



Florida Department of Environmental Protection

Mining and Mitigation Program
2600 Blair Stone Road MS 3577
Tallahassee, Florida 32399-2400

FINAL ORDER GRANTING VARIANCE

PETITIONER:

Iluka Resources, Inc.
1223 Warner Road
Green Cove Springs, FL 32043

AGENT:

Mr. Tim Bartholomew
1223 Warner Road
Green Cove Springs, FL 32043

PROJECT INFORMATION:

Variance No. 0131098-061 EV-VE (OGC #
15-0173)
Date of Issue: July 24, 2015
Expiration Date: July 24, 2025
County: Clay
Project: Clarkes Creek Turbidity Variance

FINAL ORDER BY THE DEPARTMENT:

The Department of Environmental Protection (Department) hereby grants, to Iluka Resources, Inc., a variance from the requirements of rule 62-302.530(69), Florida Administrative Code, to provide temporary relief from the turbidity standard in a portion of Clarkes Creek within the Green Cove Springs Mine boundary to allow for construction of a remediation project. Under rule 62-302.530(69), Florida Administrative Code, the water quality standard for turbidity is 29 Nephelometric Turbidity Units (NTU) or less above natural background conditions.

This variance will allow temporary relief from the turbidity standard in a portion of Clarkes Creek approximately 2 miles in length (as depicted on Figure 3) within the Green Cove Springs Mine boundary. This variance shall only be valid for a ten-year period, during which construction activities authorized under Permit No. 0131098-060 will occur, including a remediation project designed to reduce turbidity in Clarkes Creek. This variance shall expire when the permit expires on July 24, 2025.

The associated Environmental Resource Permit (No. 0131098-060) authorizes construction of a surface water management system to facilitate final site closure of a heavy minerals mine and associated on-site mitigation activities on approximately 1630.77 acres of uplands, wetlands and other surface waters in Clay County, Florida.

The project is located within Green Cove Springs Mine, a former heavy minerals mine. The project site is located on and adjacent to lands that were previously mined or disturbed by mining operations. The portion of Clarkes Creek affected by this variance is located in Sections 16 and 21, Township 7 South, Range 26 East in Clay County, approximately 2.5 miles west of the intersection of US 17 and Warner Road, at approximately latitude 29° 52' 51.514", longitude 81° 42' 44.239". Clarkes Creek is a tributary of the St. Johns River, Class III waters.

The project involves earthmoving and grading associated with excavation and consolidation of dry mill tails (DMT) at the mine site into a single managed onsite location to facilitate site closure; projects designed to improve water quality within Clarkes Creek (Figure 1); and closure and abandonment of mine water treatment Ponds 1, 2, and 3.

After reviewing the Petition for Variance and the response to the Department's request for additional information dated May 5, 2015, the Department concluded the Petitioner demonstrated that the hardship asserted as a basis for the need for a variance is peculiar to the affected property and not self-imposed and that the grant of this variance is consistent with the general intent and purpose of Chapter 403, Florida Statutes. Additionally, the Petitioner demonstrated that compliance with the particular requirement(s) from which the variance is sought will necessitate the taking of measures which, because of the extent or cost, must be spread over a considerable period of time.

The *Notice of Intent to Issue Variance # 0131098-061 EV-VE* notified Iluka Resources, Inc., of the Department's proposed agency action and advised them of their right to a hearing pursuant to sections 120.569 and 120.57, Florida Statutes. On July 2, 2015, notice was given in "*Clay Today*," a newspaper published in Clay County, and on July 1, 2015, notice was given in the Florida Administrative Register informing the public of the Department's intended action and offering an opportunity for hearing pursuant to sections 120.569 and 120.57, Florida Statutes.

The Petitioner and interested parties having been advised of their rights under chapter 120, Florida Statutes and having failed or declined to file a Petition pursuant to sections 120.569 and 120.57, Florida Statutes, are hereby deemed to have waived those rights. Acceptance of the variance constitutes notice and agreement that the Department will periodically review this variance for compliance, including site inspections where applicable, and may initiate enforcement action for violation of the conditions and requirements thereof.

It is therefore:

ORDERED by the State of Florida, Department of Environmental Protection, that the Petition of Iluka Resources, Inc. requesting a variance be and is hereby granted, subject to the conditions specified by the Department in Permit No. 0131098-060.

The variance shall also be subject to the following conditions:

1. **ANNUAL REPORT:** A variance status report shall be submitted to the Department by March 1st of each year during the effective period of this variance, describing work done on the site during the previous year and documenting progress on the remediation project(s). An annual site inspection will be performed by Department staff to confirm the information submitted with the annual status reports. The report should include a description of problems encountered and solutions undertaken and anticipated work for the following year.
2. **MONITORING:** A monitoring program shall continue throughout the term of this variance.
 - a) Monitoring and reporting shall be in accordance with the following table:

Parameter	Method	Frequency	Location(s)	Reporting
Turbidity	Water quality meter	Monthly	See Figure 3	Quarterly
Flow	Continuous water level recorder/rating curve	Continuous	See Figure 3	Quarterly
Dissolved Oxygen	Water quality meter	Annually	See Figure 3	Annually
Acute Toxicity	WET Test	Annually	See Figure 3	Annually
BioRecon	DEP-SOP 003-11 BRN 1000	At Year 5	See Figure 2	At Year 5

b) If turbidity levels within the mixing zone (as a calculated average of the monitoring values measured at stations CC-1, CC-2, CC-3, CC-4, and CC-5) exceed 67.8 NTU for three consecutive months, a BioRecon monitoring event shall be performed to determine if the turbidity is impacting the aquatic community in Clarkes Creek. If the BioRecon score is 4 or above, the monitoring program will be continued unchanged. If the BioRecon score is less than 4, Petitioner will submit a mitigation plan for Department approval outlining the additional actions that will be taken to improve the aquatic system or off-set impacts to Clarkes Creek.

3. **YEAR REVIEW:** The Department shall review this variance at the end of the first 5-year period and each subsequent 5-year period thereafter, if applicable. The Department shall review the file and monitoring data for compliance, inspect the site, and determine if the variance is still necessary.

4. **VARIANCE TERM:** The term of this variance shall expire on July 24, 2025. Water within Clarkes Creek shall meet the water quality standard for turbidity pursuant to rule 62-302.530(69), Florida Administrative Code, on or before that time.
5. **VARIANCE RELEASE:** In the event that the earthwork associated with the associated Environmental Resource Permit # 0131098-060 is complete and monitoring data show that the turbidity levels in Clarkes Creek consistently meet the water quality standards in chapter 62-302, Florida Administrative Code, Petitioner may request permission to cease monitoring and surrender the variance.

FLAWAC Review

The applicant, or any party within the meaning of section 373.114(1)(a) or 373.4275, Florida Statutes, may also seek appellate review of this order before the Land and Water Adjudicatory Commission under section 373.114(1) or 373.4275, Florida Statutes. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from

Judicial Review

Any Party to this Order has the right to seek judicial review of the Order Pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of the Appellate Procedure, with the clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Order is filed with the clerk of the Department.

DONE AND ORDERED this 24 day of July, 2015, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Jane Herndon, Esq.

Deputy Director

Division of Water Resource Management

Florida Department of Environmental Protection

Bob Martinez Center, Room 618J-1

2600 Blair Stone Road, MS 3500

Tallahassee, Florida 32399-2400

Jane.Herndon@dep.state.fl.us

Attachments:

Figure 1: Clarkes Creek Water Quality Improvement Projects, Received 6/16/2015
Figure 2: Sample Locations, Received 6/16/2015
Figure 3: Upper Clarkes Creek Monitoring Locations, Received 6/16/2015
Anticipated Schedule of Planned Activities and Monitoring in Support of Site Closure Permit, Received 5/5/2015

Copies furnished to:

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Mining Mitigation Program File

POSTAL mail addressee:


Diversified Investment Jax LLC
3832-10 Baymeadows Rd #353
Jacksonville, FL 32217

CERTIFICATE OF SERVICE

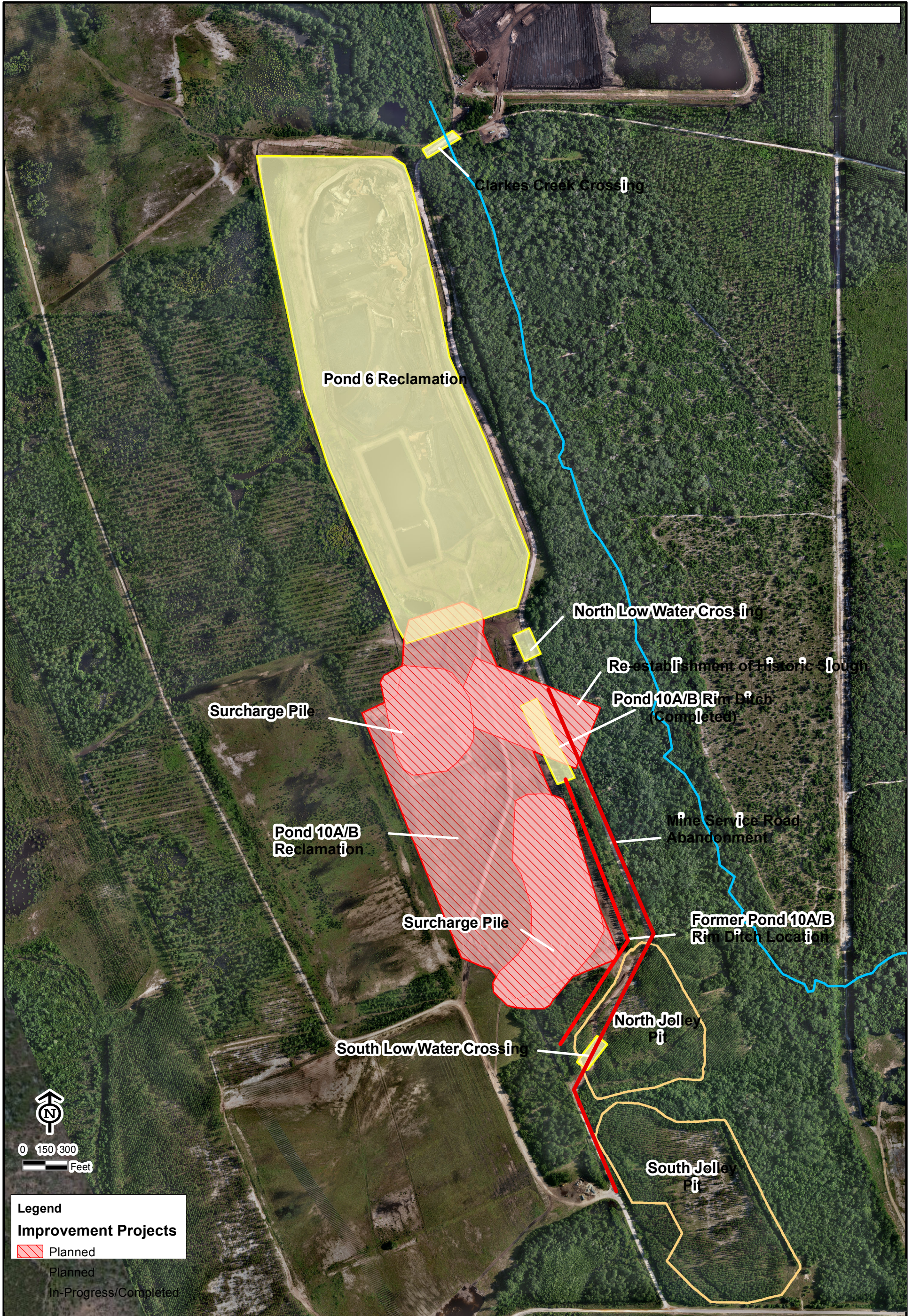
The undersigned duly designated deputy clerk hereby certifies that this variance, including all copies, were sent before the close of business on July 24, 2015, to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 7/24/15
Deputy Clerk Date

Prepared by: Jessica Duke



Legend

Improvement Projects

- Planned
- Planned
- In-Progress/Completed

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Clarkes Creek Water Quality Improvement Projects
Iluka Resources Clay County, Florida

FIGURE
1



Legend

- Proposed Permit Boundary (1,630.77Ac ±)
- Bio-Recon Sample Area
- Upper Clarke's Creek

0 25 50
Meters

0 100 200
Feet

Sample Location
Toxicity, Dissolved Oxygen

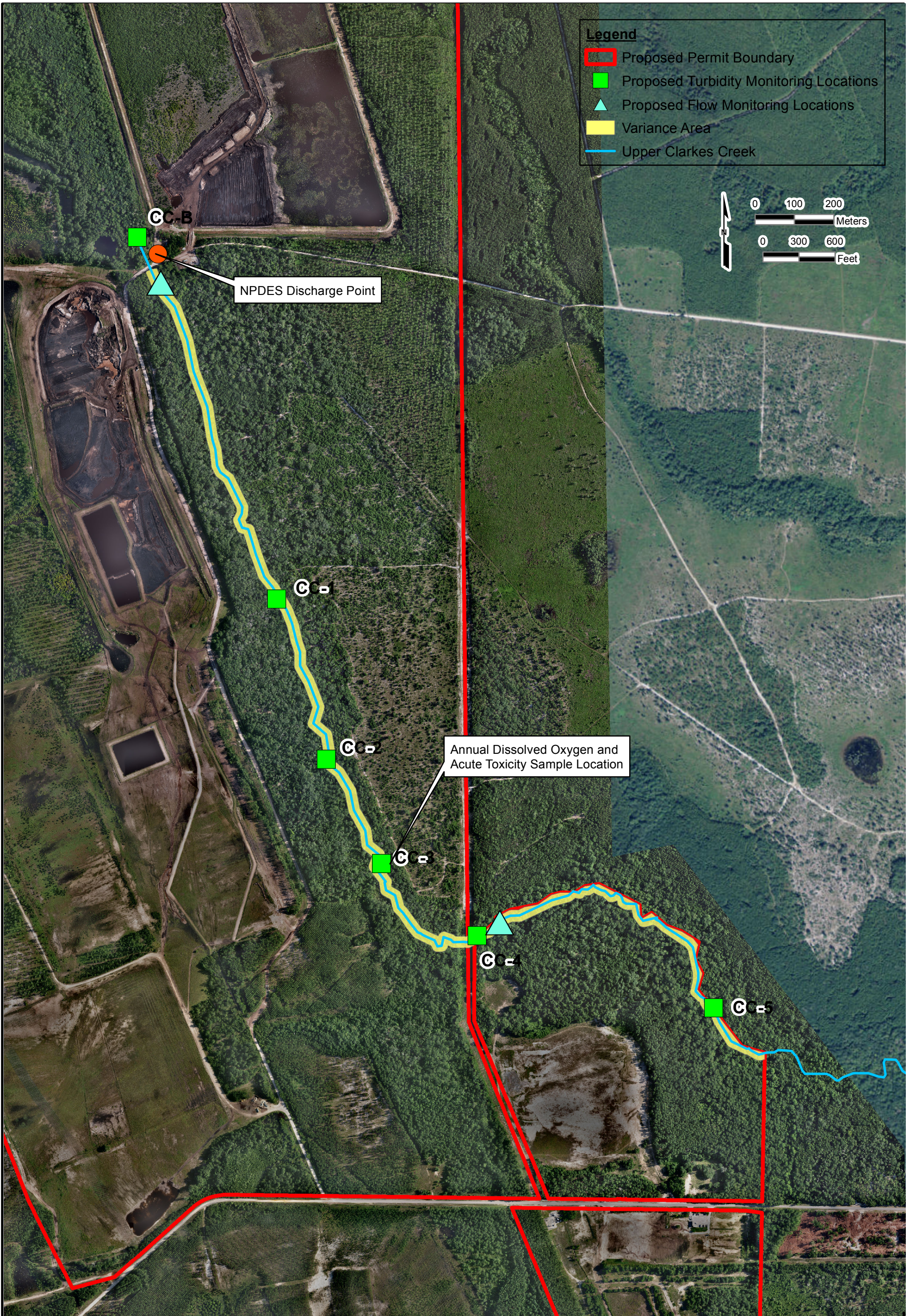
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Sample Locations
Iluka Resources Inc. Clay County, Florida

FIGURE	2
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**Upper Clarkes Creek
Monitoring Locations**

Iluka Resources Inc.
Clay County, Florida



FIGURE
3



Iluka Resources Inc.
Green Cove Springs, FL

Anticipated Schedule of Planned Activities and Monitoring in Support of Site Closure Permit

Activity Description	2015												2016												2017	2018	2019	2020	2021	2022	2023	2024	2025
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec									
Site closure permit with FDEP administration and oversight																																	
Turbidity monitoring (monthly)																																	
Biological monitoring (initial and as triggered)																																	
Data reporting to FDEP (quarterly)																																	
Ponds 1/2/3 Embankment Maintenance and Upgrades																																	
Pond 6 reclamation																																	
Reinstate Pond 6 surface water flow to the east																																	
Pond 10 A/B rim ditch excavation																																	
Pumping of water from Pond 10 A/B rim ditch																																	
Soil / humate surcharging on Pond 10 A/B area																																	
Consolidate DMT, grade, cover																																	
Reinstate Pond 10 A/B surface water flows to east																																	
Abandon mine service road between Pond 9 and Pond 6																																	
Reinstate historic sw drainage at abandoned mine service road																																	
Reinstate historic drainage slough (Pond 10 A/B area)																																	
Reinstate drainage between north and south jolley pit																																	
Reinstate Ponds 1/2/3 drainage to surrounding environs																																	
Final grading of site																																	
Permit required monitoring, maintenance, reporting																																	

Notes: Previously completed works include: mine service road improvements (north and south low water crossings, raising of the road east of 10 A/B), Clarkes Creek crossing, stormwater capture / treatment from work areas.

 Permit / monitoring / reporting activity
 Potential monitoring and reporting activity

 Water management activity
 Earth works activity