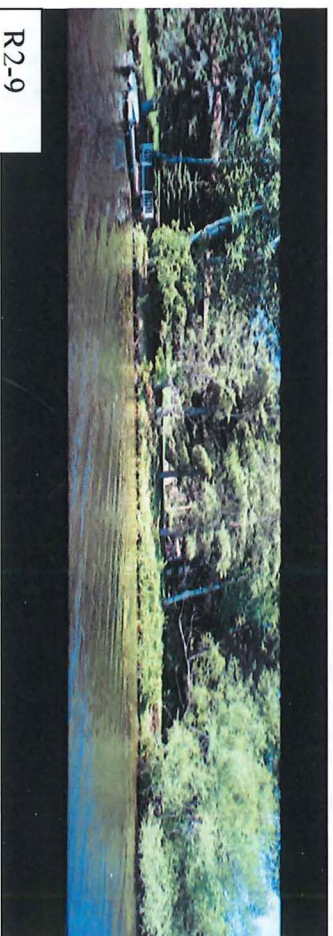
R2-6



R2-7



R2-8



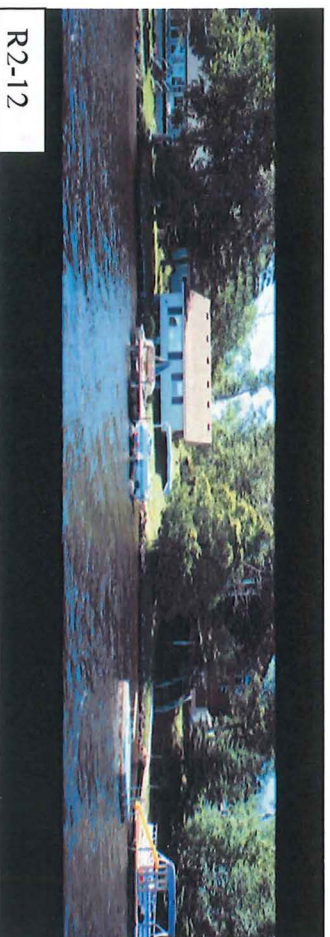
R2-9



R2-10



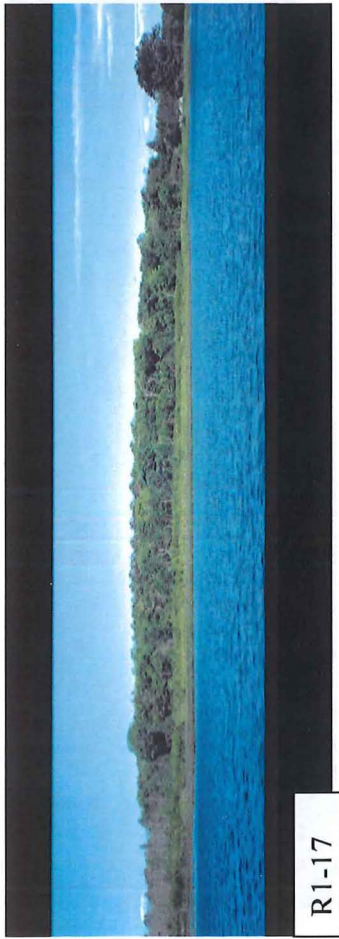
R2-11



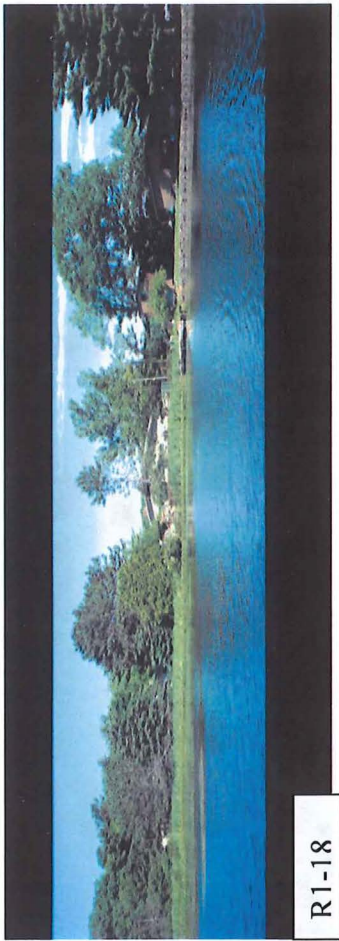
R2-12



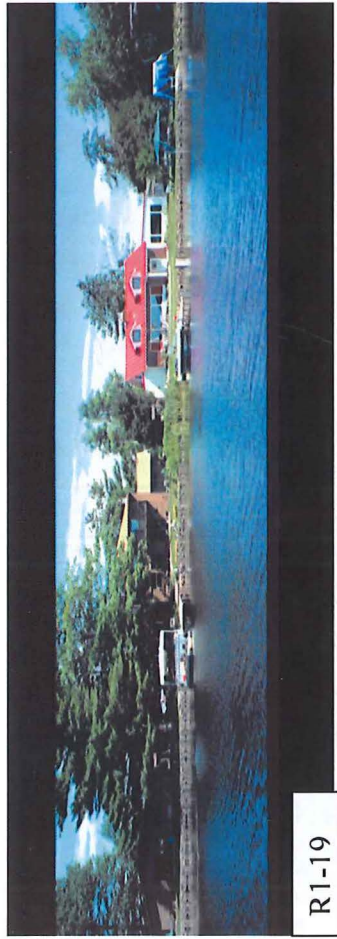
R2-13



R1-17



R1-18



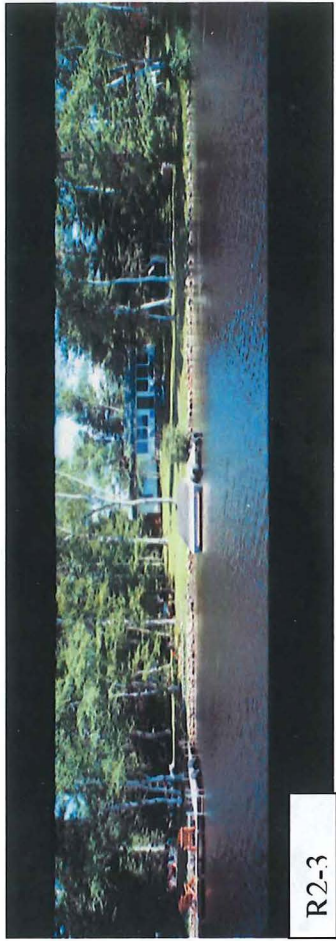
R1-19



R2-1



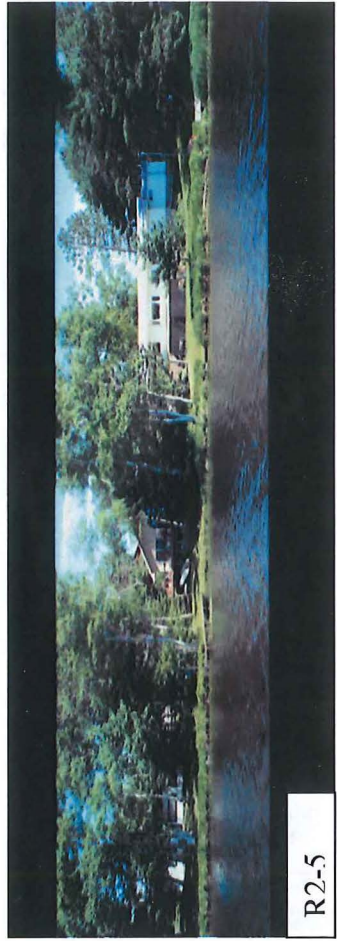
R2-2



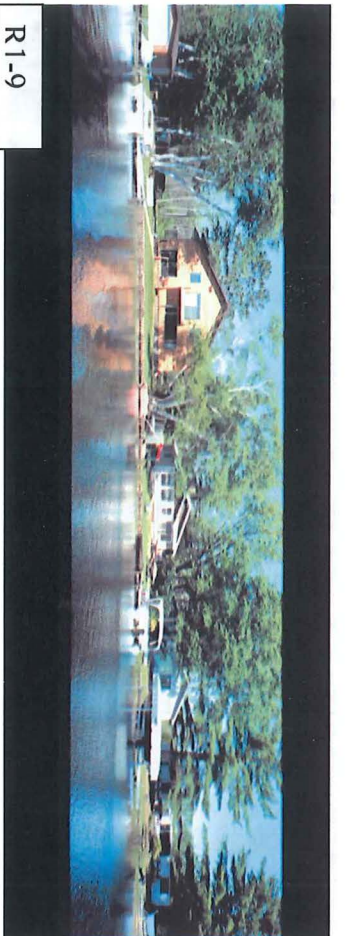
R2-3



R2-4



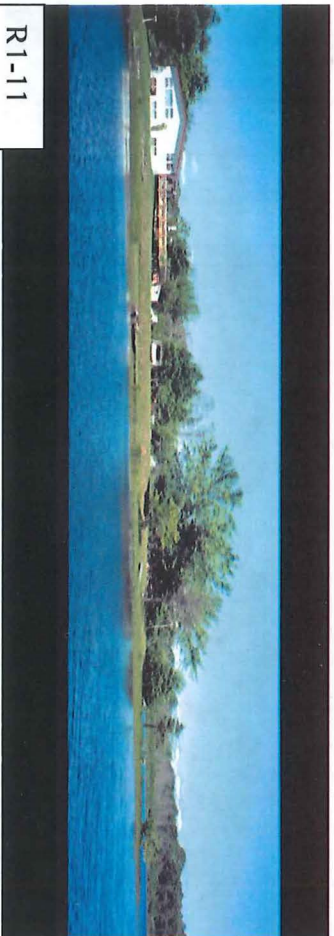
R2-5



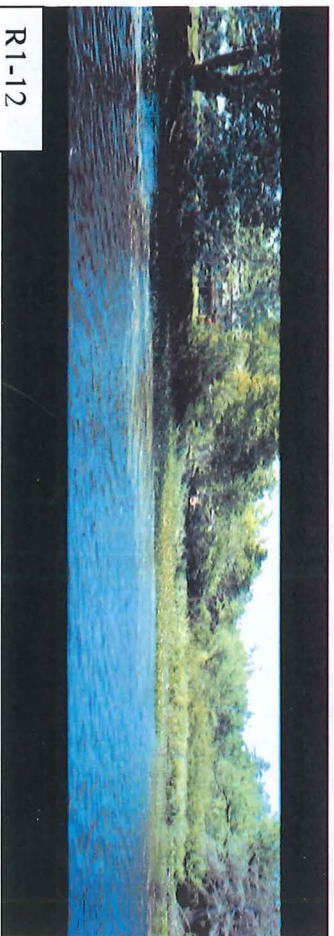
R1-9



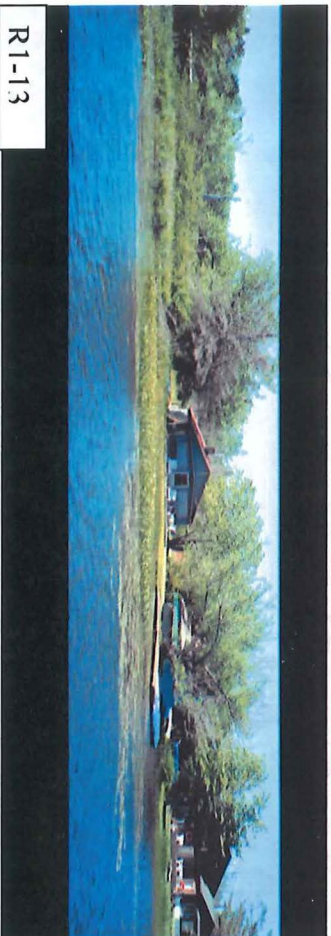
R1-10



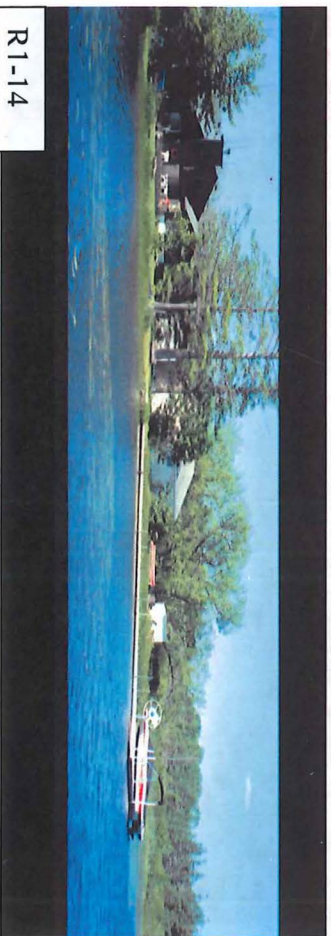
R1-11



R1-12



R1-13



R1-14

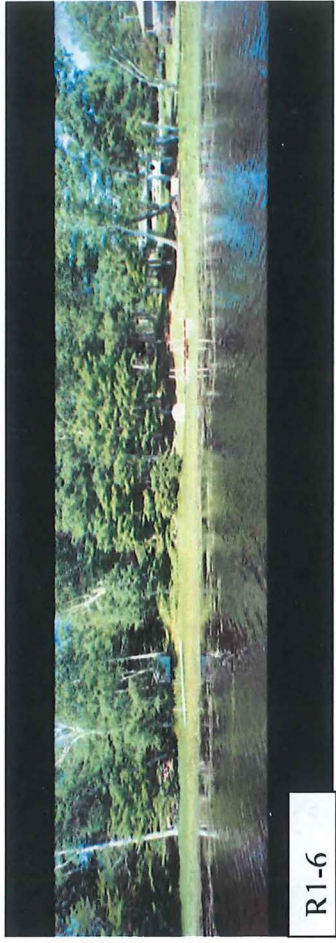
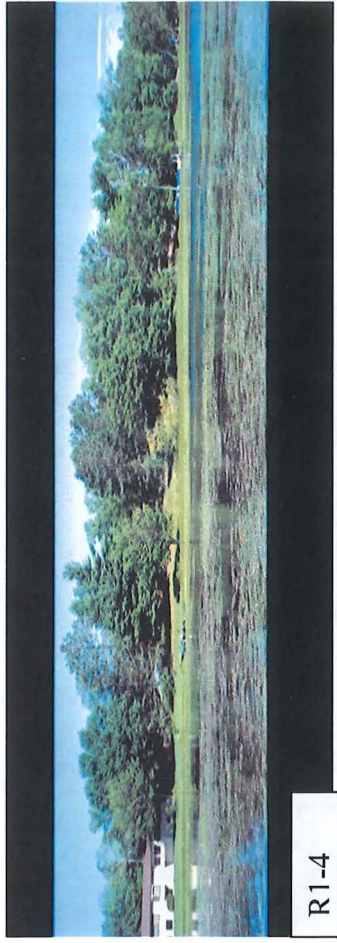
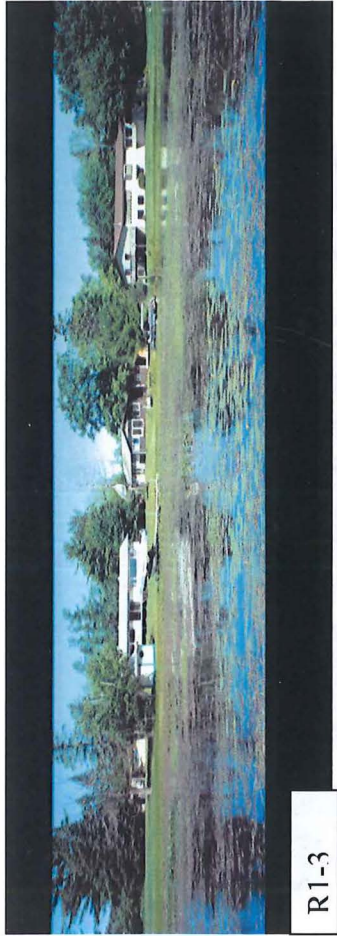
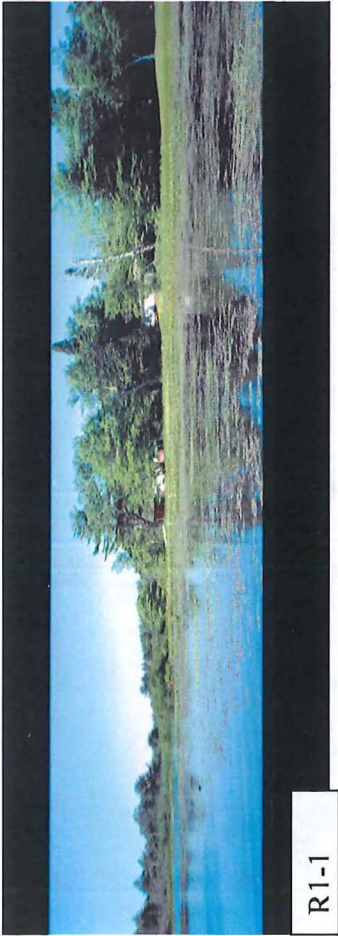


R1-15



R1-16

Amnicon Lake = R1-X





R2-14



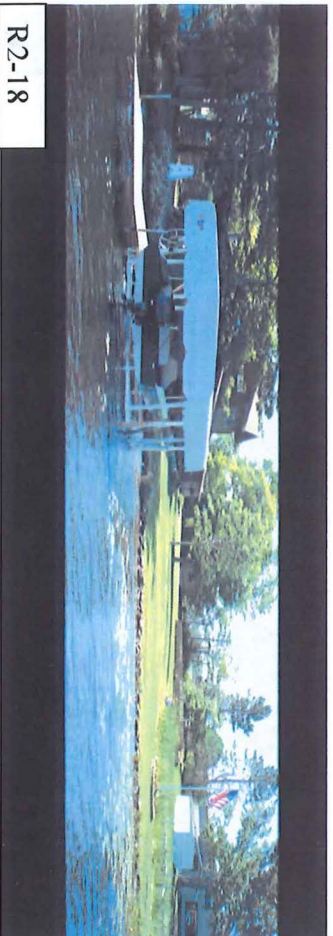
R2-15



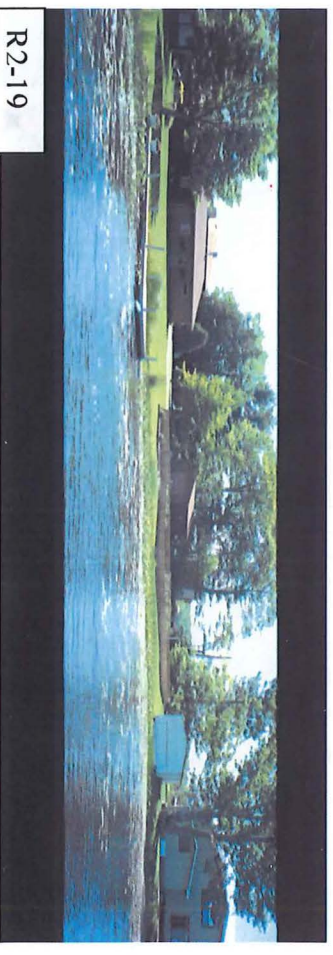
R2-16



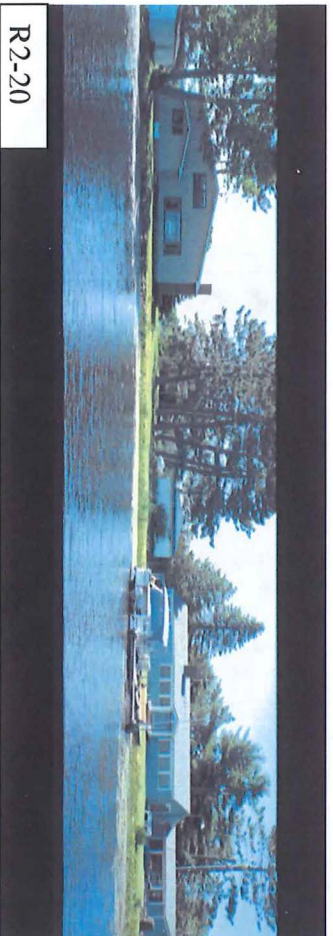
R2-17



R2-18



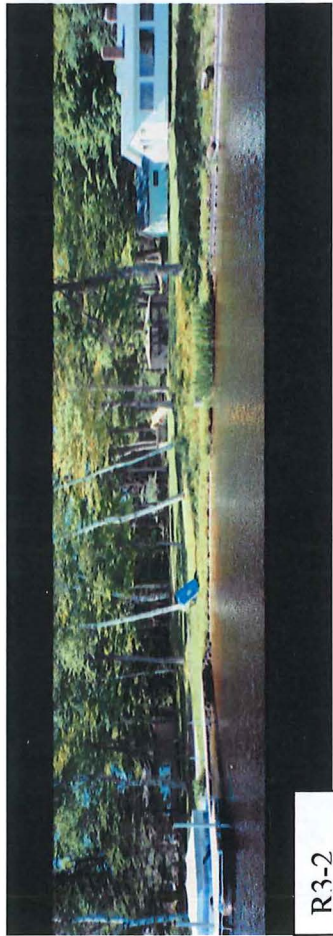
R2-19



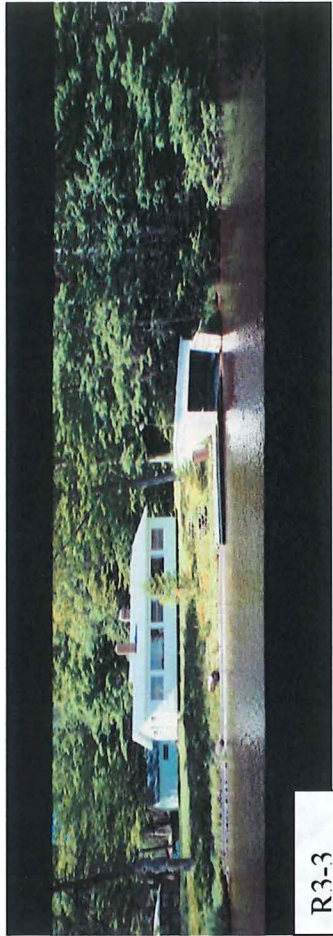
R2-20



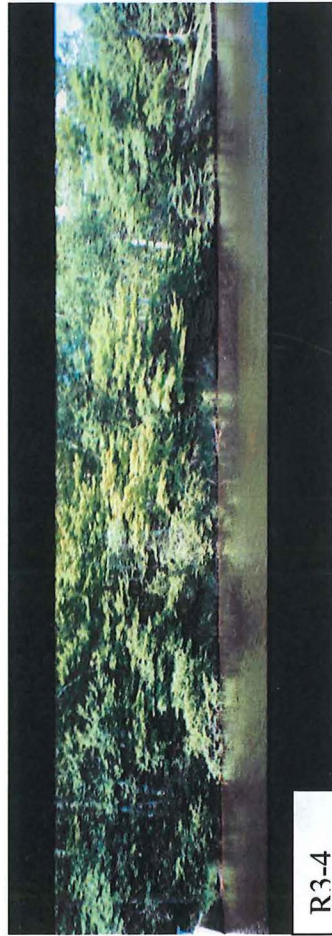
R3-1



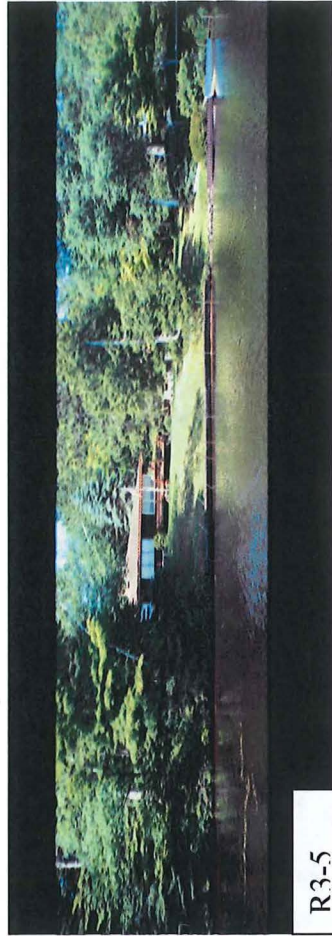
R3-2



R3-3



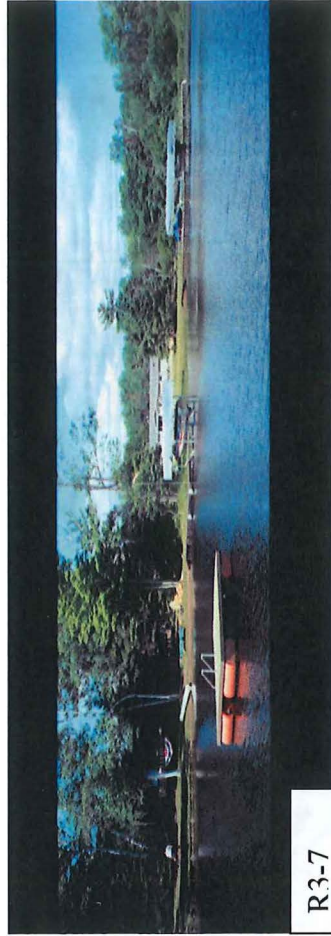
R3-4



R3-5



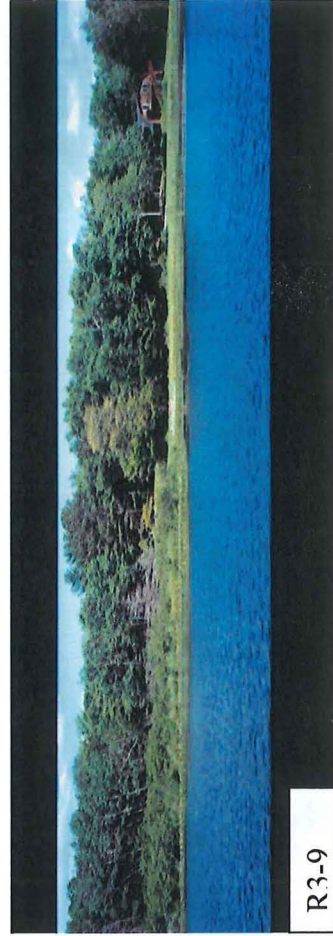
R3-6



R3-7



R3-8



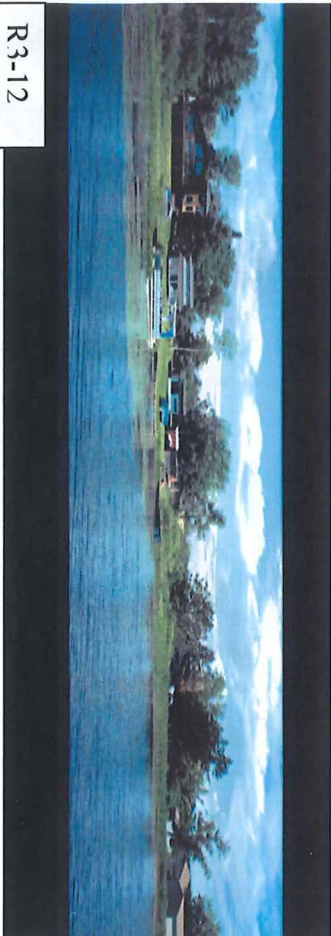
R3-9



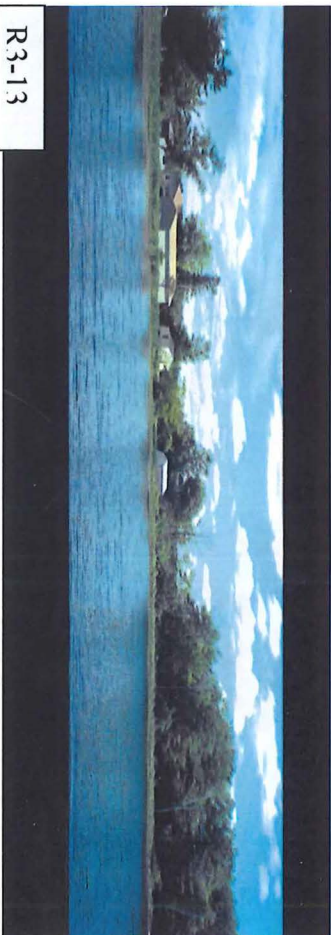
R3-10



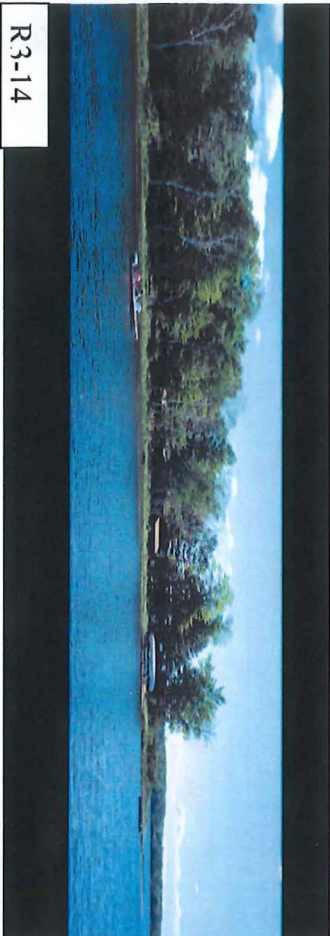
R3-11



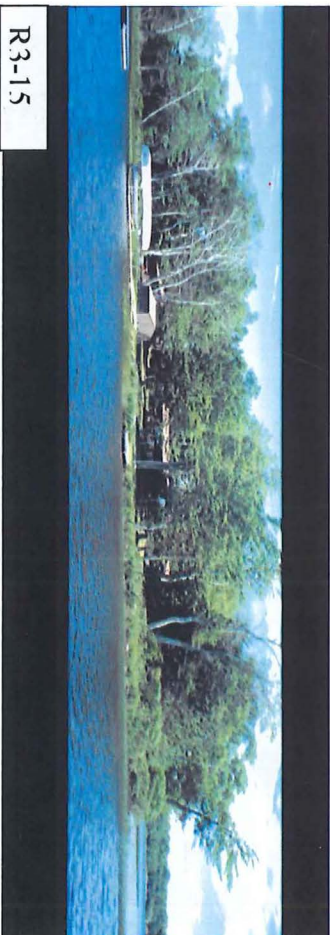
R3-12



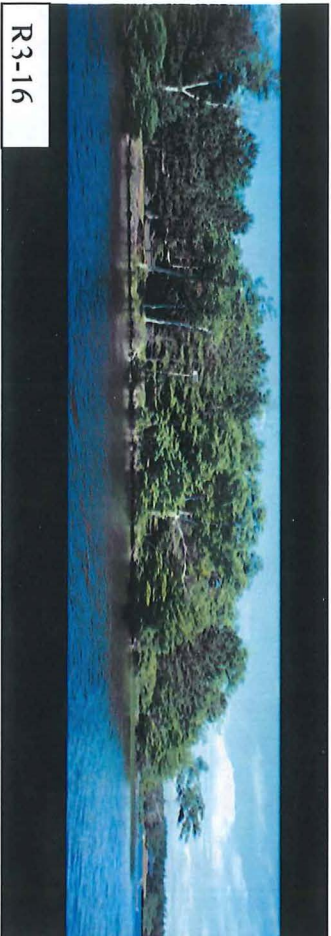
R3-13



R3-14



R3-15



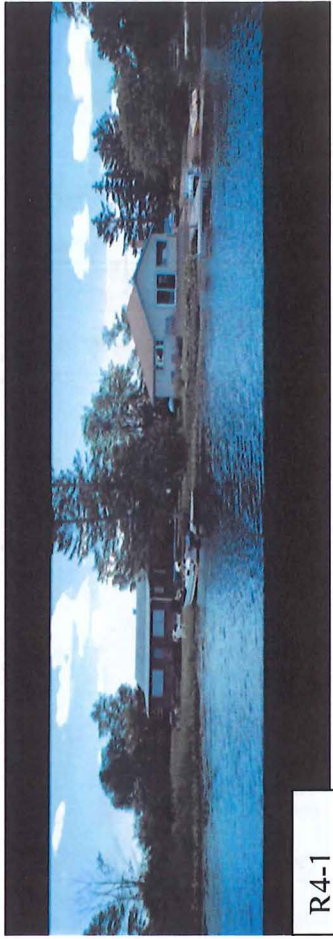
R3-16



R3-17



R3-18



R4-1



R4-2



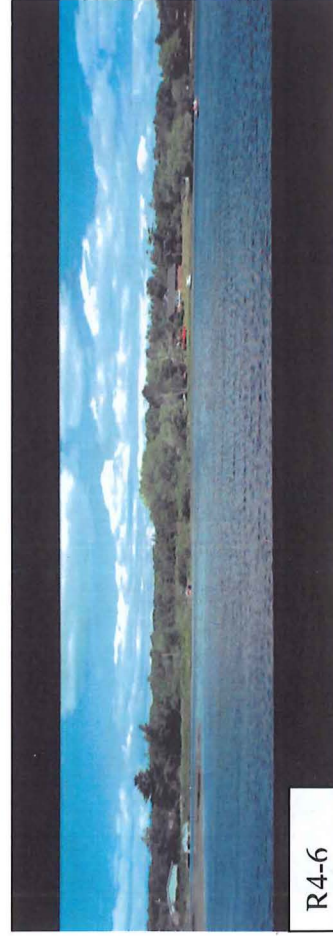
R4-3



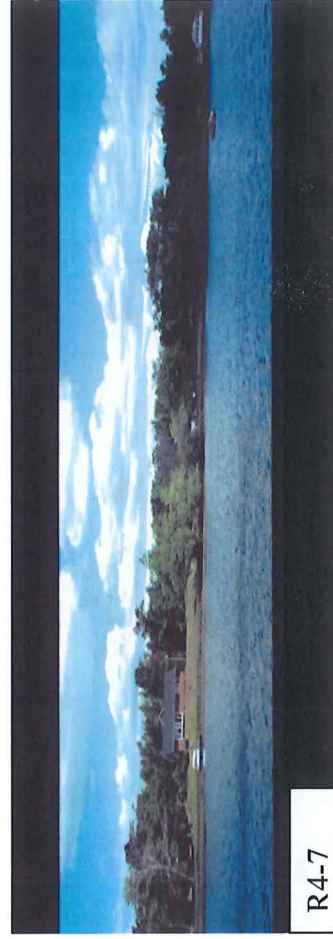
R4-4



R4-5



R4-6



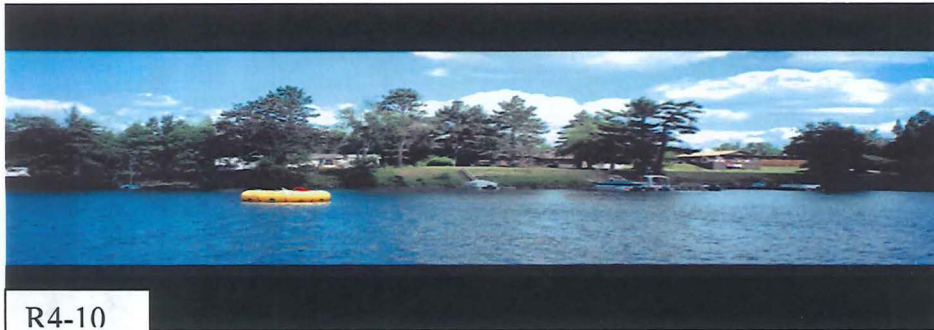
R4-7



R4-8



R4-9



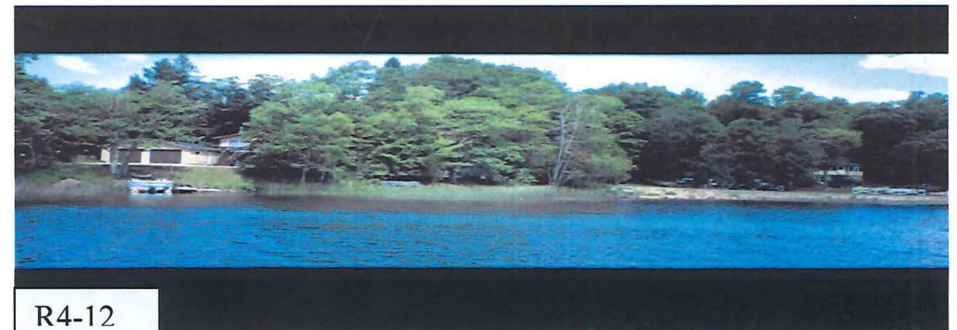
R4-10



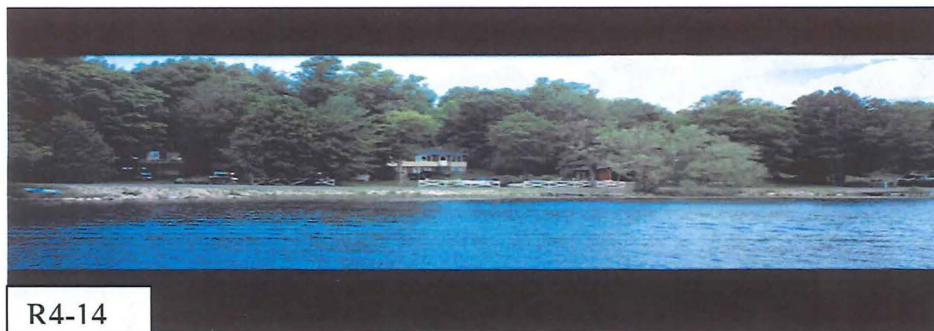
R4-11



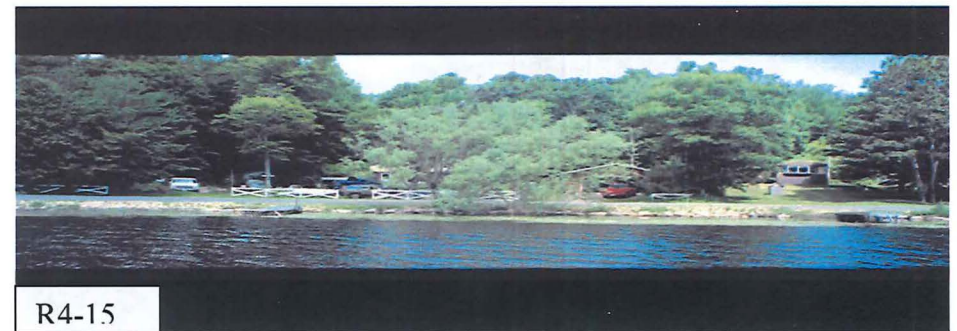
R4-12



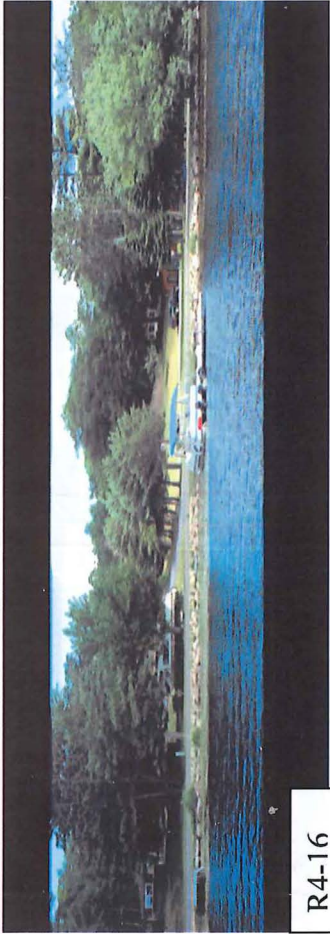
R4-12



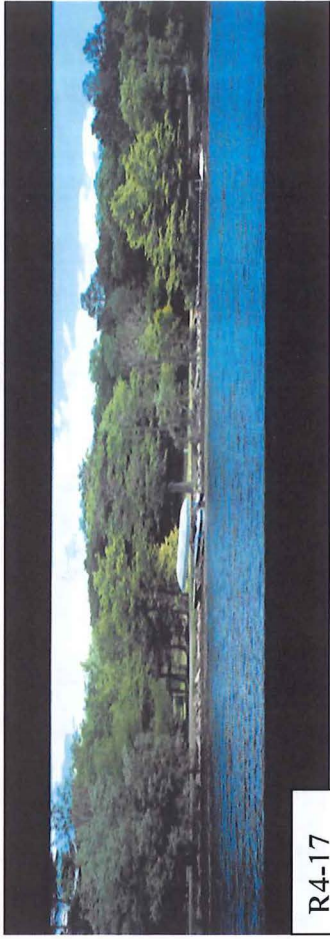
R4-14



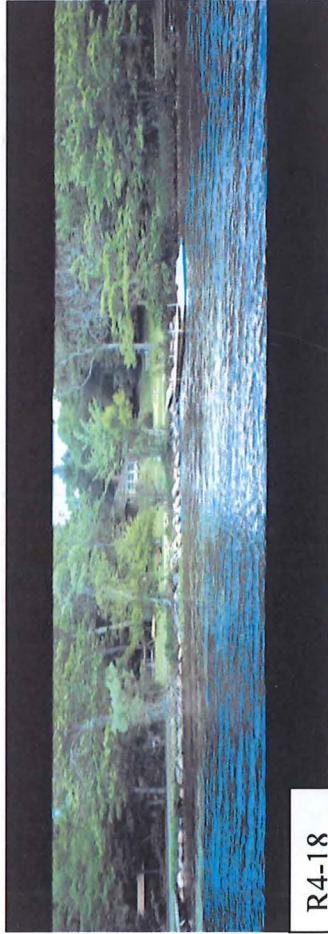
R4-15



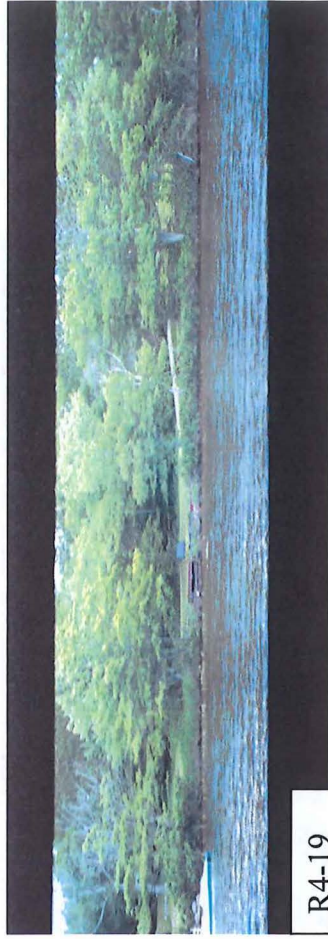
R4-16



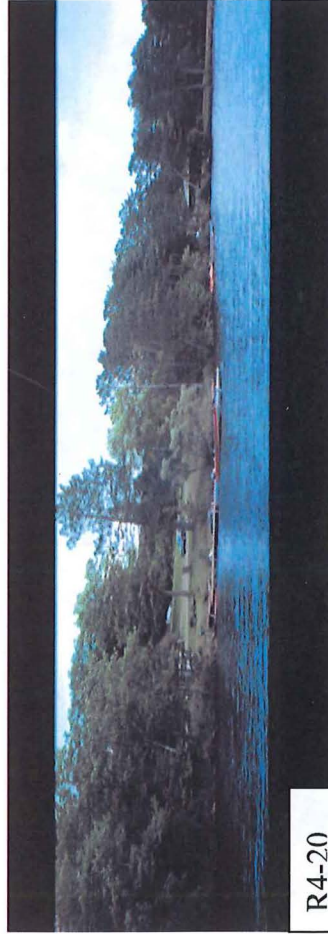
R4-17



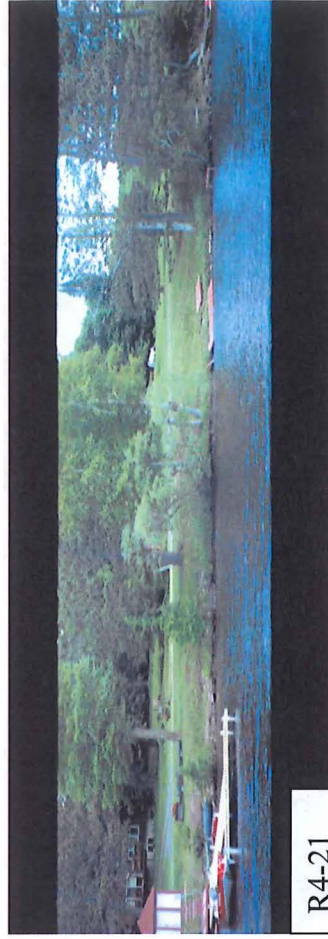
R4-18



R4-19



R4-20



R4-21



R4-22



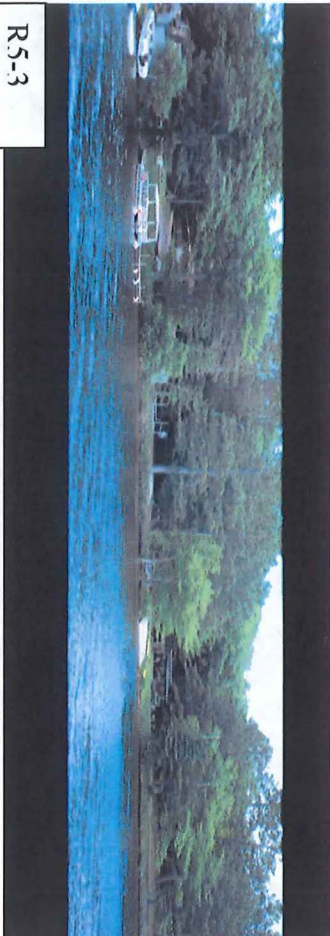
R4-23



R5-1



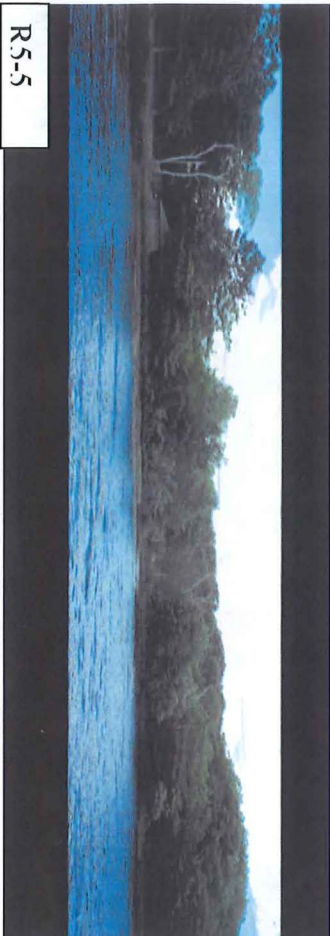
R5-2



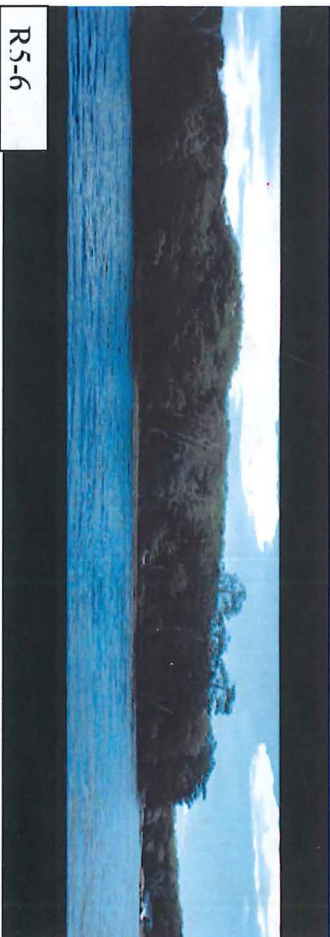
R5-3



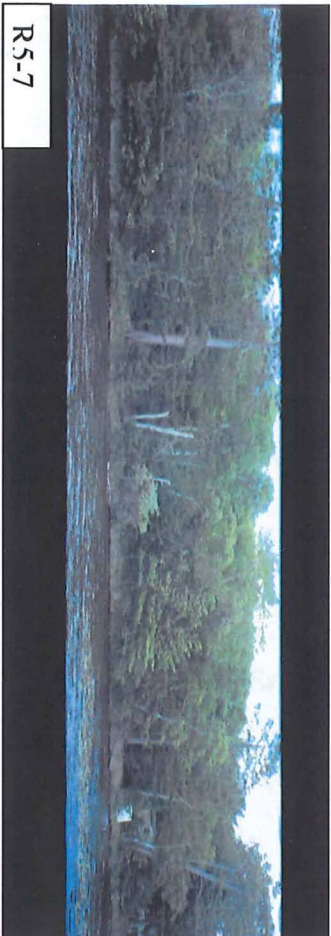
R5-4



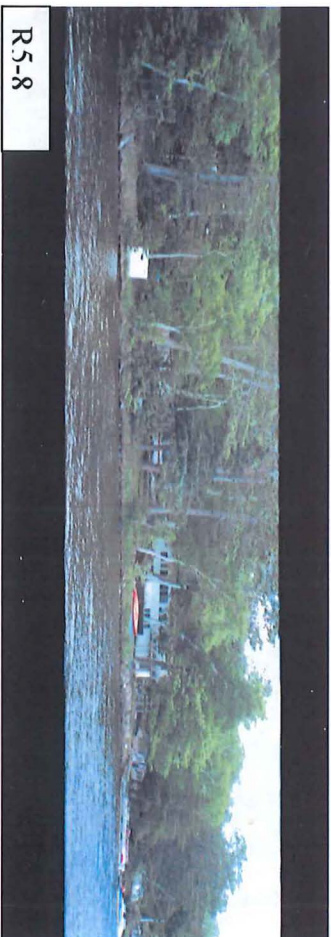
R5-5



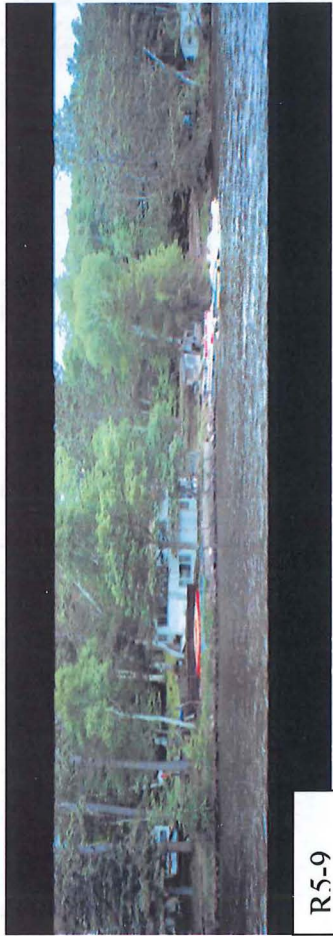
R5-6



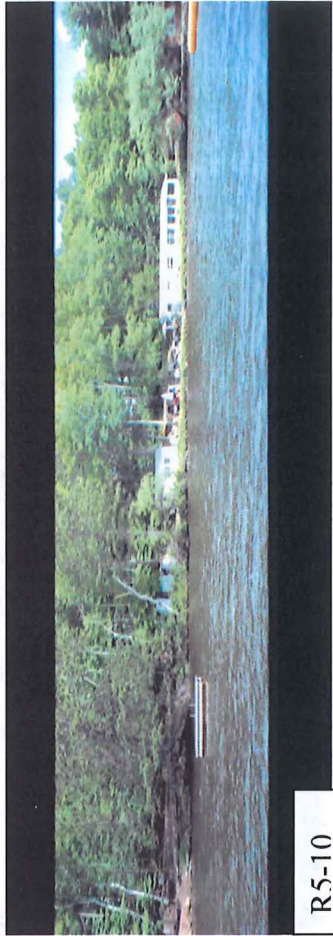
R5-7



R5-8



R5-9



R5-10



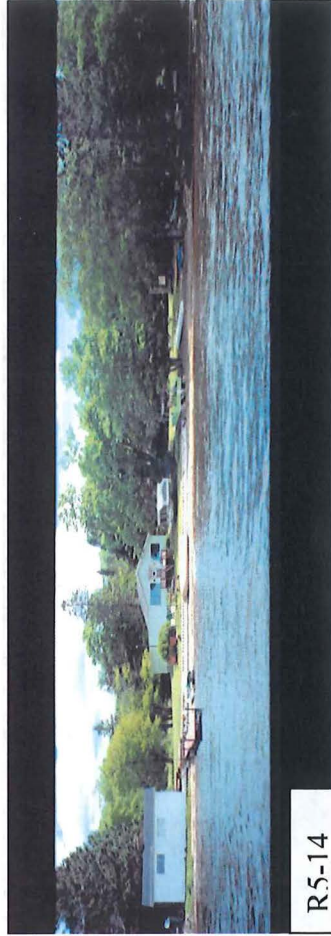
R5-11



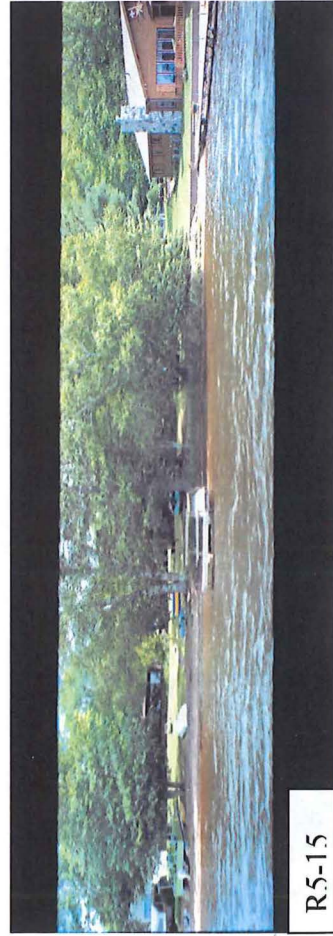
R5-12



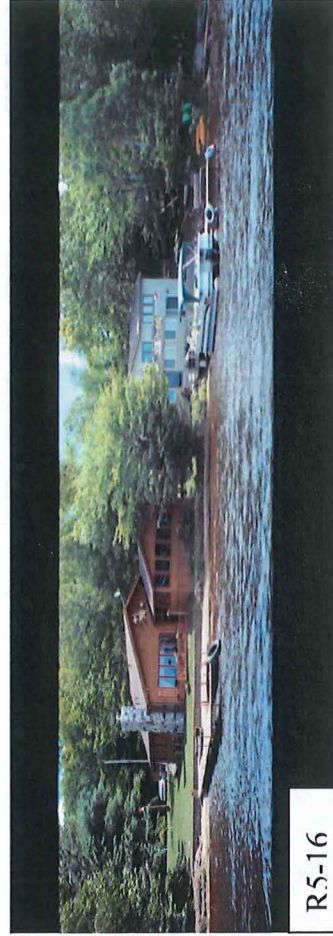
R5-13



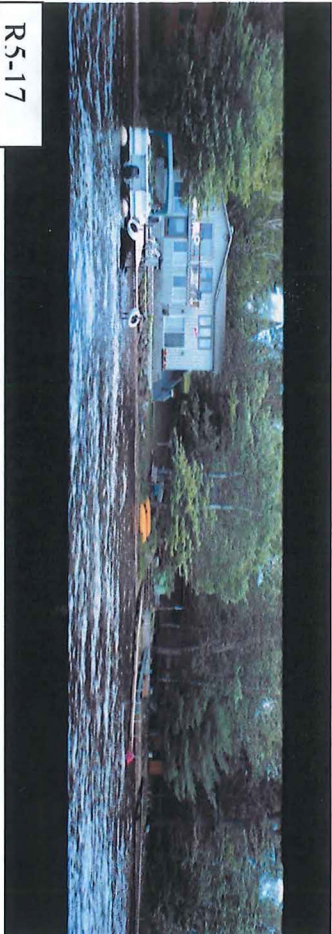
R5-14



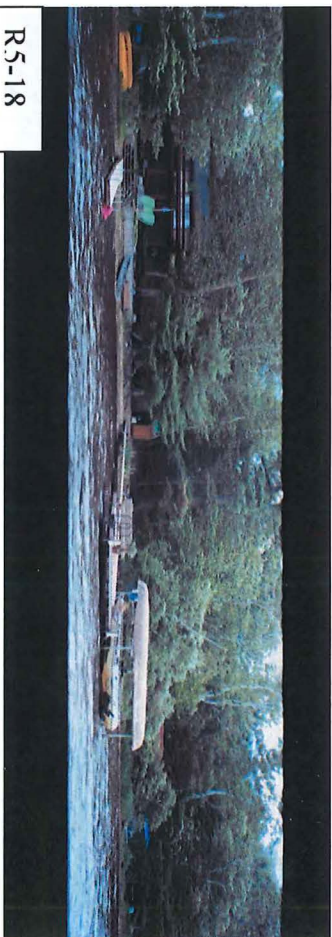
R5-15



R5-16



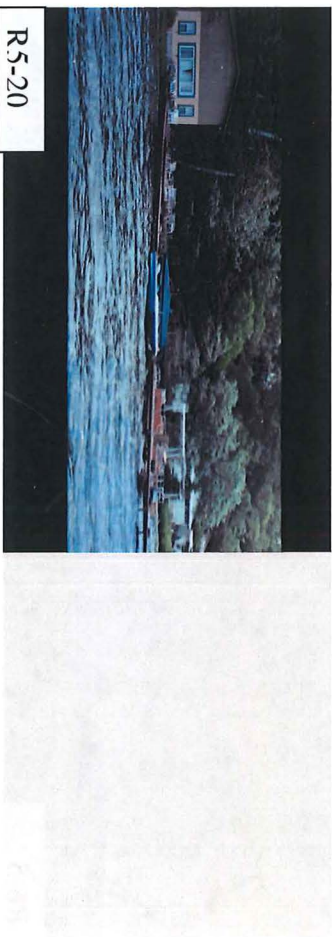
R5-17



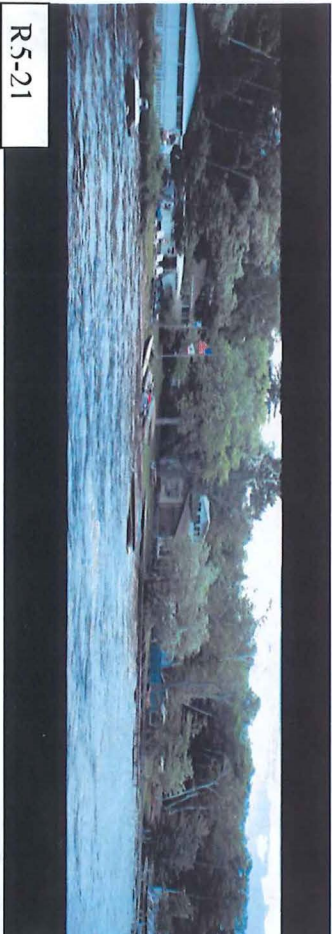
R5-18



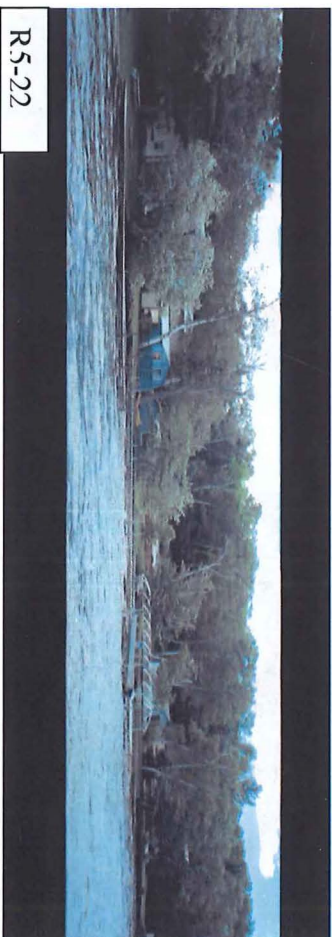
R5-19



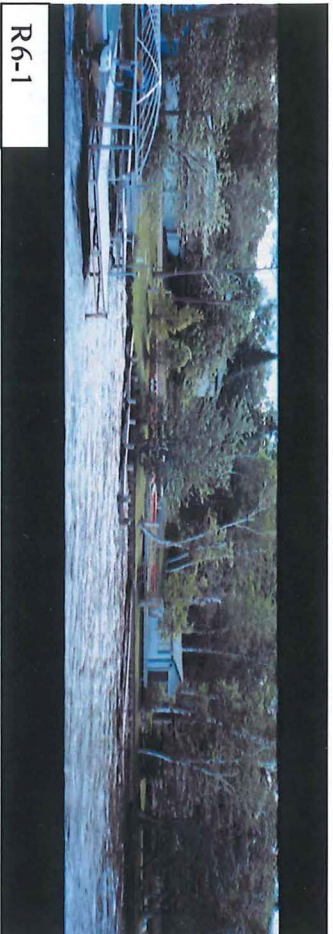
R5-20



R5-21



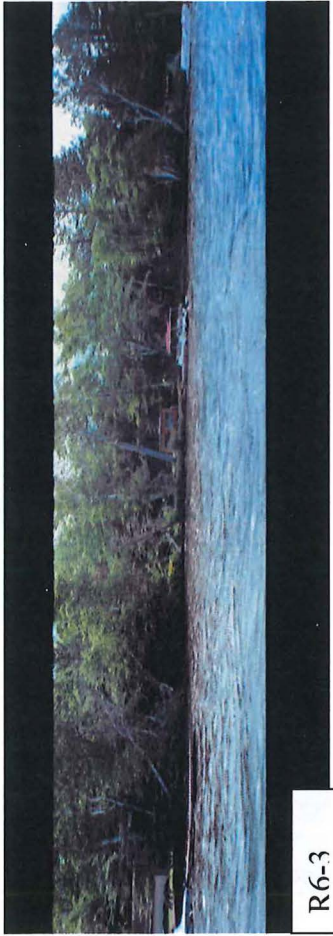
R5-22



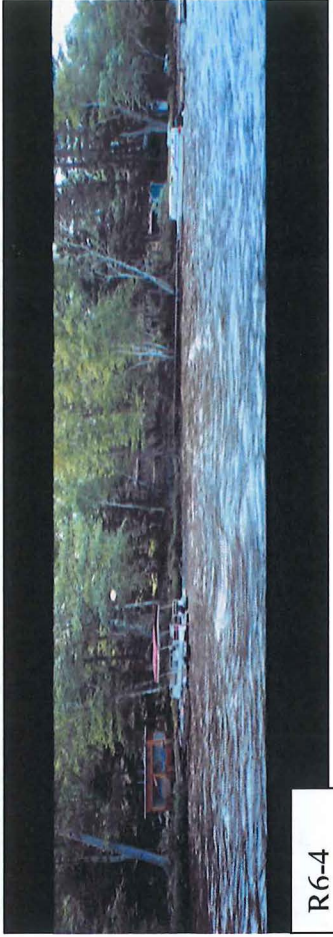
R6-1



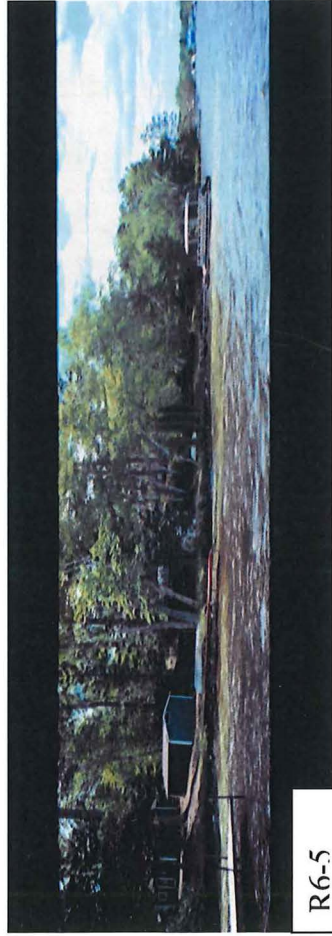
R6-2



R6-3



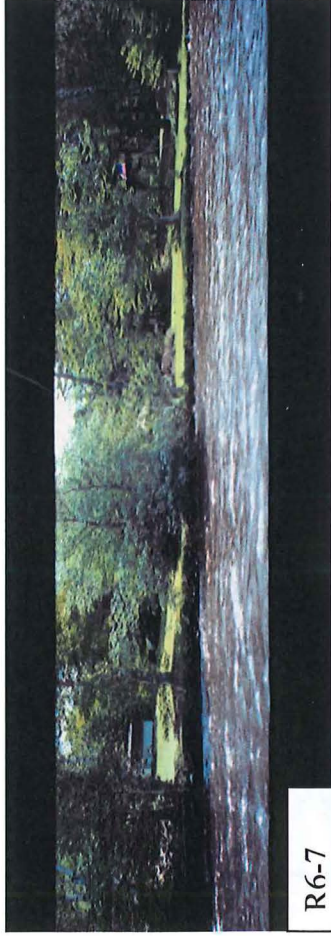
R6-4



R6-5



R6-6



R6-7



R6-8



R6-9



R6-10



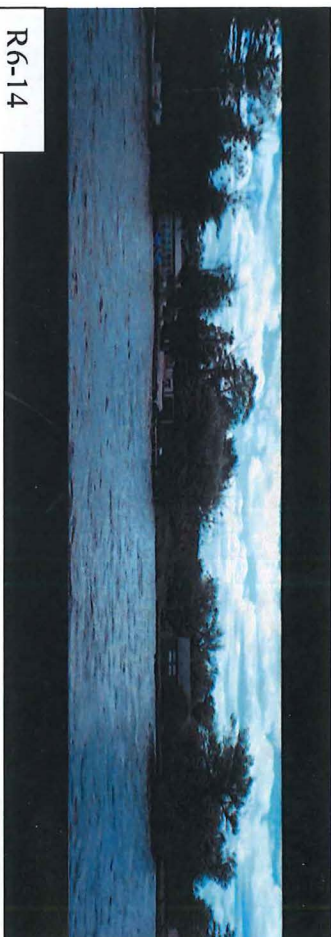
R6-11



R6-12



R6-13



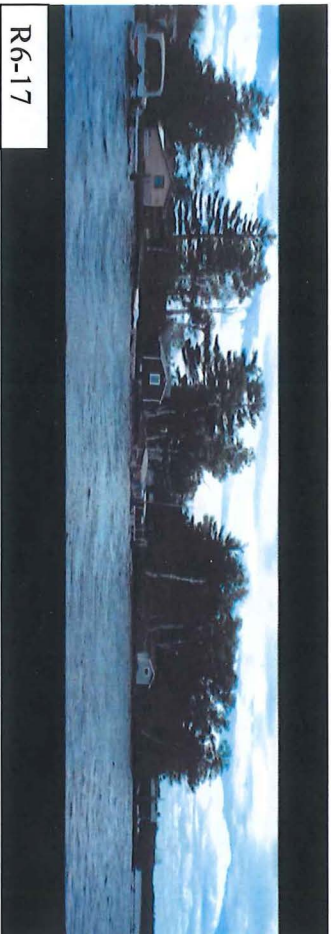
R6-14



R6-15



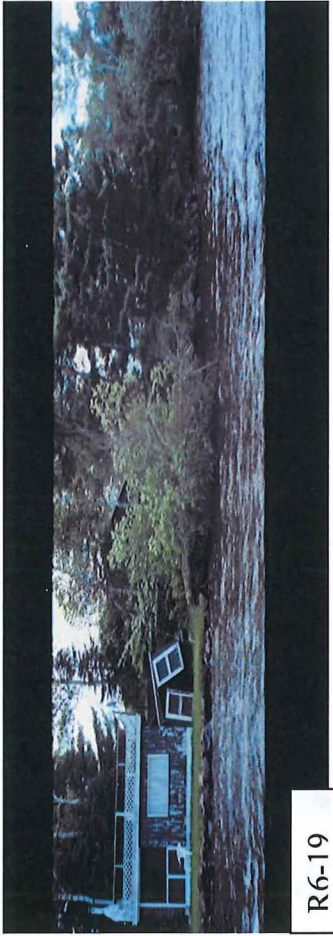
R6-16



R6-17



R6-18



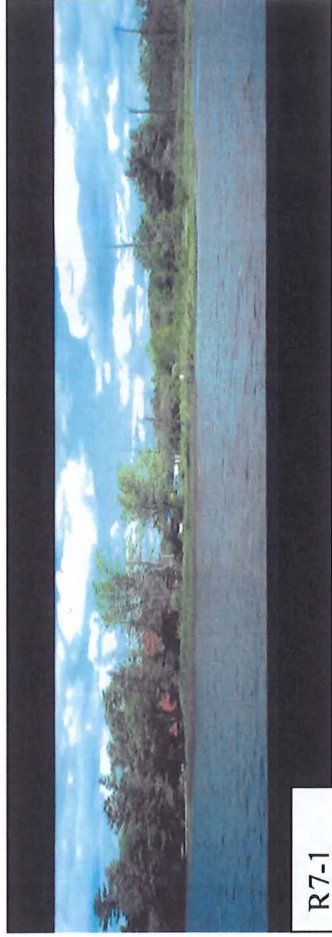
R6-19



R6-20



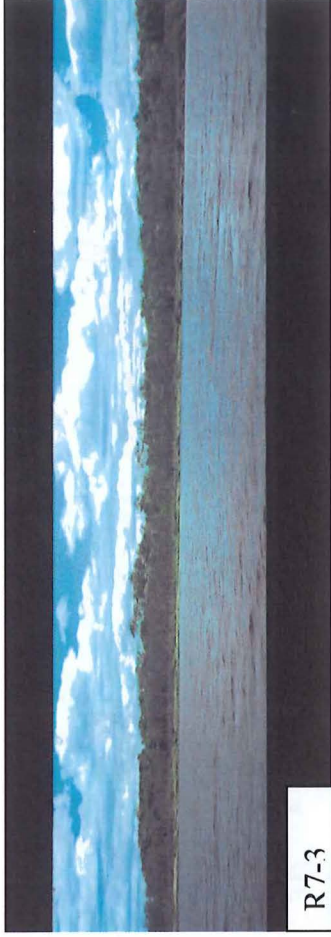
R6-21



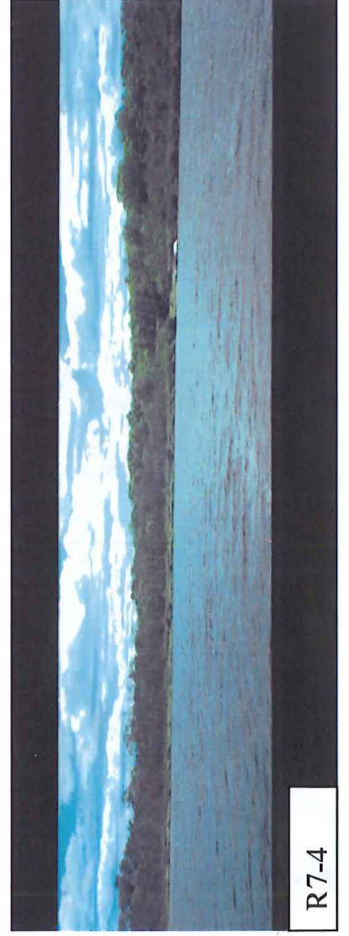
R7-1



R7-2



R7-3



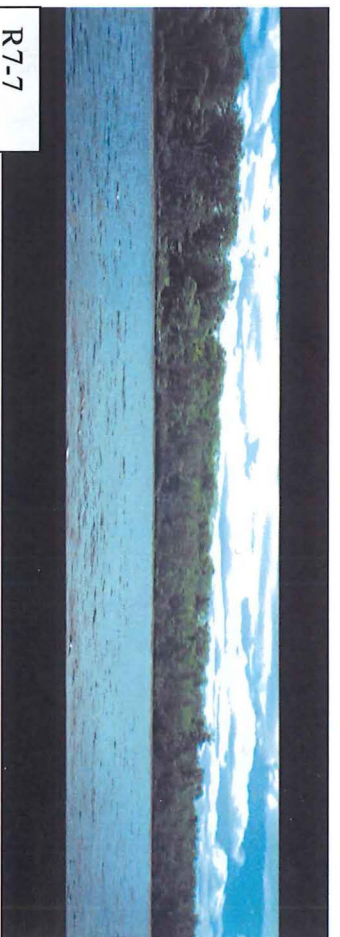
R7-4



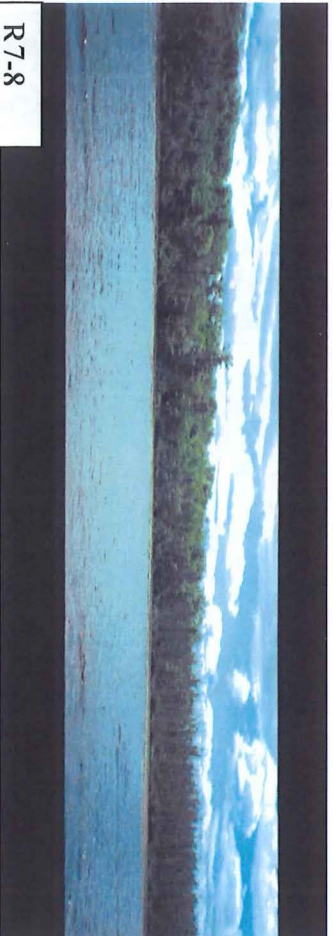
R7-5



R7-6



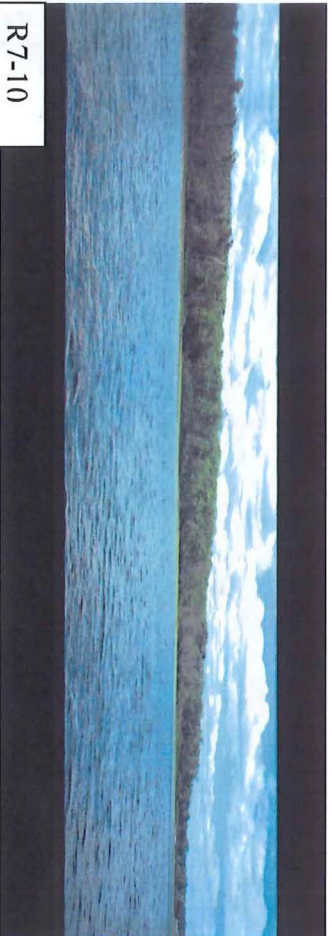
R7-7



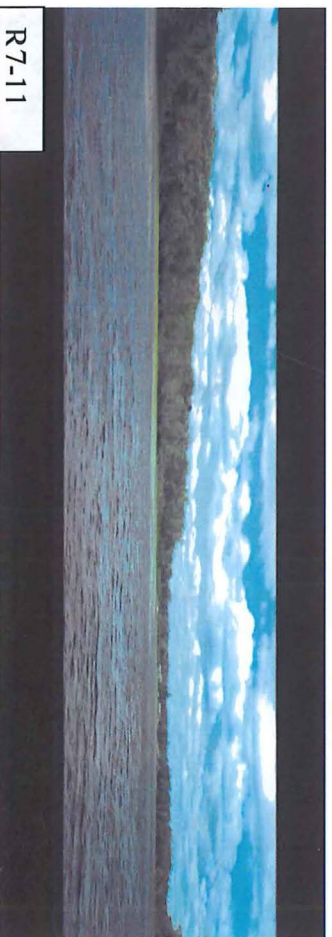
R7-8



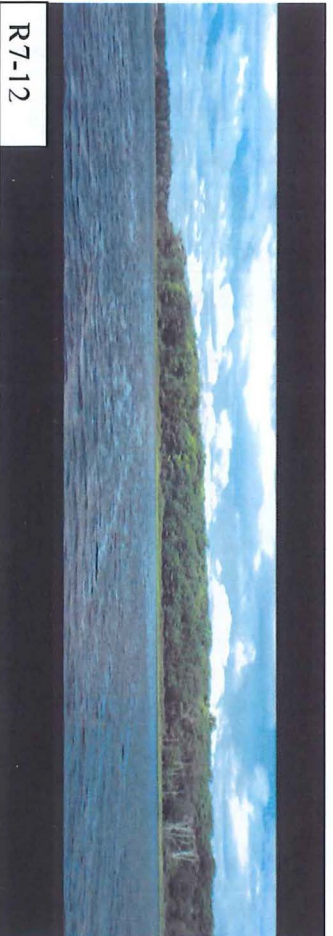
R7-9



R7-10



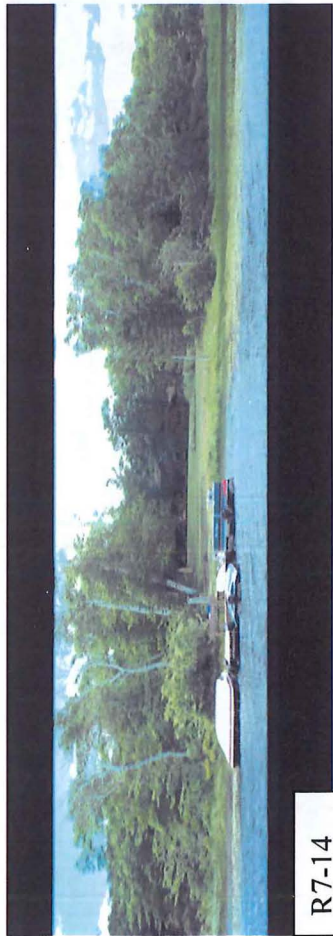
R7-11



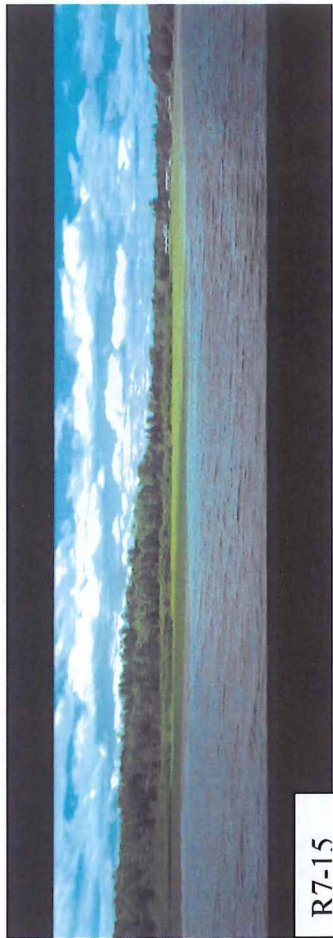
R7-12



R7-13



R7-14



R7-15



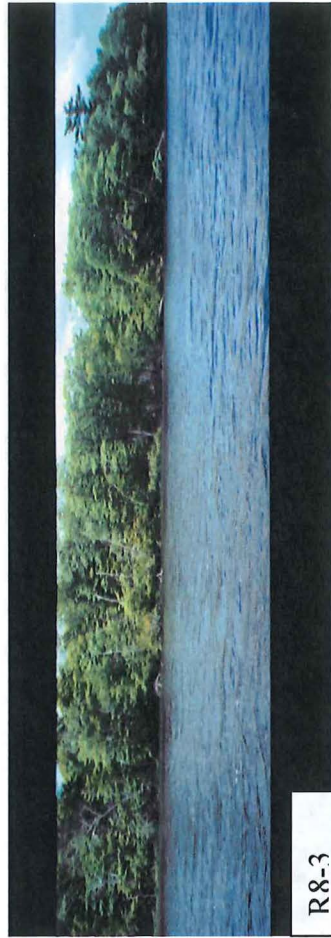
R7-16



R8-1



R8-2



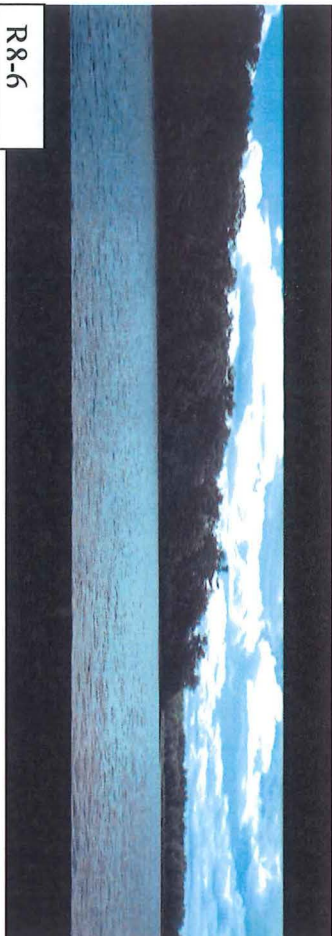
R8-3



R8-4



R8-5

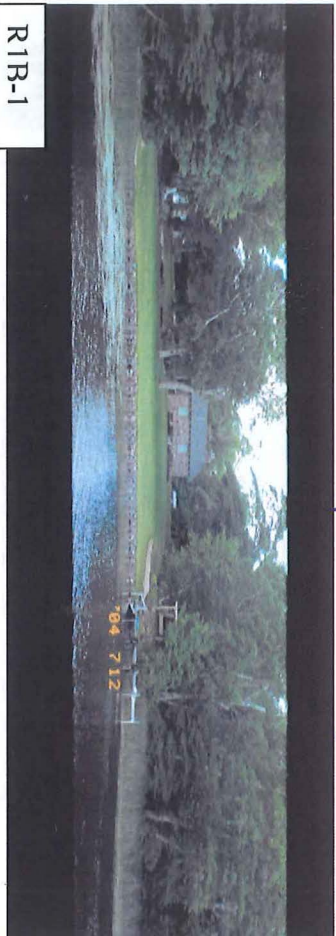


R8-6

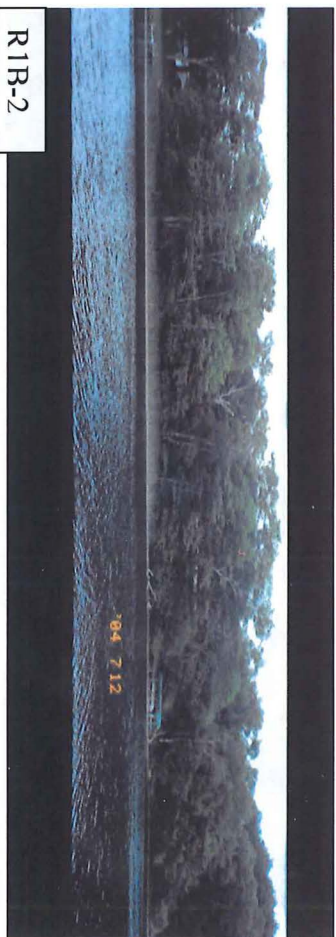


R8-7

Dowling Lake = R1B-X



R1B-1



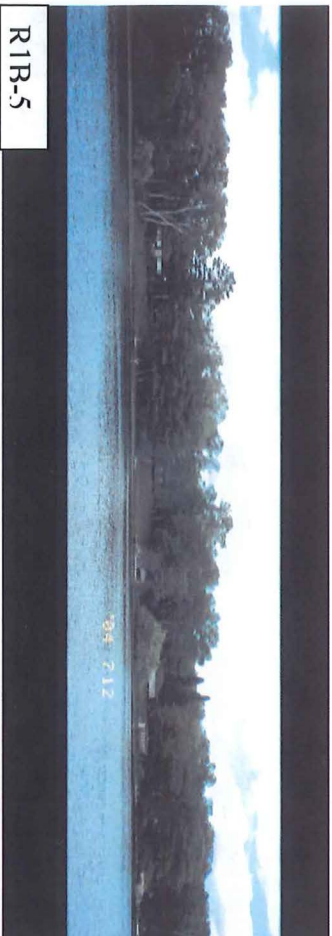
R1B-2



R1B-3



R1B-4



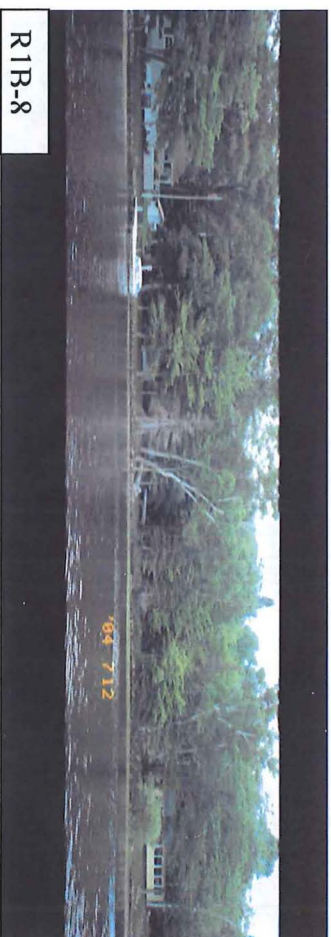
R1B-5



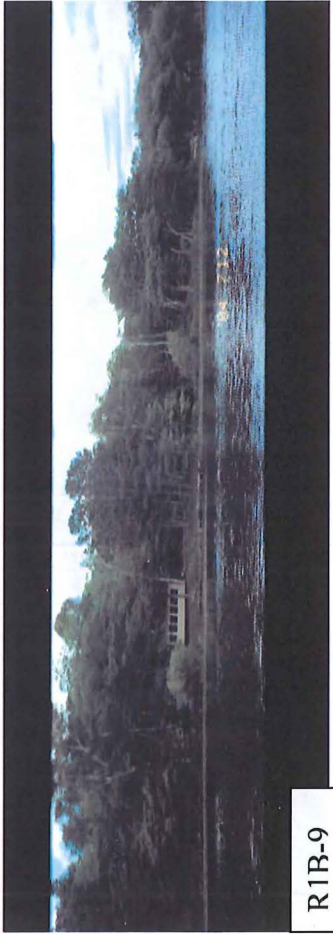
R1B-6



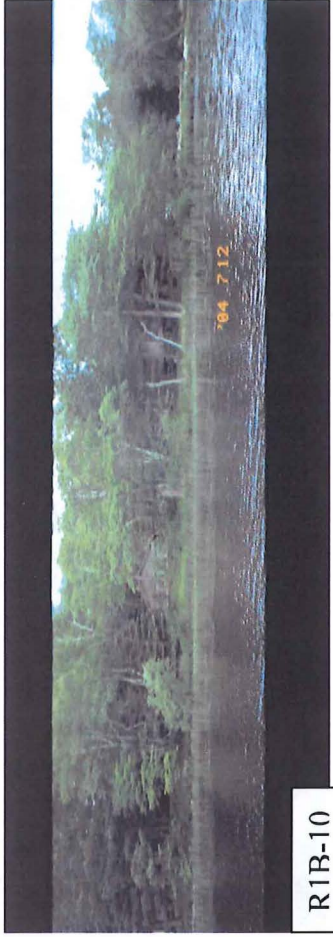
R1B-7



R1B-8



R1B-9



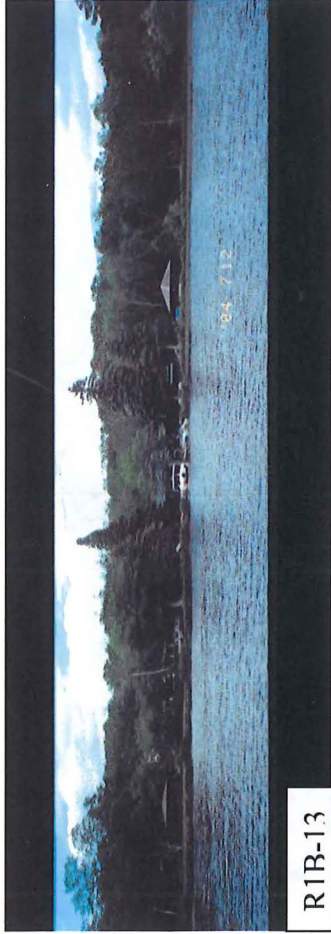
R1B-10



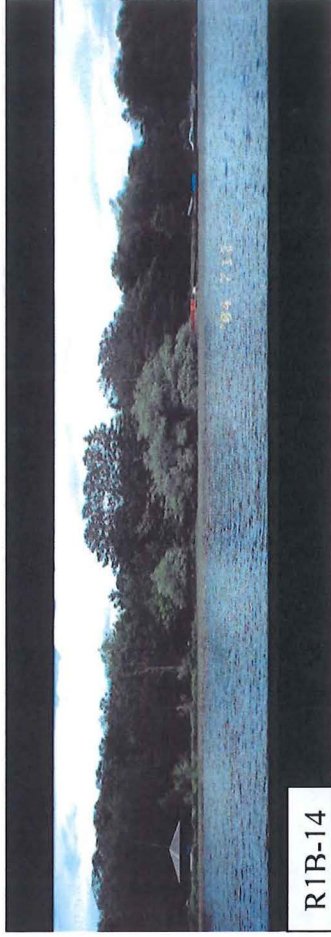
R1B-11



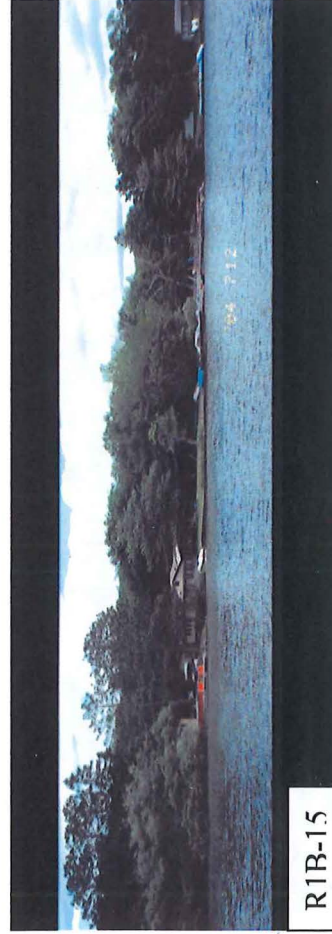
R1B-12



R1B-13



R1B-14



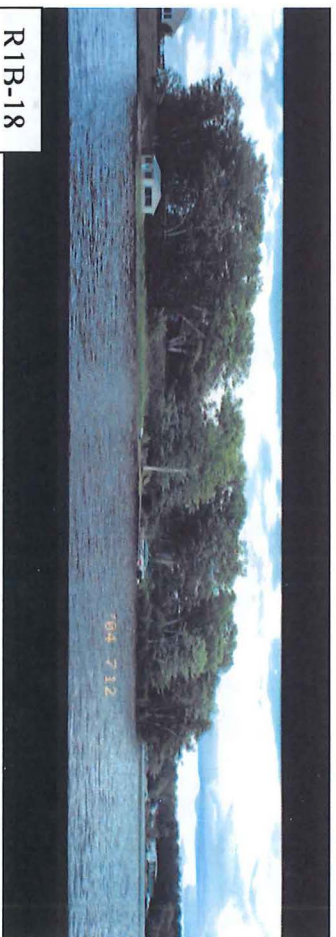
R1B-15



R1B-16



R1B-17



R1B-18



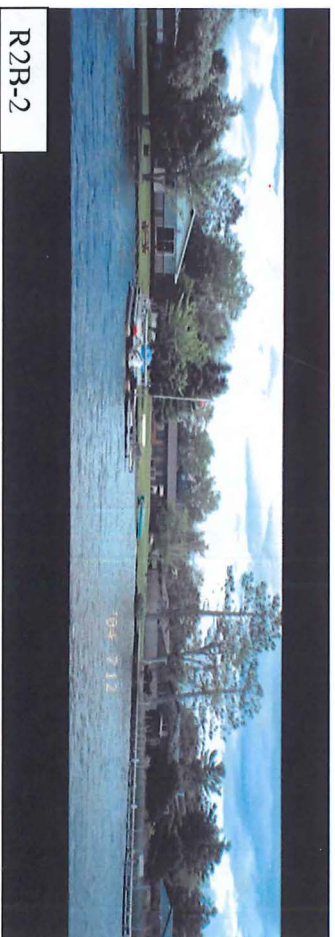
R1B-19



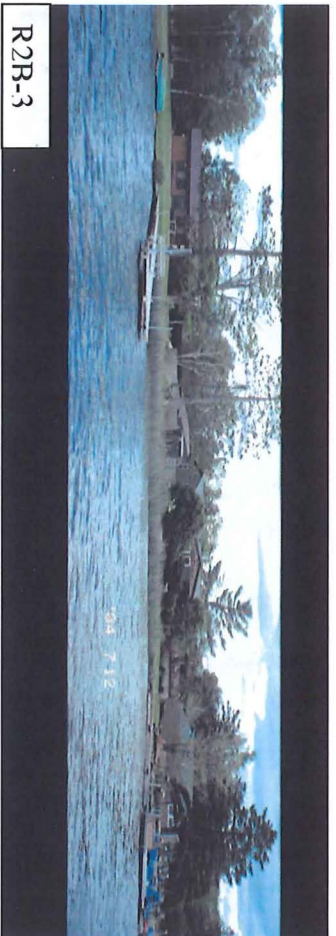
R1B-20



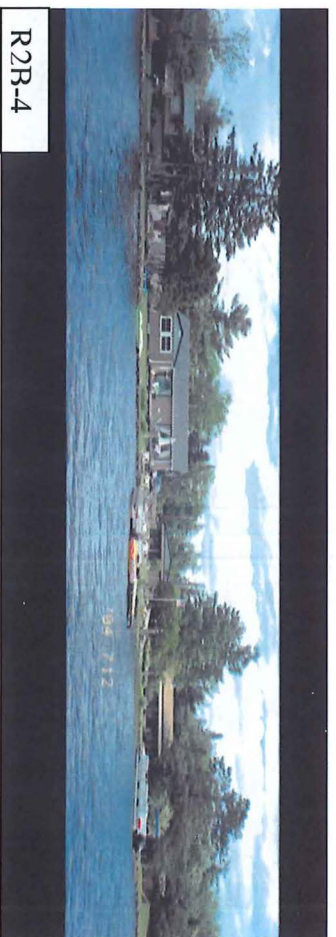
R2B-1



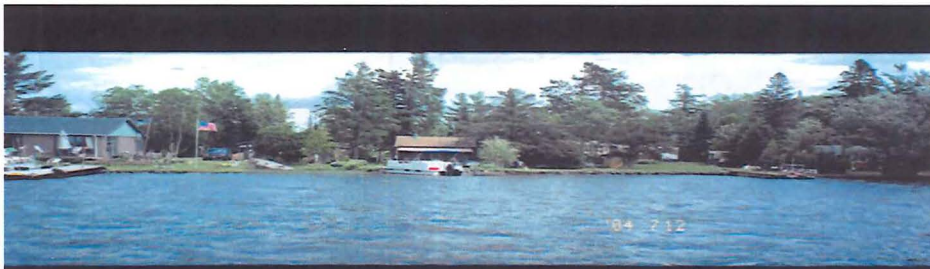
R2B-2



R2B-3



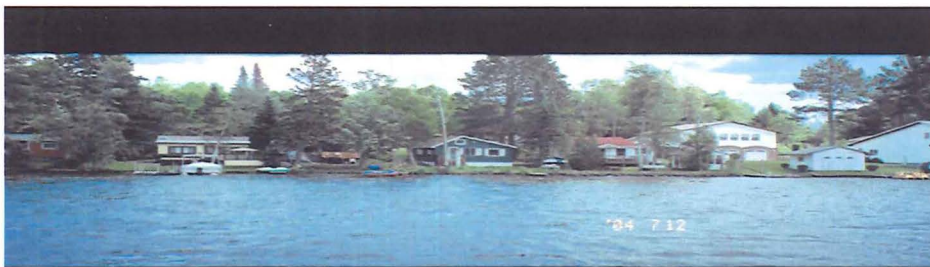
R2B-4



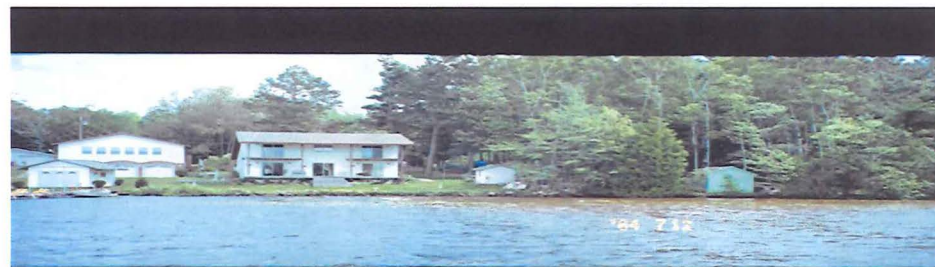
R2B-5



R2B-6



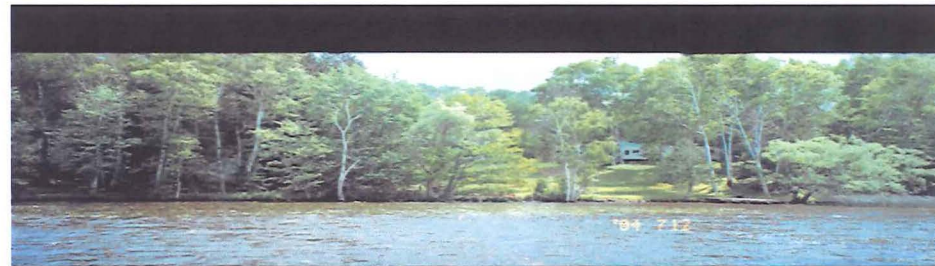
R2B-7



R2B-8



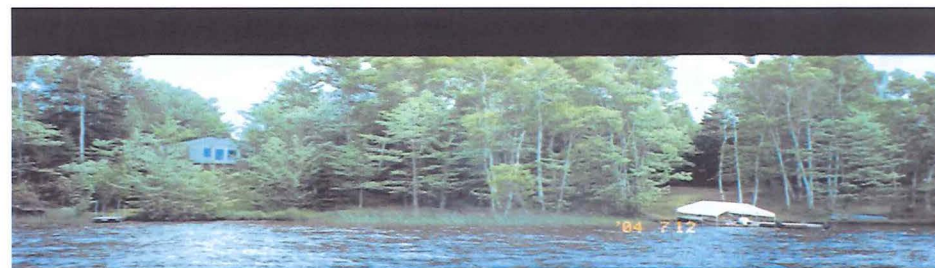
R2B-9



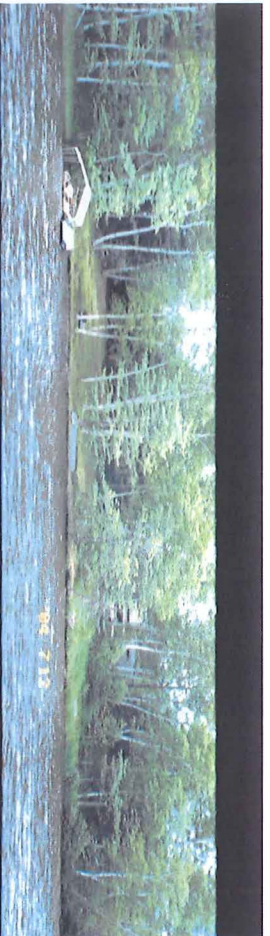
R2B-10



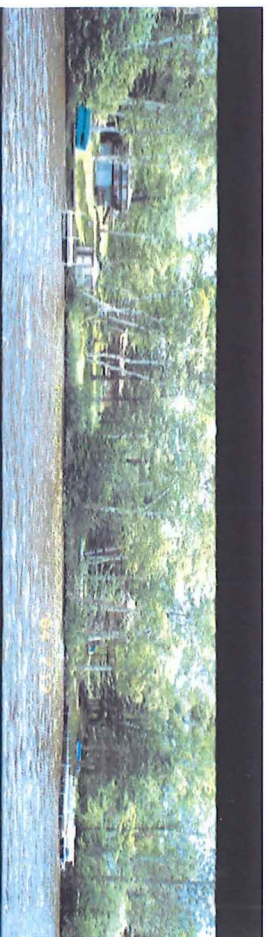
R2B-11



R2B-12



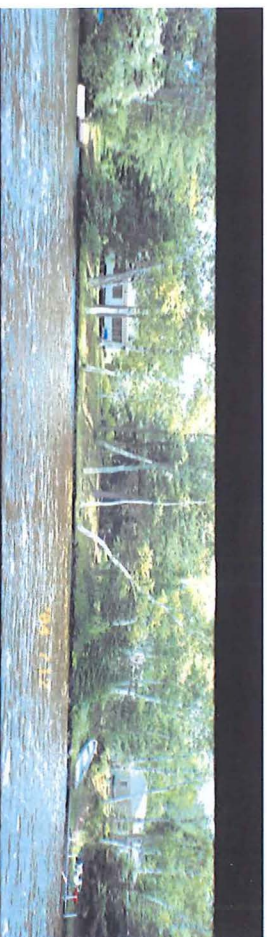
R2B-13



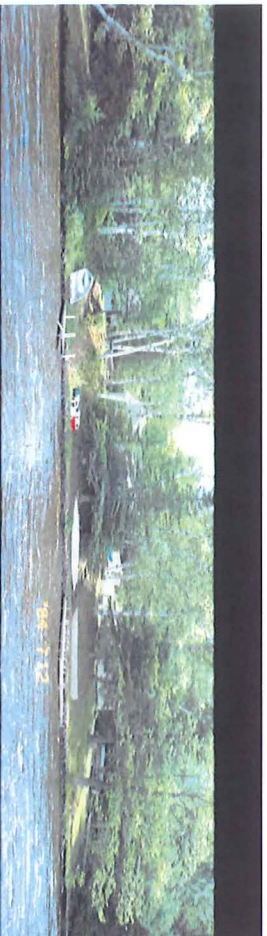
R2B-14



R2B-15



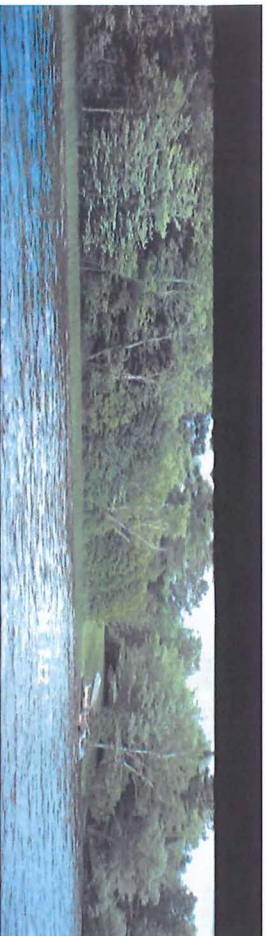
R2B-16



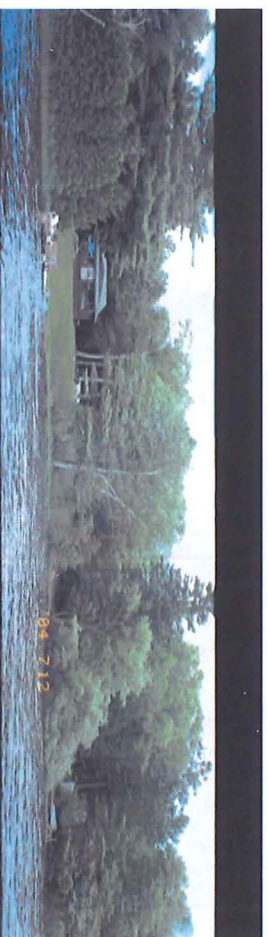
R2B-17



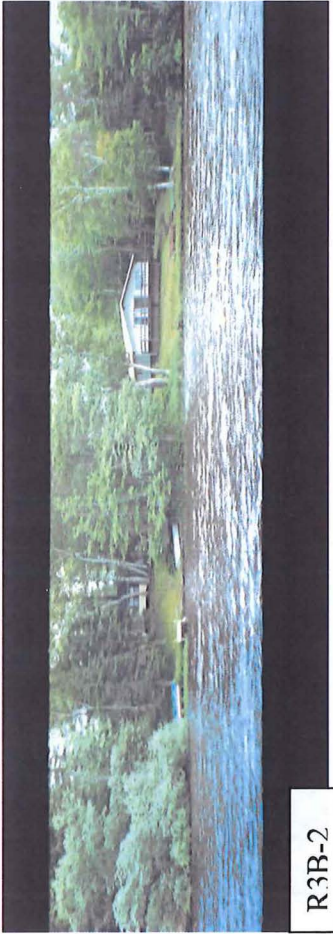
R2B-18



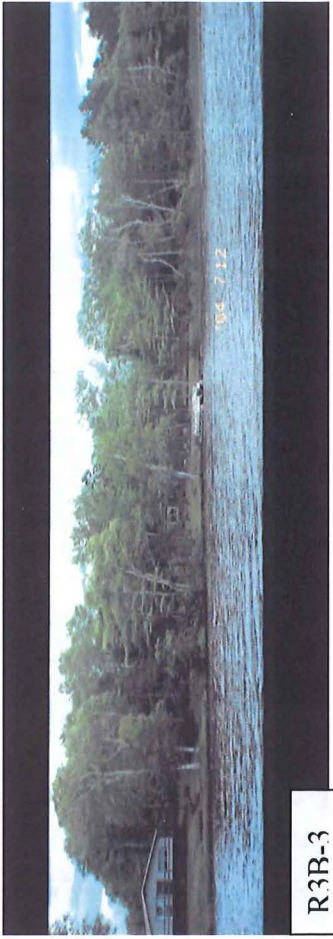
R2B-19



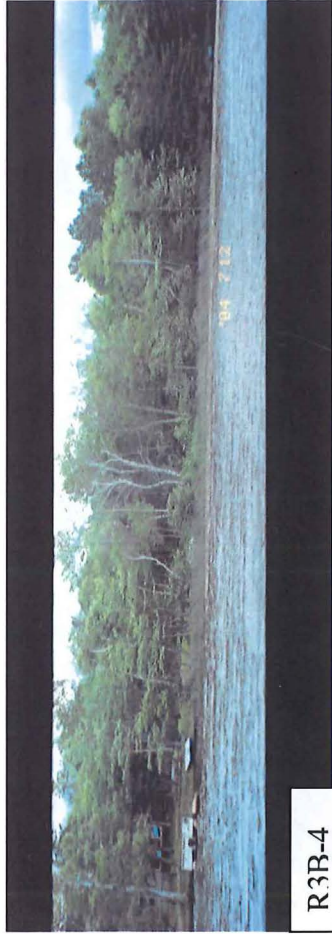
R3B-1



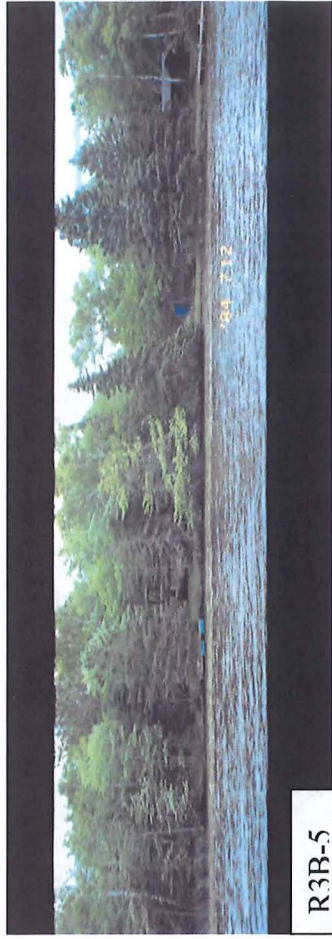
R3B-2



R3B-3



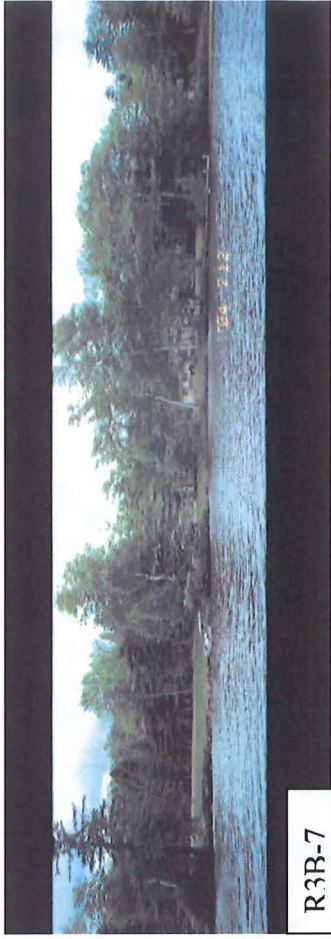
R3B-4



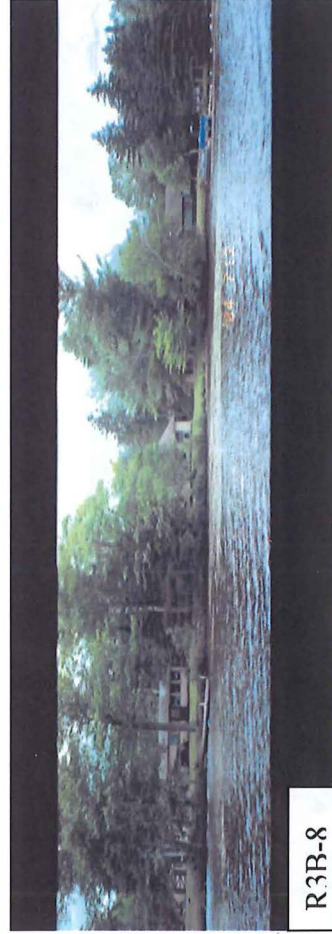
R3B-5



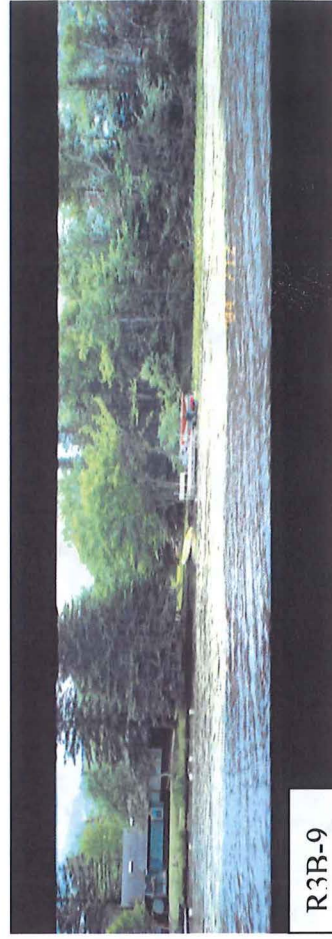
R3B-6



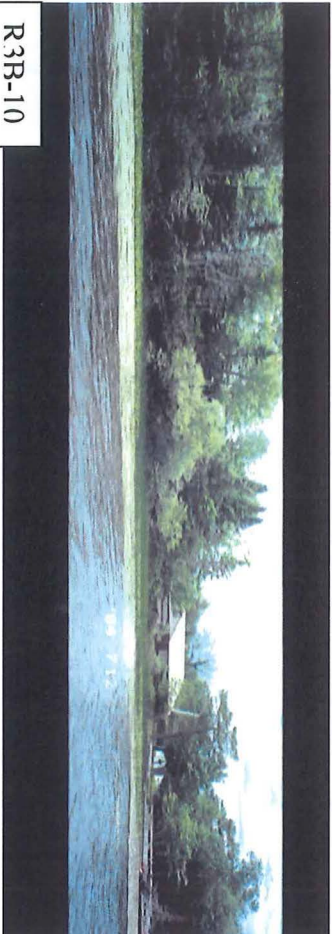
R3B-7



R3B-8



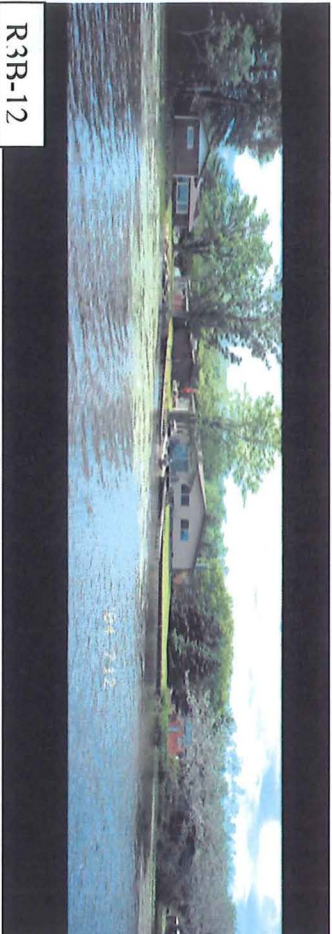
R3B-9



R3B-10



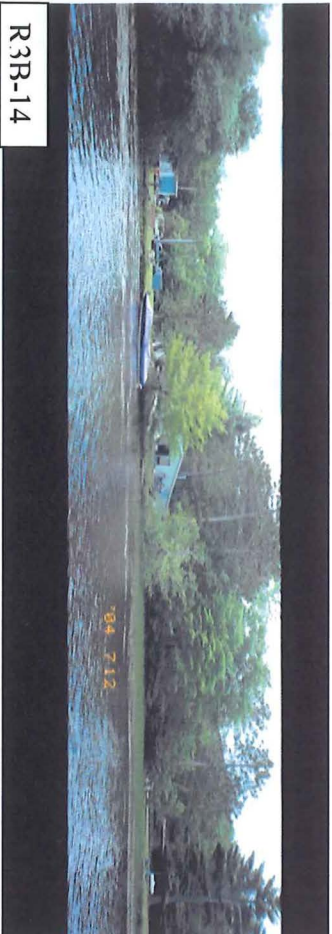
R3B-11



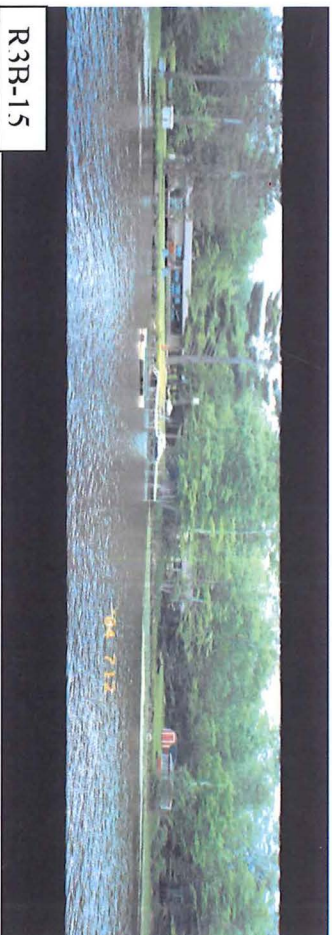
R3B-12



R3B-13



R3B-14



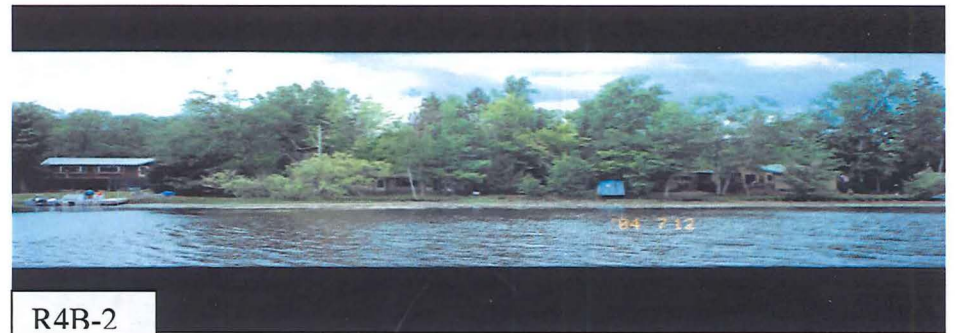
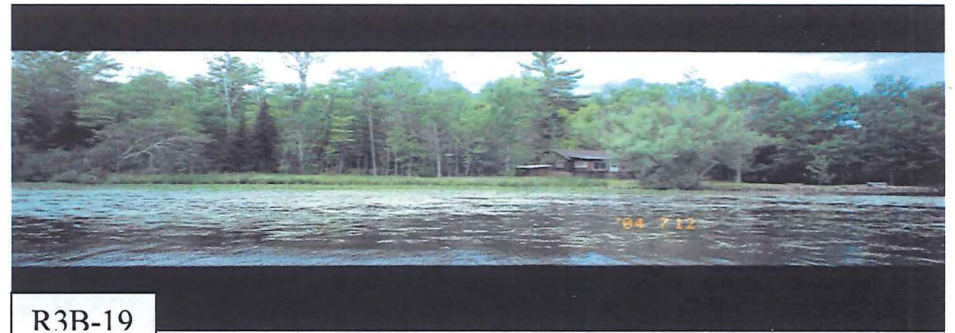
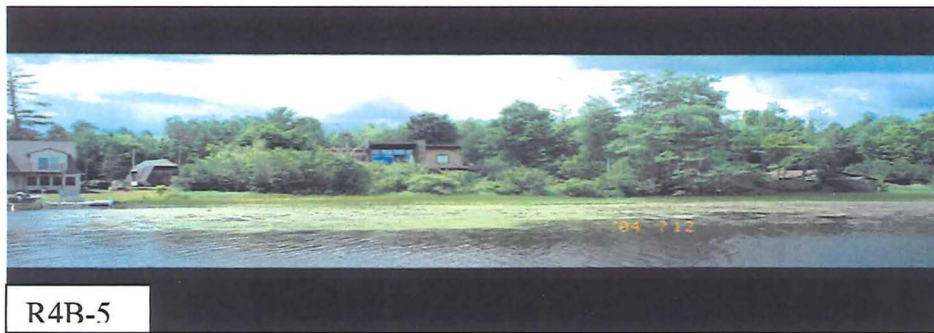
R3B-15

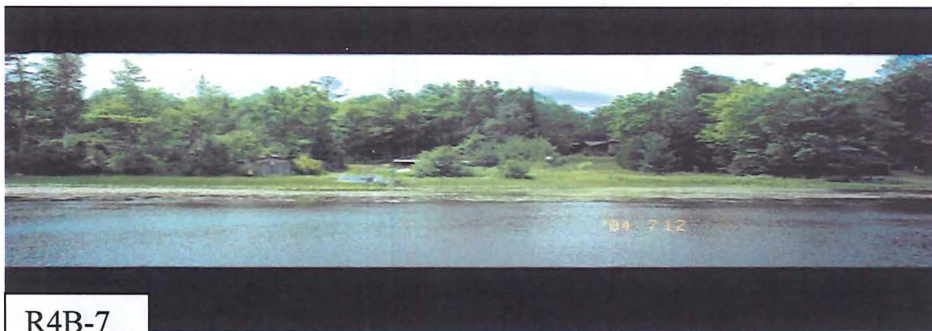


R3B-16



R3B-17

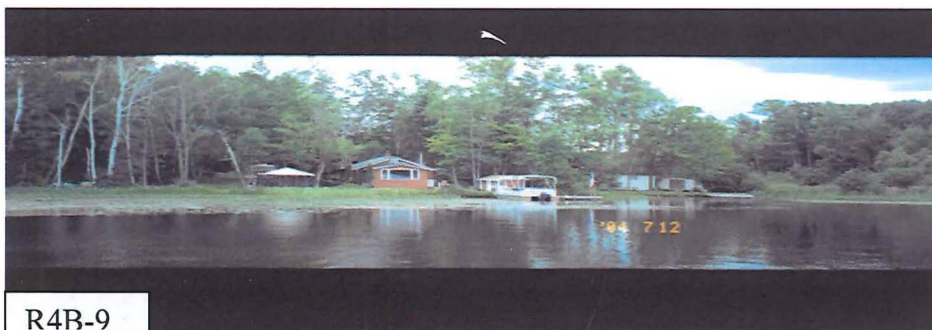




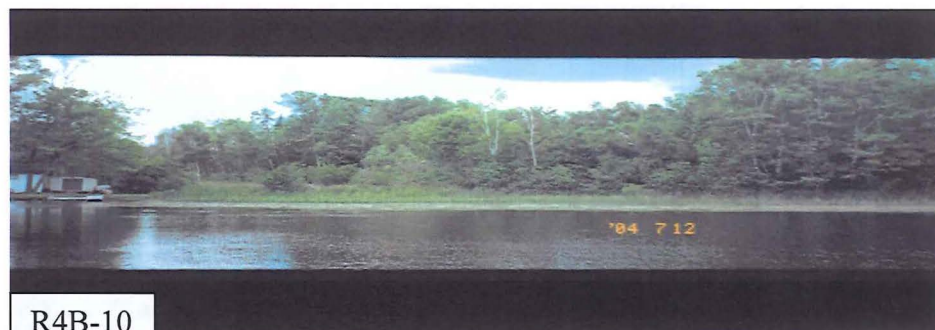
R4B-7



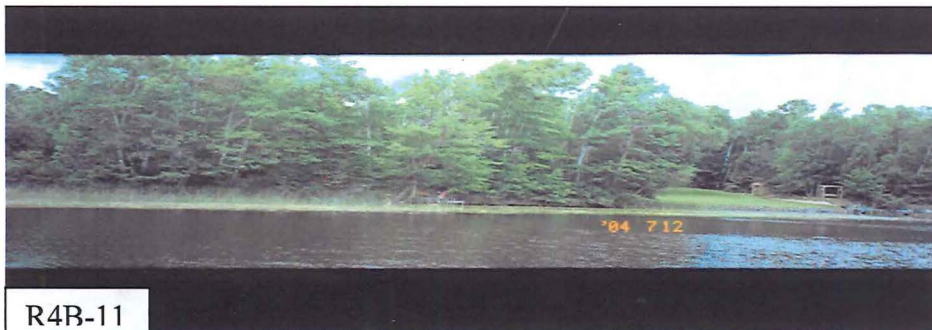
R4B-8



R4B-9



R4B-10



R4B-11



R4B-12



R4B-13

Appendix 4

Shoreland Inventory Results for Amnicon and Dowling Lakes

Amnicon Lake Shoreland Inventory

ID #	Natural Upland Condition		Natural Shoreline Condition		Shoreline Erosion		# of Lots	Undev. Lots	Shoreline Structure			Comments
	>50%	>75%	>50%	>75%	No	Yes*			No	Yes		
										riprap	wall	
R1-1	XXX	XXX	XXX	XXX	XXX		3	1	XXX			
R1-2					XX		2		XX			
R1-3					XX		2		XX			
R1-4	X				XX		2		XX			
R1-5	X				X		1		X			
R1-6	X	X	X	X	X		1		X			
R1-7					X		1		X			
R1-8					X		1		X			
R1-9					XX		2		X		X	Wood Retaining Wall
R1-10					XXXX		4		XX		XX	Both 1 foot high wood walls
R1-11						slight	1		X			Erosion on east bank
R1-12	X	X	X	X	X		1	1	X			
R1-13					X		1		X			
R1-14					X		1		X			
R1-15	XX	XX	XX	XX	XXX		3	2	XXX			
R1-16	XX	XX	XX	XX	XX		2	2	XX			
R1-17	X	X	X	X	X		1	1	X			
R1-18	X	X	X	X	XX		2		XX			
R1-19					X		1		X	X		
R2-1					X		1		X	X	X	Also a retaining wall for a patio
R2-2					X		1		X			
R2-3					X		1		X	X		
R2-4					X		1		X			
R2-5					XX		2		XX			
R2-6	X	X	X	X	X		1		X			
R2-7	X	X	X	X	X		1		X			2 Pine Island
R2-8					X		1		X			
R2-9					X		1		X			
R2-10			X	X	X		1		X			
R2-11					X		1		X			
R2-12					X		1		X			
R2-13	X		X		XX		2		XX			
R2-14					X		1		X			
R2-15					X		1		X			
R2-16					X		1		X			
R2-17					X		1		X			
R2-18					X		1		X			
R2-19					X		1		X			
R2-20					X		1		X			
R3-1					X		1		X			
R3-2			X		X		1				X	Concrete Wall
R3-3	X	X	X	X	X		1	1	X			
R3-4	X	X	X	X	X		1	1	X			
R3-5						slight	1				X	Wood Wall, leaning slightly toward lake
R3-6	X	X	X	X	X		1		X			
R3-7					XX		2		XX			
R3-8	X	X	X	X	X		1		X			
R3-9	XX	X	X	X	X		2	1	X			

Amnicon Lake Shoreland Inventory

ID #	Natural Upland Condition		Natural Shoreline Condition		Shoreline Erosion		# of Lots	Undev. Lots	Shoreline Structure			Comments
	>50%	>75%	>50%	>75%	No	Yes*			No	Yes		
										riprap	wall	
R3-10					X		1		X			
R3-11	XX	XX	XX	XX	XX		2	1	XX			
R3-12	XX	X	XX	XX	XXXX		4	1	XXXX			
R3-13					X		1		X			
R3-14	X	X	X	X	X		1	1	X			
R3-15					X		1		X			
R3-16	X	X	X	X	X		1	1	X			
R3-17	X	X	X	X	X		1		X			
R3-18	X	X	X	X	X		1	1	X			
R4-1					X	X	2		X	X		1/2 riprap other 1/2 beach
R4-2					X		1			X		
R4-3					XX		2		XX			
R4-4	X	X	X	X	XX		2		XX			
R4-5	X	X	X	X	X		1		X			
R4-6	XX	XX	XX	XX	XX		2		XX			
R4-7					X		1		X			
R4-8					XX		2		XX			
R4-9			X		X		1		X			
R4-10					XX		2		XX			
R4-11					X		1		X			campground
R4-12					X		1		X			
R4-13	X	X	X	X	XX		2		XX			
R4-14					XX		2			XX		riprap construction begins adj to Tri Lakes road
R4-15					X		1			X		
R4-16					XX		2			XX		
R4-17					X		1			X		
R4-18					X		1			X		end of riprap
R4-19	X	X	X	X	X		1	1	X			
R4-20					X		1		X			
R4-21			X	X	X		1		X			
R4-22			X	X	X		1		X			
R4-23					X		1		X			
R5-1	X	X	X	X	XX		2	1	XX			
R5-2	XX	XX	XX	XX	XX		2		XX			
R5-3					XX		2		XX			
R5-4					XX		2		XX			
R5-5	XX	X	XX	XX	XX		2	1	XX			
R5-6	X	X	X	X	X		1	1	X			
R5-7	X	X	X	X	X		1		X			
R5-8	X	X	X	X	X		1		X			
R5-9						slight	1				X	Concrete Slab Wall at lake
R5-10	X		X		XX		2		XX			
R5-11					XX		2		X	X		
R5-12	X	X	X	X	X		1		X			
R5-13					XX		2		XX			
R5-14					X		1				X	White concrete wall, beach by lake
R5-15					XX		2		X		X	concrete cinderblock , beach in front

Amnicon Lake Shoreland Inventory

ID #	Natural Upland Condition		Natural Shoreline Condition		Shoreline Erosion		# of Lots	Undev. Lots	Shoreline Structure			Comments
	>50%	>75%	>50%	>75%	No	Yes*			No	Yes		
										riprap	wall	
R5-16					X		1				X	poured concrete, beach in front
R5-17					X		1		X		X	poured concrete, beach in front
R5-18	X	X					1				X	poured concrete, beach in front
R5-19	X	X	X	X	X		1		X			
R5-20	X		X		X		1		X			
R5-21					XX		2		XX			
R5-22					XX		2		XX			
R6-1					X		1				X	wood wall at water
R6-2					X		1				X	wood wall at water
R6-3	X	X	X	X	X		1		X			
R6-4	XX		XX	X	X		2		X		X	rock wall
R6-5					X		1		X			
R6-6					XX		2		X		X	
R6-7					X		1		X			
R6-8					X		1		X			
R6-9	X		X		X		1		X			
R6-10	X	X	X	X	X		1		X			
R6-11	X	X	X	X	X		1	1	X			
R6-12	X		X		XX		2		XX			
R6-13	XX	X	XX	X	XXX		3		XXX			
R6-14	X	X	X	X	XX		2	1	XX			
R6-15					X		1		X			
R6-16					XXX		3		XXX			
R6-17					XX		2		XX			
R6-18	X	X	X	X	XX		2	1	XX			
R6-19					X		1		X			
R6-20	X	X	X	X	X		1	1	X			
R6-21	X	X	X	X	XX		2	1	XX			
R7-1	X	X	X	X	X		1		X			
R7-2	XX	XX	XX	XX	XX		2	2	XX			
R7-3	XX	XX	XX	XX	XX		2	2	XX			
R7-4					X		1		X			
R7-5	X	X	X	X	XX		2	1	XX			
R7-6	X	X	X	X	X		1	1	X			
R7-7			X		X		1		X			
R7-8	XX	XX	XX	XX	XX		2	2	XX			
R7-9	XX	XX	XX	XX	XX		2	2	XX			
R7-10	X	X	X	X	X		1	1	X			
R7-11	X	X	X	X	X		1	1	X			
R7-12	XX	XX	XX	XX	XX		2	2	XX			Tomahawk Island SE side
R7-13	X	X	X	X	X		1	1	X			
R7-14					X		1		X			
R7-15	XX	XX	XX	XX	XX		2	2	XX			
R7-16	XX	XX	XX	XX	XX		2	2	XX			
R8-1	XX	XX	XX	XX	XX		2	2	XX			
R8-2	X	X	X	X	X		1	1	X			Tomahawk Island NE side
R8-3	X	X	X	X	X		1	1	X			
R8-4	X	X	X	X	X		1	1	X			

Amnicon Lake Shoreland Inventory

ID #	Natural Upland Condition		Natural Shoreline Condition		Shoreline Erosion		# of Lots	Undev. Lots	Shoreline Structure			Comments
	>50%	>75%	>50%	>75%	No	Yes*			No	Yes		
										riprap	wall	
R8-5	XX	XX	XX	XX	XX		2	2	XX			
R8-6	X	X	X	X	X		1	1	X			
R8-7	X	X	X	X	X		1	1	X			
TOTAL	91	78	93	83			208	53		13	15	

Dowling Lake Shoreland Inventory

ID #	Natural Upland Condition		Natural Shoreline Condition		Shoreline Erosion		# of Lots	Undev. Lots	Shoreline Structure			Comments
	>50%	>75%	>50%	>75%	No	Yes*			No	Yes		
										riprap	wall	
R1B-1					X		1			X		Bill Cadot Residence
R1B-2	X		X	X	X		1		X			
R1B-3	X		X		XX		2		X			
R1B-4	X		X		XX		2		X			
R1B-5	X		X	X	XX		2		X			
R1B-6	X	X	XX	X	XX		2		X	X		
R1B-7					X		1		X			
R1B-8	X				X		1		X			
R1B-9	X		X		X		1		X			
R1B-10	X	X	X	X	X		1		X			
R1B-11			X		X		1		X			
R1B-12					X		1		X			
R1B-13			X		XX		2		XX			
R1B-14	X	X	X	X	X		1		X			
R1B-15	X				XX		2		X			
R1B-16	XX	XX	XXX	XX	XXXX		4		XXX		X	
R1B-17			X	X	XX		2		XX			
R1B-18	X		X	X	XX		2		XX			
R1B-19	XX	XX	XX	XX	XX		2	2	XX			
R1B-20					X		1		X			
R2B-1					X		1		X			
R2B-2					X		1		X			
R2B-3					X		1		X			
R2B-4					X		1		X			
R2B-5					X		1		X			
R2B-6	X		X		XXX		3		XX			
R2B-7	X		X	X	XXX		3		XX	X		
R2B-8					X		1		X			
R2B-9	XXX	XXX	XXX	XX	XXX		3		XXX			
R2B-10					X		1					
R2B-11	X	X	X	X	X		1		X			
R2B-12	X		X		X		1		X			
R2B-13	X				X		1		X			
R2B-14	X		X	X	XX		2		XX			
R2B-15	X		X		X		1		X			
R2B-16	X				X		1		X			
R2B-17	X		X	X	XX		2			X	X	Retaining wall on 1/2 of lot, 20 ft from shore
R2B-18					X		1		X			
R2B-19	X	X	X	X	X		1	1	X			
R3B-1					X		1		X			
R3B-2	X		X		XX		2					
R3B-3	X		X		X		1		X			
R3B-4	XX	X	XX	X	X		2	1	X			
R3B-5	X		X		X		1		X			
R3B-6					X		1		X			
R3B-7					X		1		X			
R3B-8					X		1		X			
R3B-9	X	X	X	X	XX		2	1	XX			
R3B-10	X	X	X	X	XX		2	1	XX			

Dowling Lake Shoreland Inventory

ID #	Natural Upland Condition		Natural Shoreline Condition		Shoreline Erosion		# of Lots	Undev. Lots	Shoreline Structure			Comments
	>50%	>75%	>50%	>75%	No	Yes*			No	Yes		
										riprap	wall	
R3B-11					X		1		X	X		
R3B-12					X		1				X	Wood 2 foot Wall
R3B-13			X	X	X		1		X			
R3B-14					X		1		X			
R3B-15					X		1		X			
R3B-16	X	X	X	X	XX		2		XX			
R3B-17					X		1		X			
R3B-18	X	X	X	X	X		1		X			
R3B-19					X		1			X		Opening in middle of riprap wall
R4B-1					X		1		X			
R4B-2					XX		2		XX			
R4B-3	X	X	X	X	X		1	1	X			
R4B-4					X		1		X			
R4B-5	X	X	X	X	X		1		X			
R4B-6	X	X	X	X	X		1		X			
R4B-7			X		X		1		X			
R4B-8	X	X	X	X	XX		2	1	XX			
R4B-9	X	X	X		X		1		X			
R4B-10					X		1		X			
R4B-11	X	X	X	X	X		1	1	X			Bill Cadot's Residence
R4B-12	X	X	X	X	X		1	1	X			Island
R4B-13	X	X	X	X	X		1	1	X			Island
TOTAL	45	25	48	31			98	11		6	3	

T:\Projects\Amnicon Dowling\Wetland\[Dowling.xls]Sheet1