

# Barr Lake D 1717

Poole, John

Fri 6/27/2014 12:49 PM

To:Hauptmann, Steve E. <HAUPTMSE@dhec.sc.gov>; Ford, Robert <fordrj@dhec.sc.gov>; Clark, Ann <CLARKAR@dhec.sc.gov>;

 1 attachment

Barr Lake Lexington Co.pdf;

Steve,

Thanks for meeting us out at Barr Lake today to inspect the recent changes that were reported to the BOW yesterday. It appears that some work, fill for an amenity area at left abutment and tree removal by grubbing, was performed on and near the dam that may have needed a permit. However, the removal of the vegetation has allowed for a more complete inspection of the dam and it is in **poor** condition.

Please send the owner an inspection report with the results of our inspection. At this point I believe a detailed inspection should be performed by a qualified engineer. This includes an application to the BOW for required repair work.

I have attached a PDF that has the photos that we made this morning. If you need the originals, I can bring them to you.

Thanks again,

John Poole



Preliminary Inspection Report for South Carolina Regulated Dams and Impoundment Structures Regulations R.72-1 through R.72-9

Section I (Owner's Information)

(AKA - no name 32608)

A. Dam Number: D 1717 & Hazard Class C2 B. Name of Dam: Barr Lake Dam
C. Inspection Date (6/29/14) & Time: D. Date of Last Inspection:
E. Location-County/City: Lexington/ F. EQC Regional Office:
G. Inspector's Name: Steven Hauptmann & John Poole
H. Owner's Name: Lexington Town of
I. Contact Person (if different from above):
J. Dam Owner's or Contact Person's Phone Numbers: Home ( ) 951-4651 Office ( ) Other ( )
K. Dam Owner's or Contact Person's mailing address: Address 1 11 Maiden Ln Address 2 (optional) City Lex State Zip Code 29072

Section II (Dam Condition)

General Condition Assessment (Select one of the following):

- a) Satisfactory [ ] b) Fair [X] c) Poor [X] d) Unsatisfactory [ ] e) Not Rated [ ]

Section III (Dam Inspection Checklist)

A. Dam Crest

- i. Vegetation (grass, trees weeds)? Needs grass cover established
ii. Animal activity observed? yes - holes should be filled
iii. Any obvious alteration or repairs made? take down stream side excavated & widened?
iv. Erosion noticed on crest? yes
v. Any visible settlement, misalignment or cracks? Some cracks - see pictures

**Section III (Dam Inspection Checklist) continued**

**B. Upstream Slope**

- i. Vegetation (grass, trees weeds)? \_\_\_\_\_
- ii. Animal activity observed? \_\_\_\_\_
- iii. Any obvious alterations or repairs made? \_\_\_\_\_
- iv. Erosion observed on upstream slope? yes - need ~~to~~ wave protection
- v. Settlement or cracks visible in slope? \_\_\_\_\_

**C. Down Stream Slope**

- i. Vegetation (grass, trees weeds)? Yes, Seepage should be evaluated  
Brush
- ii. Animal activity observed? yes - holes Burrowed
- iii. Any obvious alterations or repairs made? yes - permit??
- iv. Erosion observed on down stream slope? yes - Slopes Steep in some areas  
erosion at spillway against concrete
- v. Settlement or cracks visible in slope? \_\_\_\_\_
- vi. Toe drains flowing? \_\_\_\_\_
- vii. Any seepage observed? If so, describe location, flow rate, and any turbidity or color within the flow: \_\_\_\_\_

**D. Primary Spillway**

- i. Any visible deterioration of structure? Cracks in concrete structure  
Needs evaluation.
- ii. Is there an obvious need to repair or replace trash rack? fish fence should  
be removed.
- iii. Any noticeable problems with debris? collecting at fish fence.
- iv. Is valve or gate present? \_\_\_\_\_

**E. Outlet Pipe**

- i. Any water visibly flowing or leaking outside of the discharge pipe? \_\_\_\_\_
- ii. Describe any deflection or damage observed to the pipe: \_\_\_\_\_
- iii. Visible condition of outlet channel: \_\_\_\_\_

**F. Auxiliary (Emergency) Spillway**

- i. Noticeable obstructions to flow? \_\_\_\_\_
- ii. Animal activity observed? \_\_\_\_\_
- iii. Any noticeable deterioration in the approach or discharge channel? Cracks & Deterioration  
in Discharge abutment. Evaluate for integrity
- iv. Any visible deterioration of structure's crest? \_\_\_\_\_

**F. Auxiliary (Emergency) Spillway continued**

- v. If applicable, any observed exposure of rebar reinforcement? YES
- vi. If applicable, any visible leakage below concrete spillway? NO

**H. Downstream/Hazard Class Issues**

- i. Any noticeable changes immediately downstream of the dam that affects the hazard classification? NO

**I. Emergency Action Plan (EAP)**

- i. Emergency Action Plan provided by owner? NO
- ii. Does EAP contains emergency alert notification plan? If so, when was it last updated? \_\_\_\_\_
- iii. Does EAP contain specific actions to take if the dam has failed or is near failure? \_\_\_\_\_

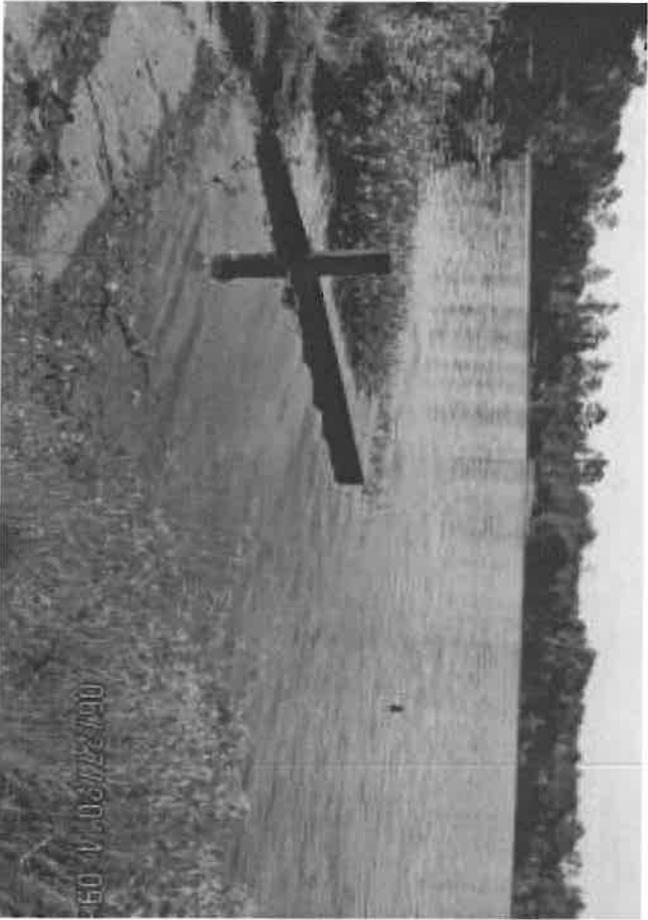
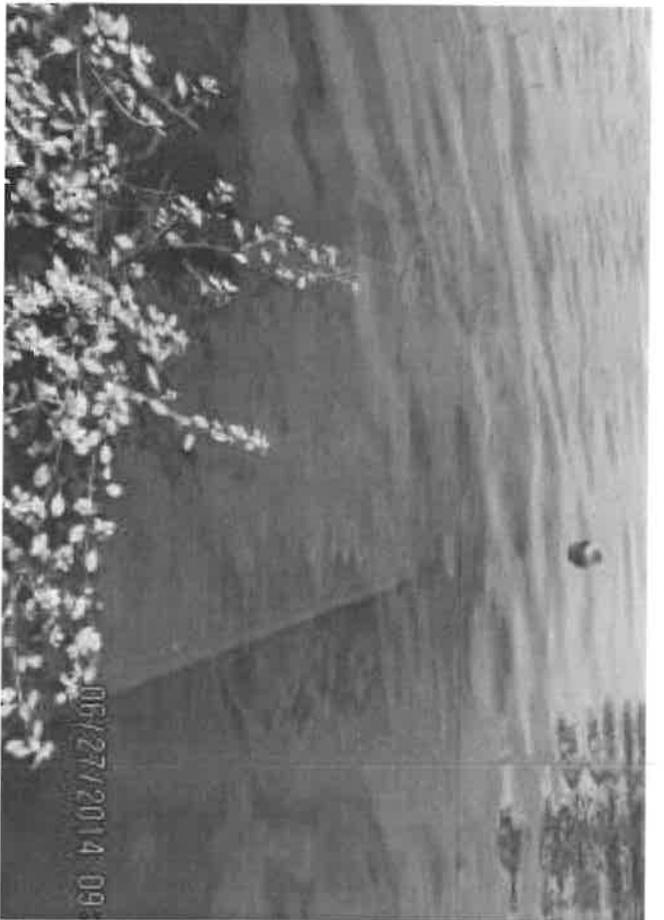
**Section IV (Conclusions)**

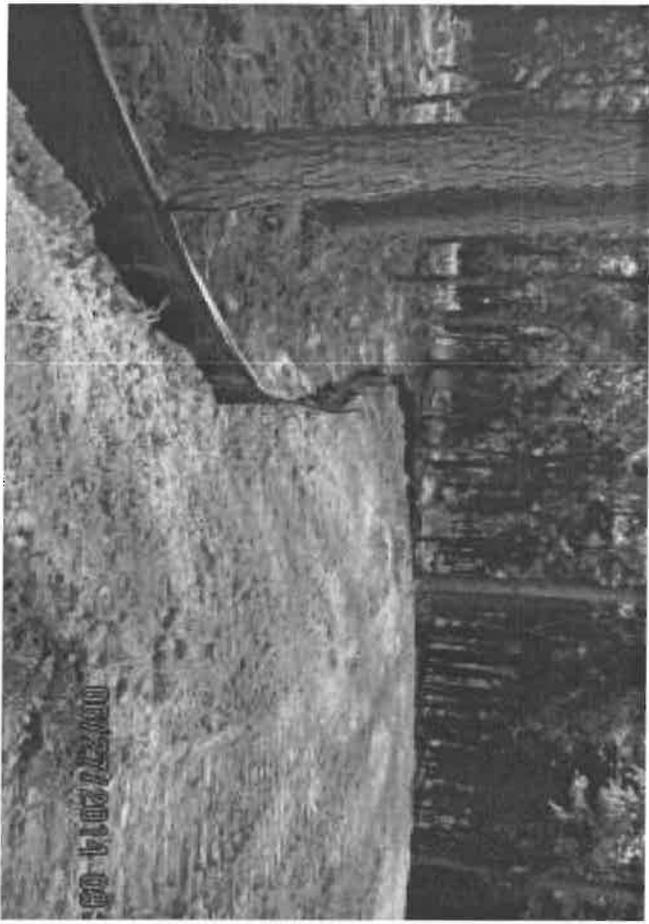
**General comments and recommendations:**

- Major work performed without a construction permit - please submit a construction permit application for current work needed and prior work performed.
- Seepage, trees, holes and erosion at spillway near concrete along with cracks in concrete/exposed rebar should be evaluated for permit by an engineer

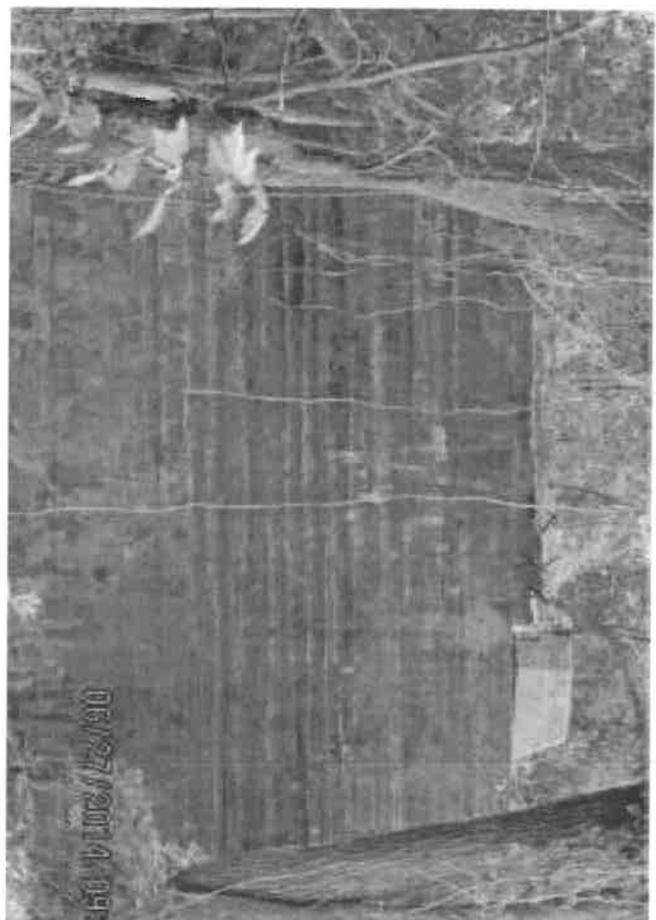
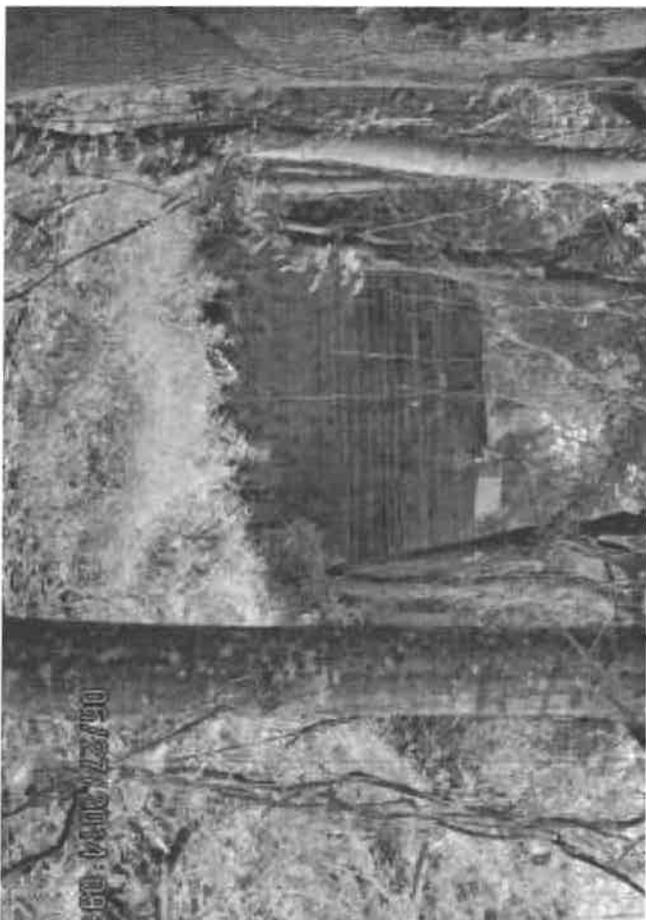
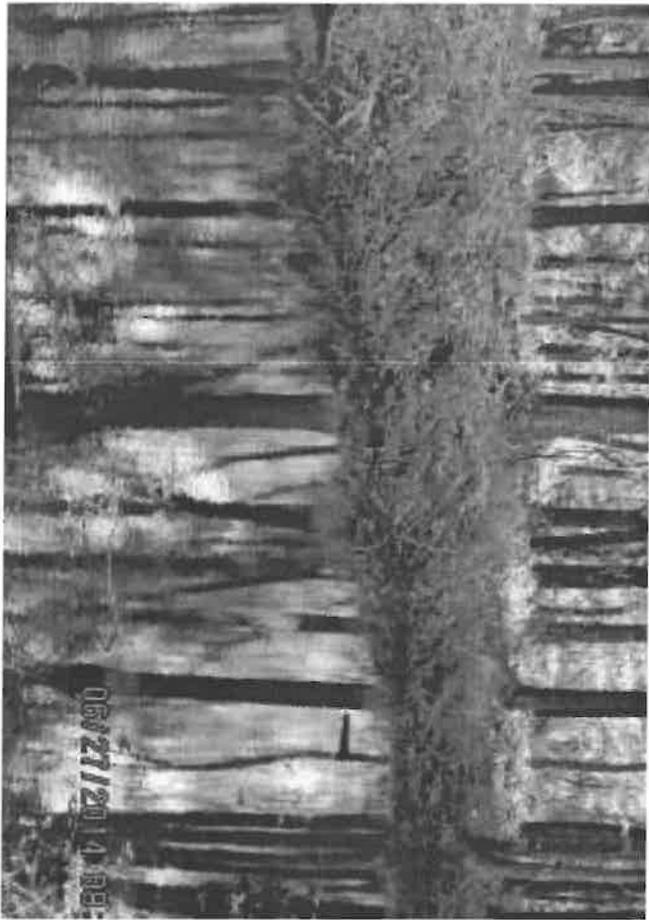
**Preliminary Dam Inspection Disclaimer:**

The information contained in the preliminary inspection report is intended as an aid to identify those dams that require maintenance and/or repair actions to reduce their danger to human life or property only. It is not intended as professional engineering or consulting advice for conditions or situations present at individual dams. It is not a substitute for a detailed inspection, nor does it replace the need for services provided by registered professional engineers. If your dam is experiencing an unusual situation consult with engineering professionals to find an appropriate remedy. Preliminary inspections conducted by South Carolina Department of Health and Environmental Control (the Department) are provided "AS IS" and "as available", without warranties of any kind, either express or implied. Preliminary inspections consist only of a visual but technical examination of the dam and its appurtenant works. All findings are based solely on visual observations of the inspector at the time of the inspection. Common law holds that the storage of water is a hazardous activity and the Department does not assume any responsibility or risk for your actions or inactions. Dam owners are responsible for the safe operations and maintenance of their impoundment structures.

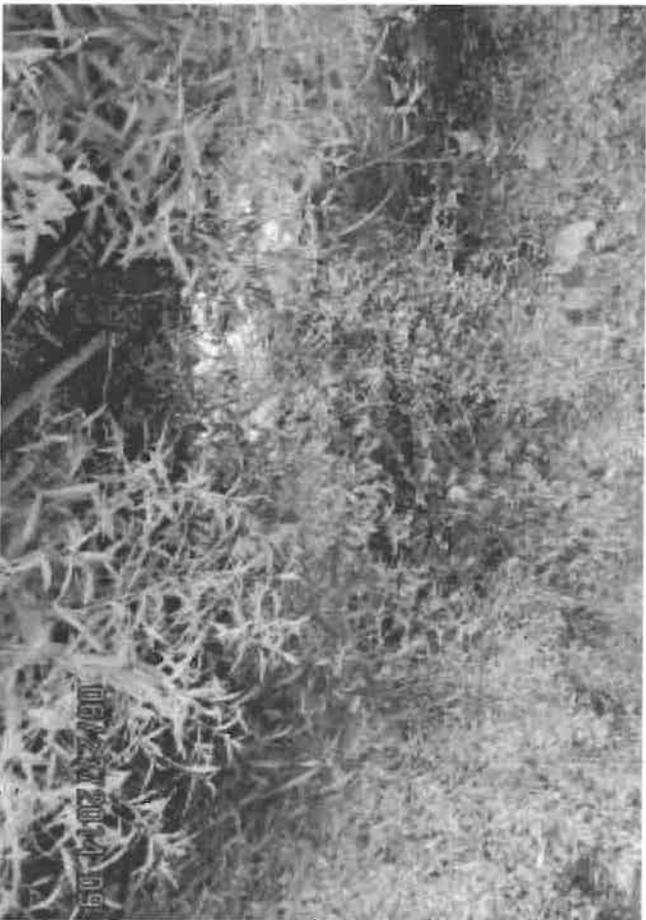
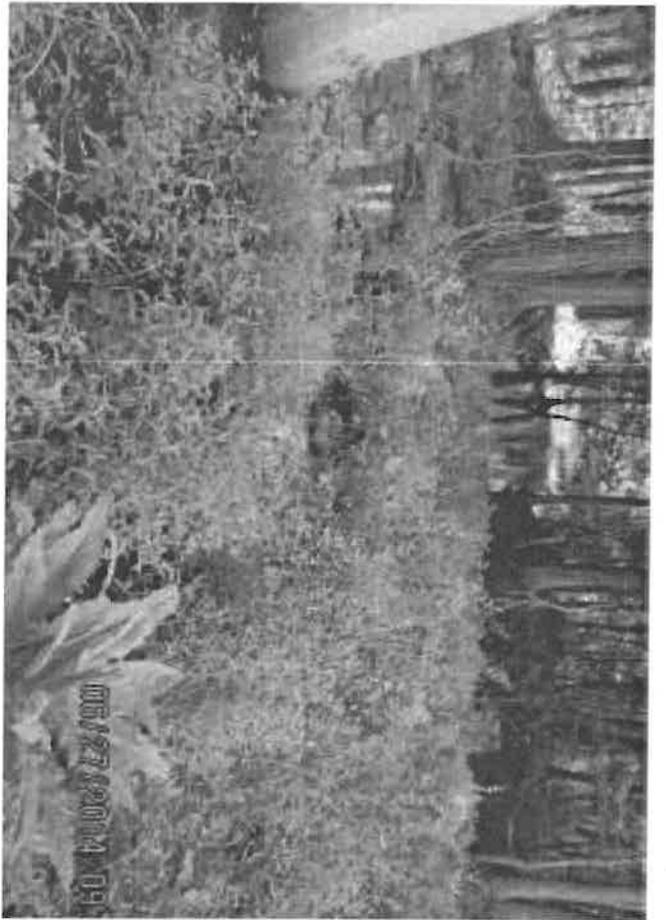
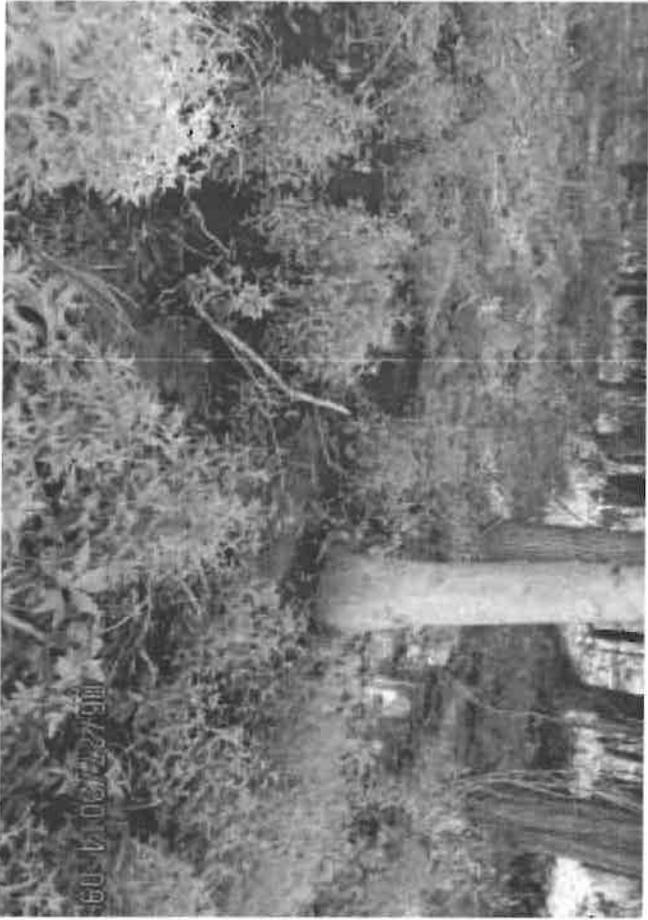


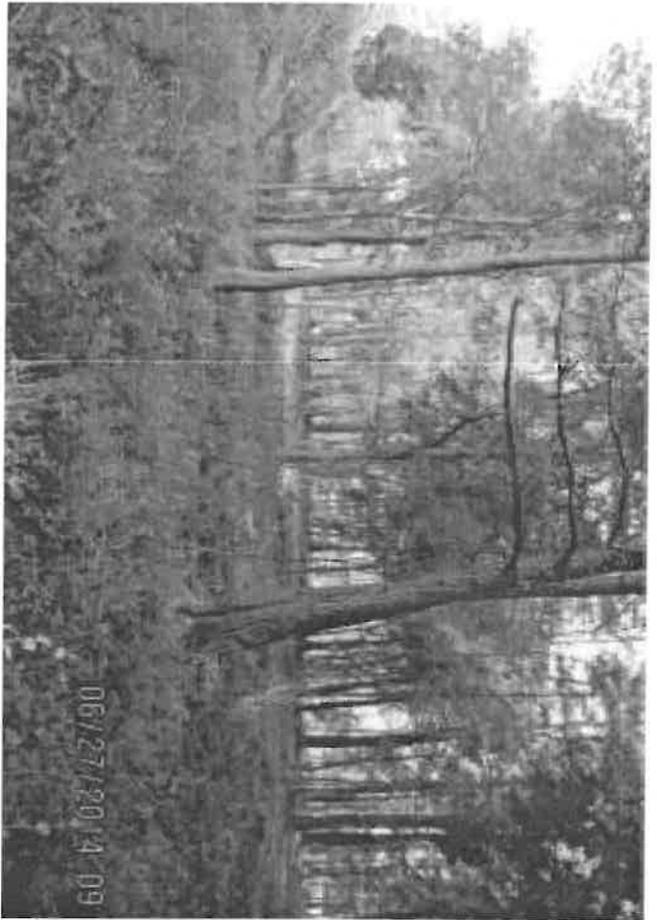


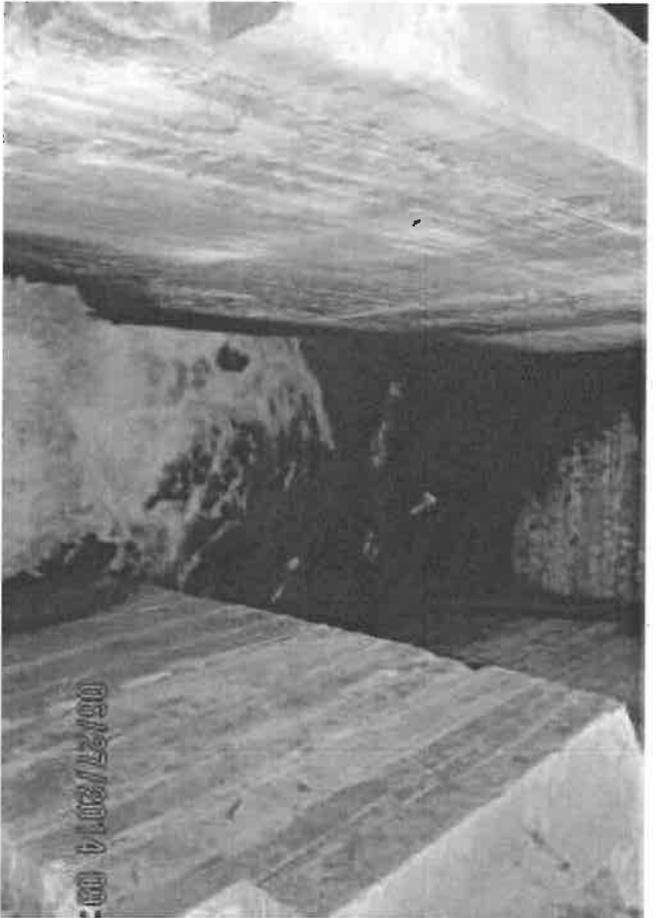
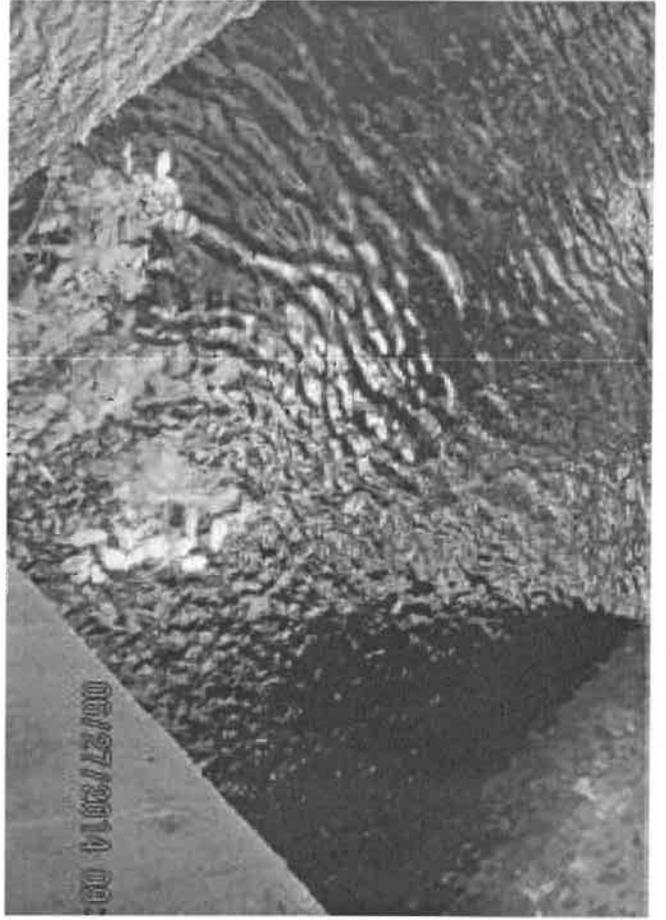


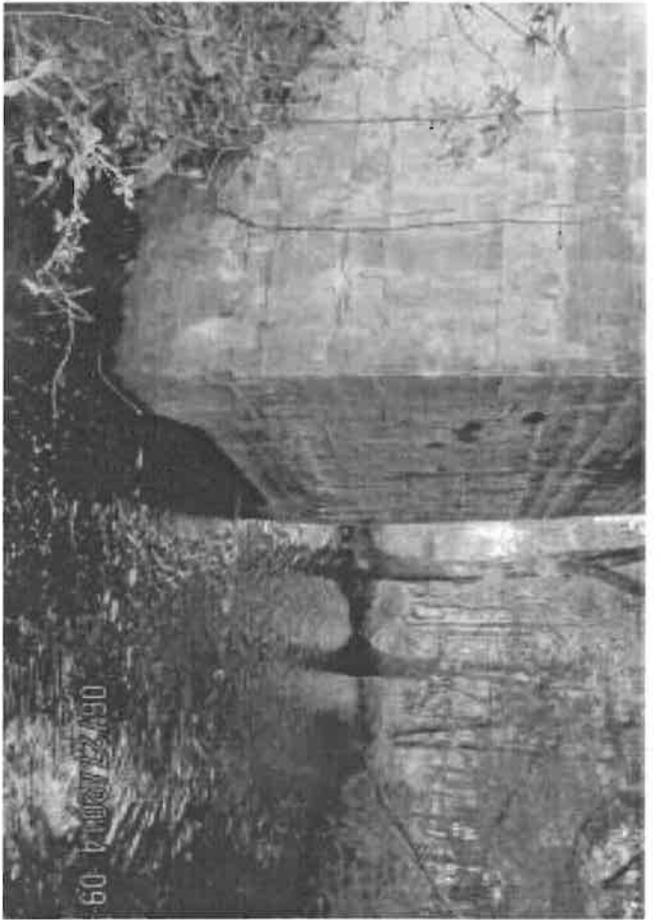


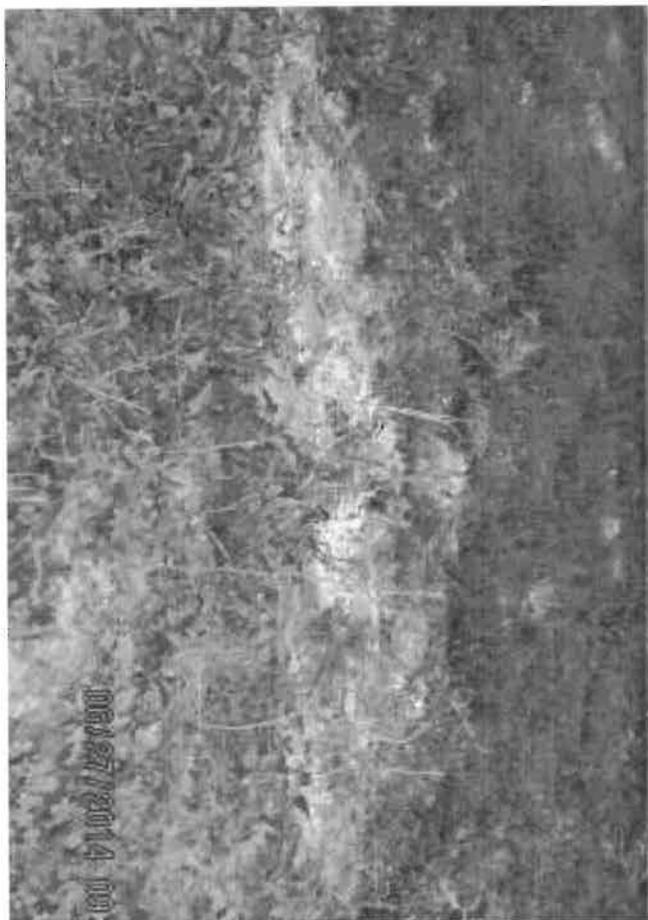
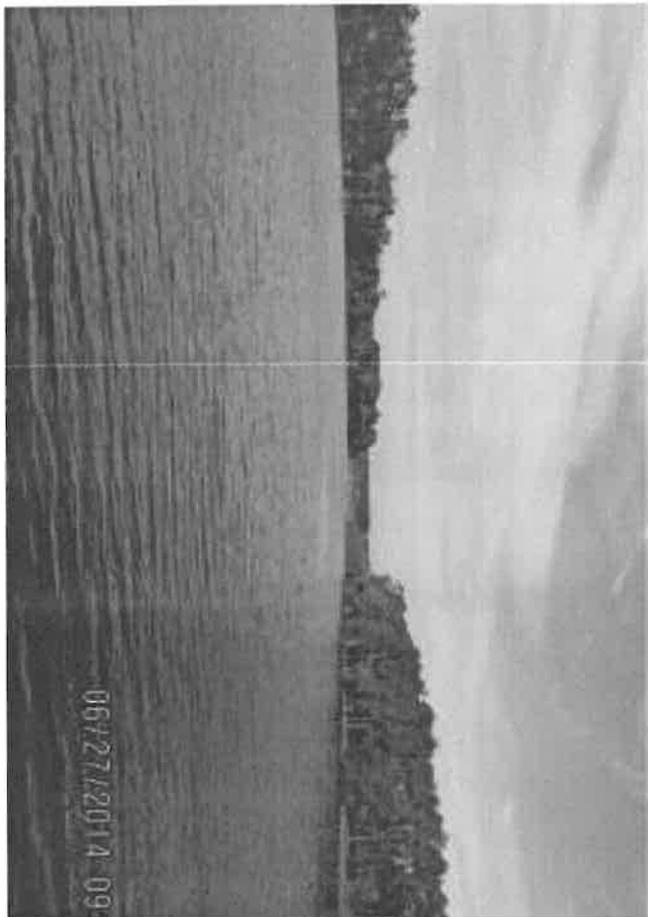
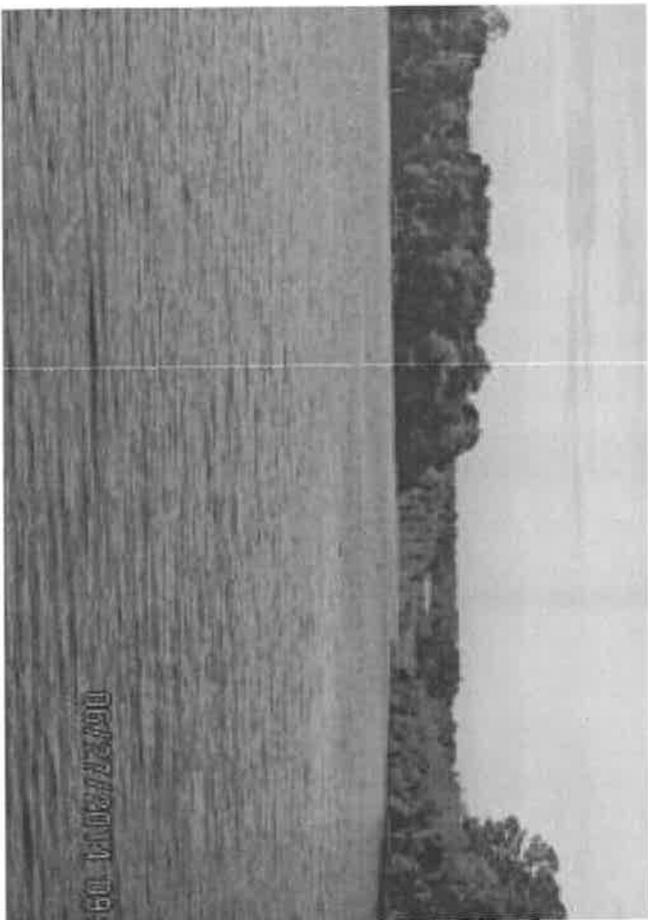


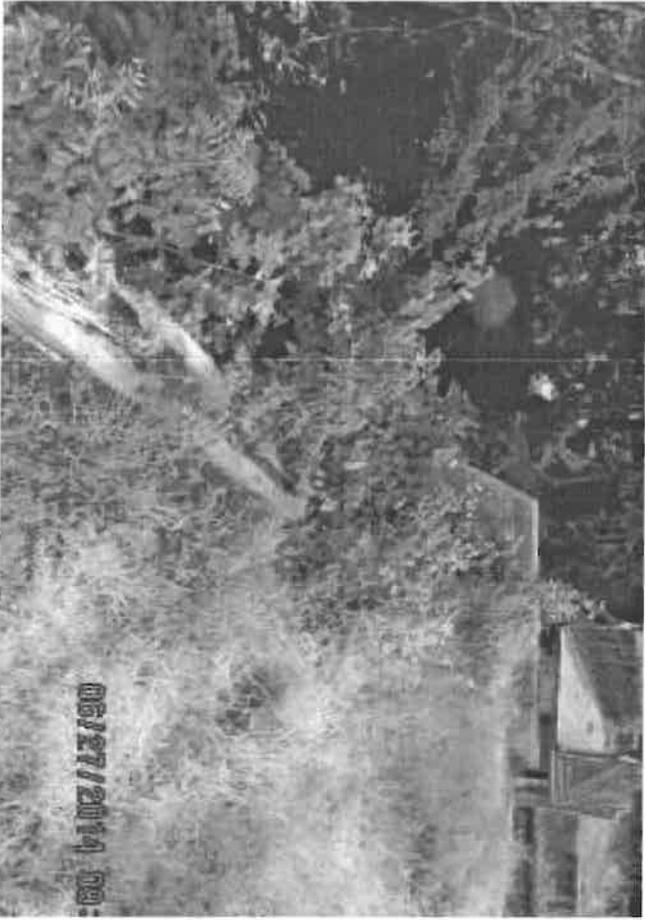


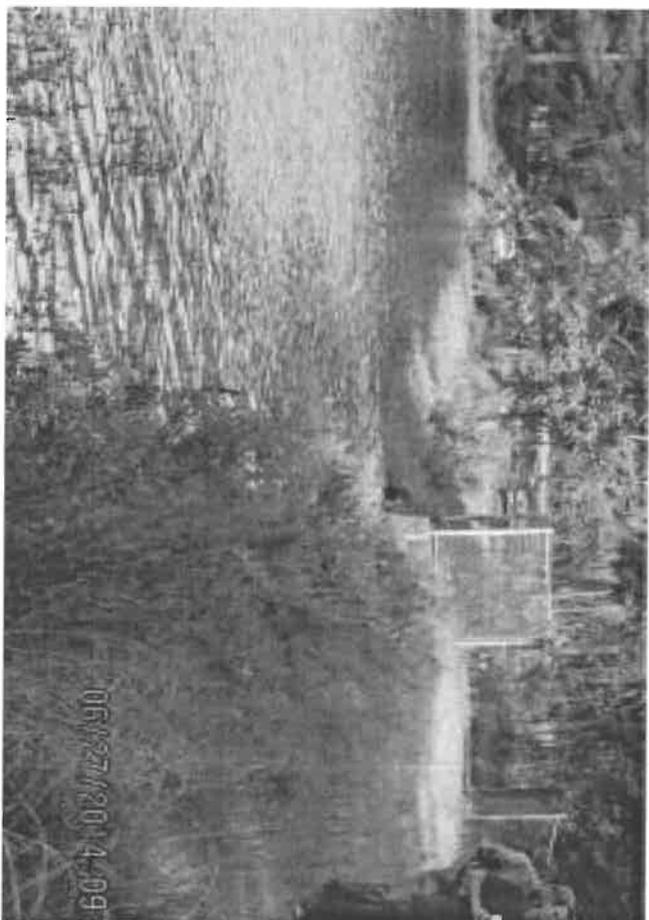


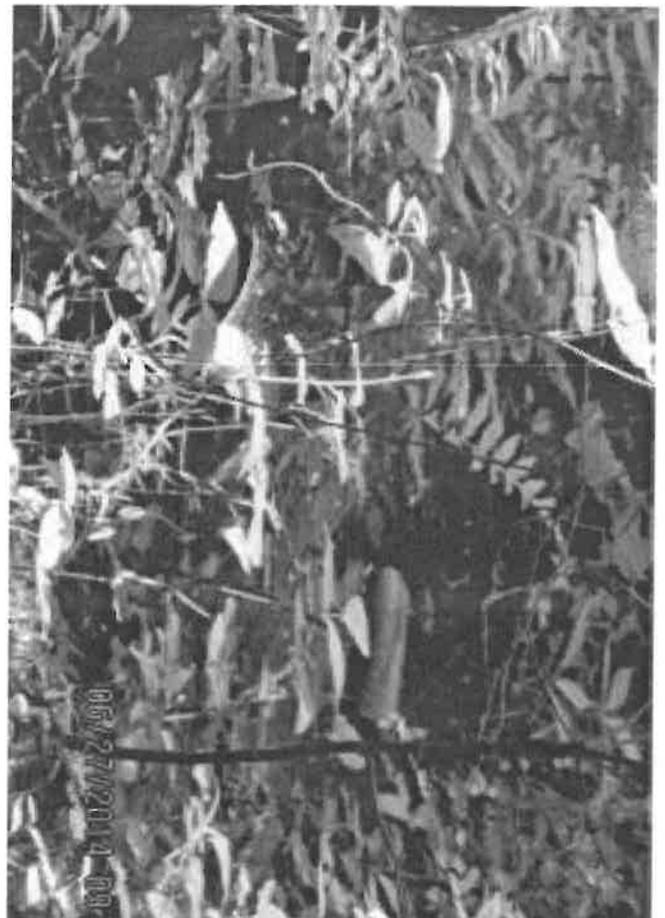
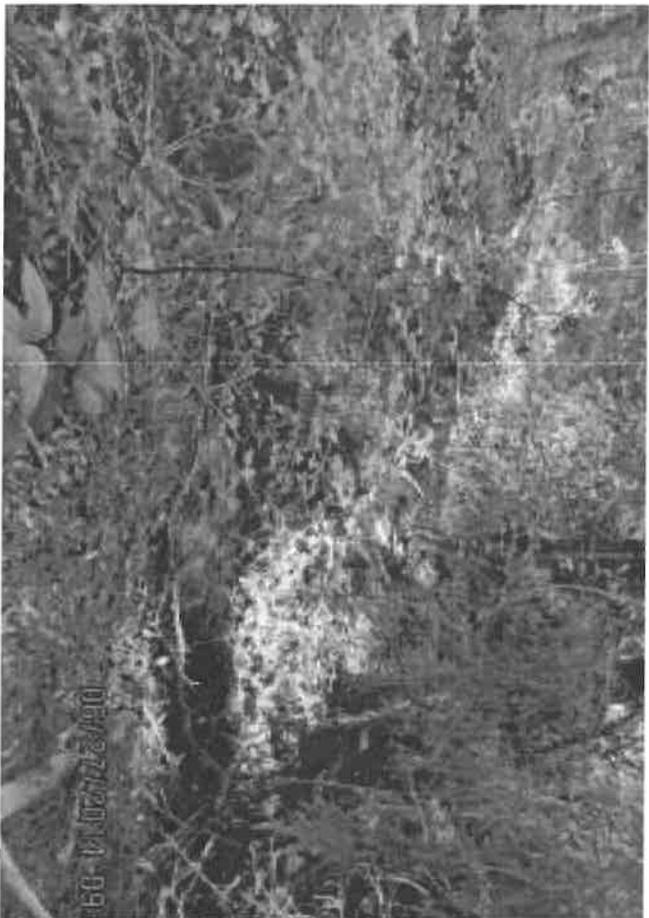


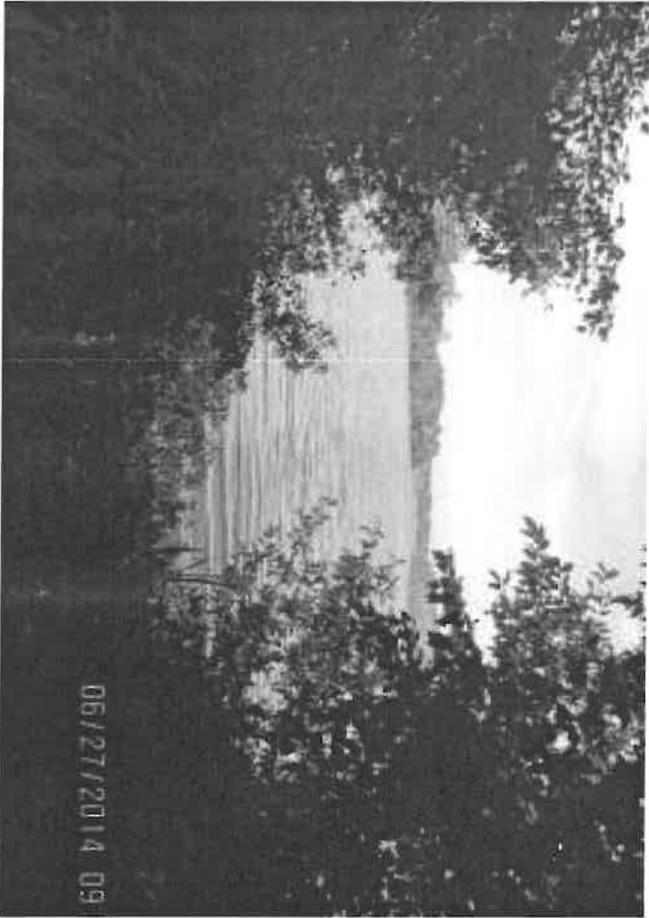


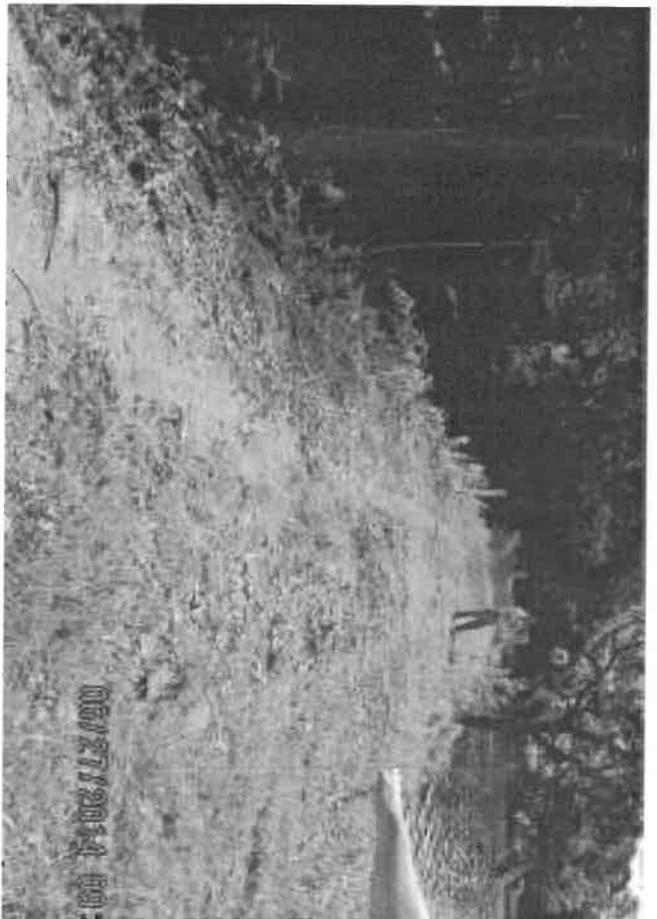
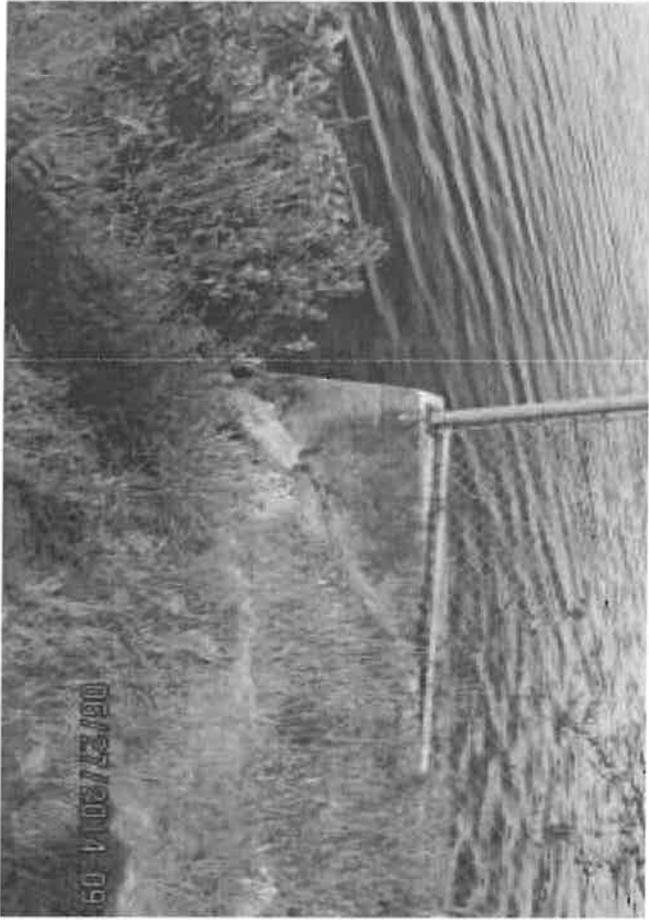












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