Land Reclamation Project (LRP)

General Overview and Updates

Godfrey Scott - Project Coordinator
Discussion Points

- Background and context
- Project targets and requirements
- Execution process.
- Results/achievements.
- Challenges and the way forward
Background

- 2009 – Special Land Use Committee (SLUC) was established to provide recommendations for managing land use conflicts and issues (*in the context of degradation from extractive activities*).

- Recommendations addressing key mining issues:
  1. Enhanced Land Reclamation,
  2. Improved Infrastructure in Mining Districts,
  3. Sustainable Land Management in the mining and forestry sector
  4. Strengthening of Land–Use Planning and Coordination and
  5. Amendments to the Mining Act and Regulations among natural resource agencies.
Committee was dissolved

2012 – Stakeholder engagement for advancing the recommendations of the SLUC

2012 – Outcome – the establishment of the Land Reclamation Committee (LRC):
- Address specific recommendations/issues of the SLUC
- Coordinating National level reclamation efforts
- Multi stakeholder representation – GGMC, GGDMA, GFC, FPA, GGDMA, UG, OCC, DNRE, EPA and NAREI
What does Land Reclamation Project represent?

- Model implementation of the activities/recommendations outlined by the Special Land Use Committee (SLUC).

- A building block initiative through which the strategic recommendations and interventions of the Land Reclamation Committee (LRC) will be implemented i.e. At the national level.
• Land Reclamation Project (LRP) is a specific requirement under the Joint Concept Note (JCN) of the Guyana – Norway Partnership.

• More specifically, partnership Goal No. 4 – *(Ongoing implementation of activities by the Land Reclamation Committee (LRC) in accordance with its ToR and Work Plan)* under the Enabling indicator of Governance.
A RELIABLE PROCESS OF INFORMING POLICY THROUGH LARGE SCALE DATA COLLECTION
Deliverables specific to the JCN and TOR for the Land Reclamation Committee (LRC):

- A complete project document and financial plan to implement reclamation activities – June, 2014


- Biannual reports on the implementation of reclamation activities – July and December, 2014.

- To commence reclamation activities at three (3) project sites by 2015.
Execution Process

Consult
In-house Data

Site Visit and Screening

Selection

Technical evaluation

Intervention
Backfilling and Replanting

Monitoring
Potential Recuperation Site - Correia Mining

Coordinate System: WGS 1984 UTM Zone
Projection: Transverse Mercator
Datum: WGS 1984
Unit: Meters

M.O.Correia_Mining_Decorestation (122.98 ha)
M.O.Correia_Fire_No. ML/G2/2004

Area A (14.7 ha)
Area B (8.9 ha)
Original
Site Visit and Technical Evaluation
This site screening tool addresses *prioritizing* or *ranking of mined-out sites* for land reclamation.

- Environmental Extent
- Matrix – Evaluation of impacts

**OBJECTIVE OF THE TOOL:**

- Promote rational decision making.
- To ensure efforts are directed to sites that will generate the greatest benefits in the most cost-effective manner.
Matrix – Evaluation of resource impacts

- Evaluates – 4 different variables.

- The Matrix consists of a list of possible environment resources that may be affected by reclamation activities as well considerations any mitigation/control measure(s) in the planning stage. E.g. Effect of pit fluids on stream water quality.
### Part 1b: Matrix For Evaluation of Impacts on Valuable Components of the Environment

<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Criteria</th>
<th>Y</th>
<th>N</th>
<th>Score</th>
<th>Maximum Score</th>
<th>Percentage</th>
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<td>1</td>
<td>Landuse</td>
<td><em>conflicts with:</em></td>
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<td>Amerindian Communities</td>
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<td>Conservation of Historical Sites (Archeology, Historic Resources/ National Trust)</td>
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<td><em>Will the project cause the need for?</em></td>
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<td>Relocation of residents</td>
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<td>Other major socioeconomic negative impacts</td>
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<td>Air</td>
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<td></td>
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<td>Particulate Matter</td>
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<td>Odour</td>
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<td>Greenhouse Gases</td>
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<td>Vibrations</td>
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<td>Soil/Geolo</td>
<td><em>Will the project:</em></td>
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<td>Include the clearing of vegetation</td>
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<td></td>
<td></td>
<td>Include the removal of top-soil</td>
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<td>0</td>
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<td>1.25</td>
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<td></td>
<td></td>
<td>Affect the soil stability/ geology</td>
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<td></td>
<td>0</td>
<td>0</td>
<td>1.25</td>
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<td></td>
<td></td>
<td>Cause deposition/ erosion</td>
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<td>1.25</td>
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<td>Water</td>
<td><em>Will the project have the potential to:</em></td>
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<td>Is the proposed site vulnerable to flooding</td>
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<td>Impact groundwater quality</td>
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<td>Impact surface water quality</td>
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<td><em>Will the project require:</em></td>
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<td>Flood control measures</td>
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<td>Alteration of existing drainage patterns, streams/ rivers</td>
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#### TOTAL

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<th>Rating</th>
<th>Significance</th>
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<td>High Significance</td>
<td>66.6 – 100%</td>
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<tr>
<td>Medium Significance</td>
<td>33.4 – 66.7%</td>
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<tr>
<td>Low Significance</td>
<td>0 – 33.3 %</td>
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Components

Environmental Extent Criteria

- Evaluates 9 different categories of variables.
- The objective of this Criterion is to gain an general idea of the environmental magnitude of the project /reclamation activity.
<table>
<thead>
<tr>
<th>#</th>
<th>Category</th>
<th>Issue</th>
<th>Y</th>
<th>N</th>
<th>Score</th>
<th>Maximum</th>
<th>Maximum Percentage</th>
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<tbody>
<tr>
<td>1</td>
<td>Location</td>
<td>Rate the Accessibility of the Site</td>
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<td>High Accessibility (Score 5)</td>
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<td>Medium Accessibility (Score 10)</td>
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<td>Low Accessibility (Score 15)</td>
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<td>2</td>
<td>Extent of Project</td>
<td>Indicate the Extent of the Project</td>
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<td>Less than 1 hectare (Score 5)</td>
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<td>Between 1-5 hectares (Score 10)</td>
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<td>Greater than 5 hectares (Score 15)</td>
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<td>3</td>
<td>Environmental Impact</td>
<td>See Attached Matrix</td>
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<td>Medium Significance (Score 10)</td>
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<td></td>
<td></td>
<td>Low Significance (Score 5)</td>
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<td>4</td>
<td>Nursery Establishment</td>
<td>Is the site in close proximity to a plant nursery?</td>
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<td>11.1%</td>
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<td>5</td>
<td>Proximity to Community</td>
<td>Is the site in close proximity to a community?</td>
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<td>11.1%</td>
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<tr>
<td>6</td>
<td>Access to Backfilling</td>
<td>Is the site in close proximity to a readily available source of backfilling material?</td>
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<td>15</td>
<td>11.1%</td>
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<tr>
<td>7</td>
<td>Access to Water Supply</td>
<td>Is the site in close proximity to good-quality, affordable and abundant water supply?</td>
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<td></td>
<td>0</td>
<td>15</td>
<td>11.1%</td>
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<tr>
<td>8</td>
<td>Proximity to Important Biodiversity</td>
<td>Is the site in close proximity to important biodiversity conservation features? (e.g. endemics, critically endangered, vulnerable species etc.)</td>
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<td></td>
<td>0</td>
<td>15</td>
<td>11.1%</td>
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<tr>
<td>9</td>
<td>Land Ownership</td>
<td>Is the present landowner willing to participate in land reclamation activities?</td>
<td></td>
<td></td>
<td>0</td>
<td>15</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

**TOTAL**

ENVIRONMENTAL EXTENT = 0%

Evaluation Completed by: __________________________
Date of Evaluation: __________________________
General rule of thumb

Sites which generate the lowest values for Environmental Extent should be prioritised for Land Reclamation Activities.
Data output – Distribution of data points
Output – Topographic characteristics
Strategic Perspective—land use planning
Projections

- Calculated parameters
  - Amount of material available
  - Amount of material required
  - Project timelines (entire project, specific stages)
  - Financial projections
Results/Achievements to date
Project Unit and Project Document

- **Land Reclamation Unit** – The Land Reclamation Unit was established and the requisite technical staff recruited.

- **Project document** – A complete project document, inclusive of a financial plan was prepared and submitted for review in May 2014.

- The project document was subsequently finalized and submitted to the Office of Climate Change (OCC) in June, 2014.
Work Plan

- **Work–Plans and (M&E) framework** – In support of the project document, a detailed Work–Plans and accompanying Monitoring and Evaluation (M&E) framework for the LRC were prepared for 2014 & 2015.

- Project–level and site specific action plans framework were prepared 2014.
• **Biannual reports (2)** on the implementation of reclamation activities for the periods (a) January – July and (b) July to December respectively were prepared.

• **Fortnightly Project Reports** were also prepared and are available.
Stakeholder engagement

- One (1) Multi stakeholder engagement sessions on 16\textsuperscript{TH} JULY, 2014.

Objectives

- To promote dialogue and information sharing.
- To stimulating stakeholder participation in the activities of the LRP.
Site Selection

- Three (3) priority project sites have been identified for intervention through the LRP.

- Supporting site specific action plans to commence earth works have been prepared.
Site 1

- Olive Creek – Mazaruni Mining District No.3.

- Project Area: 8.78 Hectares or 21.69 Acres.
Site 2

- Dacoura Mines – Mazaruni Mining District No.3

- Project Area: 3.5 HA – Hectares or 8.6 Acres.
Schedule One
Project Extent _ Bosai

AREA A: 3.7342 ACRES OR 1.5112 HECTARES
AREA B: 4.9134 ACRES OR 1.9884 HECTARES
Site 3

- Thomas Island Puruni:– Mazaruni Mining District No.3.
- Project Area: 7.6 hectares or 18.78 Acres
Challenges

- Buy in – Culture shift necessary
- Mobilization
- Site accessibility
The way forward

- Aggressive data collection is critical!!
- Continuous replication of reclamation experimental trials
- Increased stakeholder awareness
- Adjusted support systems (nurseries etc)
Thank you

Questions!!