MOKOLO- EN KROKODILRIVIER WATERAANVULLINGSPROJEK
(MKWAP)

Fase 2: Oordrag skema vanaf die Krokodilrivier (Wes) na die Lephalale area

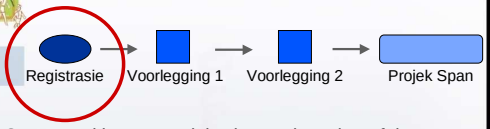
Openbare Ope Dag

water & forestry
Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

Inleiding

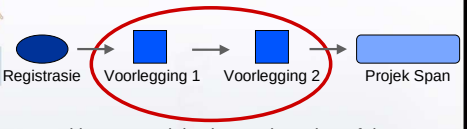
- Welkom by die Openbare Ope Dag vir **MKWAP Fase 2**
- Maak asb. seker dat u die **Presensielys** ingevul het
- Oorsig van Ope Dag

Ope Dag - Oorsig



- Stap 1: Vul in Presensielys by Registrasie Tafel

Ope Dag - Oorsig



- Stap 1: Vul in Presensielys by Registrasie Tafel
- Stap 2: Besigtig Voorleggings 1 en 2

Ope Dag - Oorsig

- Stap 1: Vul in Presensielys by Registrasie Tafel
- Stap 2: Besigtig Voorleggings 1 en 2
- Stap 3: Rig vrae aan Projek Span

Inleiding

- Welkom by die Openbare Ope Dag vir MKWAP Fase 2
- Maak asb. seker dat u die Presensielys ingevul het
- Oorsig van Ope Dag
- U is welkom om vrae te rig aan die projek span nadat u die voorleggings besigtig het

Projek Span

Departement van Waterwese en Bosbou

Verteenwoordigers	Verantwoordelikheid
O. van den Berg	Aansoeker

Aurecon

Verteenwoordigers	Verantwoordelikheid
F. Vogel	Projek Koördinerings en Bestuurs Module
B. Smit	
J. Pienaar	Tegniese Studie Module

Nemai Consulting

Verteenwoordigers	Verantwoordelikheid
N. Naidoo	Omgewingsbestuurs Module
D. Henning	
S. Pienaar	

7

Inleiding

- Welkom by die Openbare Ope Dag vir MKWAP Fase 2
- Maak asb. seker dat u die Presensielys ingevul het
- Oorsig van Ope Dag
- U is welkom om vrae te rig aan die projek span nadat u die voorleggings besigtig het

- Die inhoud van diè voorlegging is as volg:
  - Doel van Ope Dag
  - Projek Agtergrond en Motivering
  - Tegniese Inligting
  - Omgewingsimpakbepaling

8

Doel van Ope Dag

- Vorm deel van Openbare Deelname vir die Omgewingsimpakbepaling (**OIB**)
- Voorsiening van inligting aangaande **MKWAP Fase 2**
- Dien as geleentheid vir projek-verwante besprekings

9

Neem asb. Kennis:

- Die beplanning en ontwerp van die projek komponente is ‘n dinamiese proses, en die inligting mag dus verander.
- Alle Belanghebbende en Geaffekteerde Partye sal op hoogte gehou word van enige veranderinge in die projek deur die Omgewingsimpakbepaling

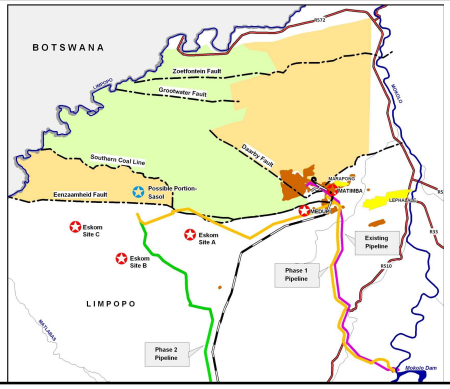
10

Projek Agtergrond

- Die MCWAP is ‘n DWEA geïnisieerde projek met die doel om water voorsiening in die in die Lephalale Munisipale area aan te vul.
- Die projek ondervang die beplanning, ontwerp en konstruksie van die siviele infrastruktuur benodig om water oor te plaas na die gebruiksarea, in die hoeveelhede benodig vir huidige en toekomstige ontwikkeling.
- Twee fases word tans beplan vir implementering:
  - Fase 1: Mokolo Skema (opgradering van die bestande infrastruktuur)
  - Fase 2: Krokodilrivier (Wes) Skema
  - Verdere fases sal waarskynlik volg

11

Steenkool Reserwes



Motivering vir die Projek

- Die Waterberg steenkool reserwes is 'n energie bron van Nasionale belang en ekonomiese ontwikkeling.
- Bestaande ontwikkeling sluit in Ellisras, Marapong, Grootegeluk Myn, Matimba, Medupi (word tans gebou) en besproeiing.
- Beplanning vir toekomstige ontwikkeling sluit in verdere kragsentrales, steenkool tot petroleum verwerkings aanlegte, moontlike ontwikkeling van gas velde, addisionele steenkool myne en die geassosieerde infrastruktuur.
- Die water behoeftes van hierdie industrie kan nie uit lokale bronne voorsien word nie en moet dus aangevul word van elders.

13

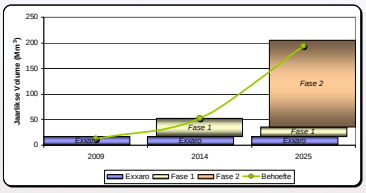
Motivering (vervolg)

- Die Departement van Waterwese en Omgewingsake (DWAE) is verantwoordelik vir die beplanning van Regerings Water Werke ten einde te voorsien in die behoefte.
- MCWAP is die oorkoepelende projek waaronder die oordrag skemas beplan en geïmplementeer word.
- Die behoefte aan energie (elektrisiteit en brandstof) geniet hoë prioriteit op die regering se agenda en daarom ook dié projek.
- Die Omgewings Impak Studie verseker dat die relevante wetgewing nougeset gevolg en deurgaans toegepas word in die uitvoering van die projek.

15

Tegniese Inligting

- Die grafiek vergelyk die huidige en toekomstige aanvraag met die gekombineerde kapasiteit van Fases 1 en 2 gesamentlik



16

Tegniese Inligting (vervolg)

- Fase 2 Infrastruktuur
  - Verskillende opsies is ondersoek vir die plasing van die onttrekkingswerke, ontslikkingswerke en pompstasies; primêr by Boschkop en Vlieëpoort, maar ook by minder doeltreffende posisies in die Krokodil Rivier (Wes)
  - Opsies vir die belyning van die pyplyne is ook ondersoek:
    - Oos van Thabazimbi en die spoorlyn
    - 'n Sentrale roete langs die spoorlyn
    - Wes van Thabazimbi en langs die kraglyn
  - **Onttrekking vanaf Vlieëpoort en oordrag via die sentrale roete is geselekteer gebaseer op 'n reeks tegniese, ekonomiese en omgewings aspekte.**

17

Tegniese Inligting (vervolg)

- Infrastruktuur komponente:
  - Vlieëpoort:
    - Stuwal en onttrekkingswerke;
    - Laedruk pompstasie;
    - Ontslikkings werke;
    - Balanseer dam; en
    - Hoë druk pompstasie,
  - Oordrag pyplyn:
    - Kombinasie van styg en gravitasie pyplyne (± 130 km),
    - Stoor damme vir die bedryf van die stelsel
    - Waterslag beskerming, lugkleppe en spoelkleppe
    - Rivier kruising vir die Matlabas Rivier
- Kapitaal koste:
  - Beraam as R 8 500 miljoen

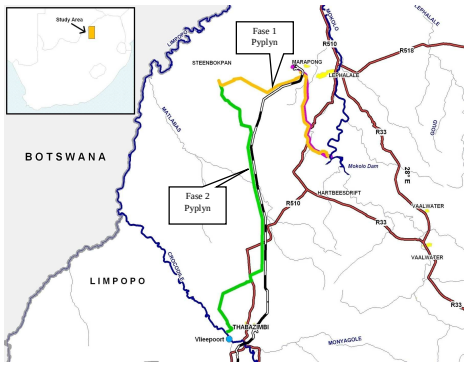
18

Tegniese Inligting (vervolg)

- Konstruksie:
  - Beplan vir middel 2010
  - Fase 2 moet voltooi word teen middel 2014; dit sal intense aktiwiteit op terrein verg met meer as een werksfronte.
  - Die konstruksie program is afhanklik van die kontrakteur se konstruksie metode en beplanning.
  - Bestuur van die konstruksie terrein, toegangsbeheer en veiligheid is 'n kontraktuele vereiste en sal bestuur word deur die aangewese inspekteurs.
- Implementeringsagent:
  - Trans-Caledon Tunnel Authority (TCTA) sal die ontwerp en konstruksie fase behartig.
  - Onderhandelinge en kompensasie is 'n aflewerbare van die instruksie aan TCTA.

19

Fase 2 Uitleg



20

Omgewingsimpakbepaling

Omgewingsimpakbepaling (OIB)

"die identifisering, vooruitskatting, evaluering en bestuur van die bio-fisiese, sosiale en ander relevante nagevolge van ontwikkelings voordat besluite geneem word"

21

Omgewingsimpakbepaling

Opsomming

- Die OIB voorstelling behels die volgende:
  - Wetgewende raamwerk
  - Omvangsbepaling- en Omgewingsimpakbepalingproses

22

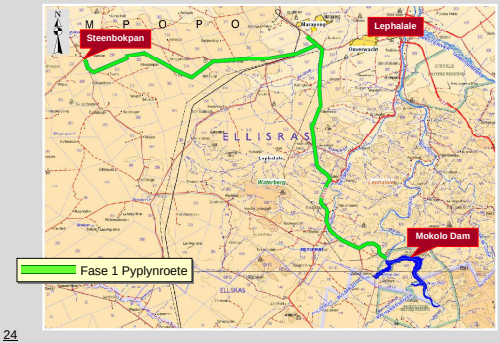
Omgewingsimpakbepaling

Wetgewende Raamwerk

- MKWAP vereis omgewingsgoedkeuring kragtens die Nasionale Wet op Omgewingsbestuur (No. 107 van 1998).
- Goedkeuringsproses moet in ooreenkomstig met die Omgewingsimpakbepaling Regulasies (Staatskennisgewings No. R385, R386 en R387) uitgevoer word.
- MKWAP omgewingsgoedkeuring prosesse:

23

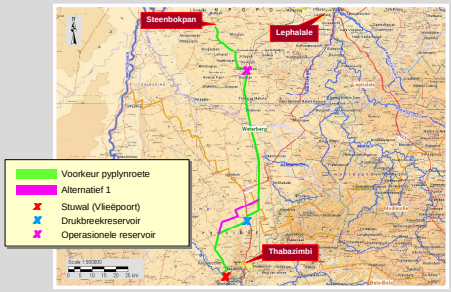
Fase 1 Omvangsbepaling & Omgewingsimpakbepaling



24

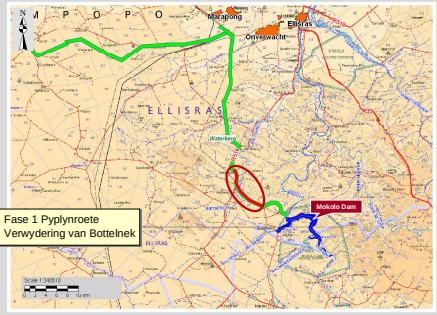
Fase 2 | **Omvangsbepaling & Omgewingsimpakbepaling**

Neem Kennis: *Hierdie Ope Dag is gefokus op MKWAP Fase 2*



25

Verwydering van Bottelnek | **Basiese Bepaling**



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Omgewingsimpakbepaling

MKWAP Fase 2
Omvangsbepaling & OIB

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OMVANGSBEPALING FASE

1 Aanstelling van Omgewingsbeoordelingspraktisyn

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OMVANGSBEPALING FASE

1 Aanstelling van Omgewingsbeoordelingspraktisyn

2 Aansoekvorm

- Ingedien by Departement van Omgewingsake en Toerisme (DEAT) – April 09
- DEAT Verwysingsnommer vir MKWAP Fase 2: **12/12/20/1466**

29

OMVANGSBEPALING FASE

1 Aanstelling van Omgewingsbeoordelingspraktisyn

2 Aansoekvorm

3 Openbare Deelname — *Ons is hier*

30

OMVANGSBEPALING FASE

1 Aanstelling van Omgewingsbeoordelingspraktisyn

2 Aansoekvorm

3 Openbare Deelname

Ons is hier

14 Mei - 19 Junie 2009*

* *Beplande datums – mag verander*

OMVANGSBEPALING FASE

1 Aanstelling van Omgewingsbeoordelingspraktisyn

2 Aansoekvorm

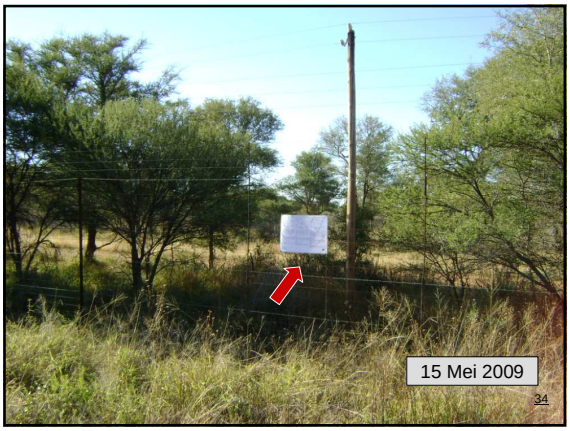
3 Openbare Deelname

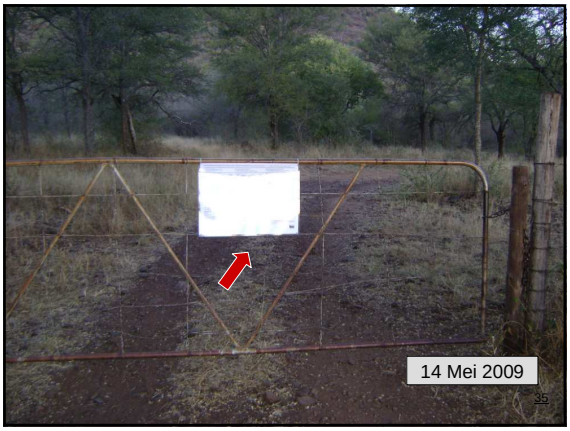
Ons is hier

14 Mei - 19 Junie 2009

- Kennisgewing:
  1. Kennisgewingsborde opgerig langs roete en by openbare plekke (14 – 15 Mei 2009)

Voorbeelde





OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier* — **14 Mei - 19 Junie 2009**

Kennisgewing:

1. Kennisgewingsborde
2. Verspreiding van Agtergrond-inligtingsdokumente (AID) d.m.v. geregistreerde pos, faks en epos na Belanghebbende en Geaffekteerde Partye
   - **Owerhede**
   - **Geaffekteerde Partye**
   - **Algemeen**

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OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier* — **14 Mei - 19 Junie 2009**

Kennisgewing:

1. Kennisgewingsborde
2. Agtergrond-inligtingsdokumente
3. Koerantadvertensies (14 – 15 May 2009)
   - **Die Beeld**
   - **Kwêvoël**
   - **Daily Sun**
   - **The Star**

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OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier* — **14 Mei - 19 Junie 2009**

Kennisgewing:

1. Kennisgewingsborde
2. Agtergrond-inligtingsdokumente
3. Koerantadvertensies

Openbare Ope Dae

Fase 2	
27 Mei 2009	
Area:	Thabazimbi
Lokaal:	Kumba Bioskoop Saal
Tyd:	08h00 – 13h00
27 Mei 2009	
Area:	Lephalale
Lokaal:	Mogol Konferensie Saal
Tyd:	15h30 – 19h30

Fase 1	
28 Mei 2009	
Area:	Lephalale
Lokaal:	Mogol Konferensie Saal
Tyd:	08h00 – 13h00

Verwydering van Botteinek	
28 Mei 2009	
Area:	Mokolo Dam Area
Lokaal:	Ashante Konferensie Fasiliteit
Tyd:	15h30 – 19h30

Neem kennis: *U is welkom om Ope Dae wat nie spesifiek is tot Fase 2 nie by te woon*

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OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag

Inhoud van verslag sluit in die volgende (*onder andere*):

1. Projek agtergrond en beskrywing
2. Beskrywing van omliggende omgewing
3. Relevante wetgewing
4. Beskrywing van moontlike omgewingsimpakte
5. Openbare deelname proses
6. Identifiseer nodige spesialis studies
7. Studieplan vir Omgewingsimpakbepaling

40

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag

Inhoud van verslag sluit in die volgende (onder andere):

1. Projek agtergrond en beskrywing
2. Beskrywing van omliggende omgewing
3. Relevante wetgewing
4. Beskrywing van moontlike omgewingsimpakte
5. Openbare deelname proses
6. Identifiseer nodige spesialis studies
7. Studieplan vir Omgewingsimpakbepaling

Die volgende spesialis studies is geïdentifiseer vir MKWAP Fase 2:

- Ekologiese studie;
- Erfenisimpakbepaling;
- Sosio-ekonomiese Studie; en
- Visuele impakbepaling.

41

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening van Omvangsbepalingsverslag — **20 Julie - 20 Augustus 2009***

* *Beplande datums – mag verander*

42

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening van Omvangsbepalingsverslag — **20 Julie - 20 Augustus 2009***

- 'n Periode van 30 dae word gegun aan Belanghebbende en Geaffekteerde Partye om die Omvangsbepalings-verslag te evalueer

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening van Omvangsbepalingsverslag — **20 Julie - 20 Augustus 2009***

- 'n Periode van 30 dae word gegun aan Belanghebbende en Geaffekteerde Partye om die Omvangsbepalingsverslag te evalueer
- Beskikbaarheid van verslag vir openbare insae:
  1. Biblioteke, skole, Besproeiings Rade en ander geskikte plekke
  2. DWAF webblad (*http://www.dwaf.gov.za/projects.asp*)
  3. Verdere voorstelle is welkom

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening
6. Indiening van Verslag by DEAT

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening
6. Indiening van Verslag
7. DEAT Hersiening

OMVANGSBEPALING FASE

1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening
6. Indiening van Verslag
7. DEAT Hersiening

Einde van Omvangsbepalings Fase

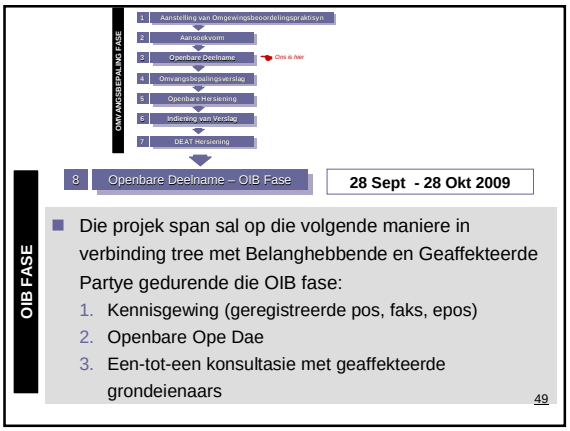
OMVANGSBEPALING FASE

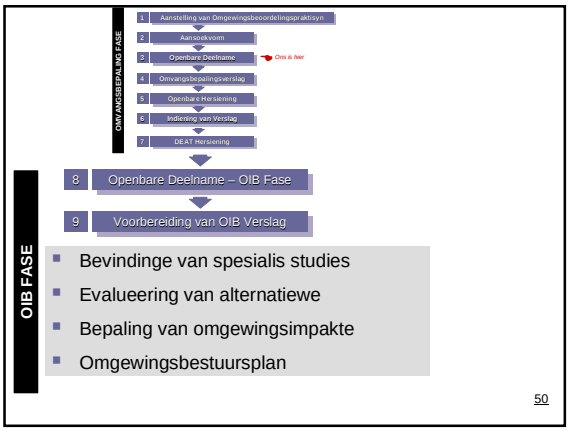
1. Aanstelling van Omgewingsbeoordelingspraktisyn
2. Aansoekvorm
3. Openbare Deelname — *Ons is hier*
4. Omvangsbepalingsverslag
5. Openbare Hersiening
6. Indiening van Verslag
7. DEAT Hersiening

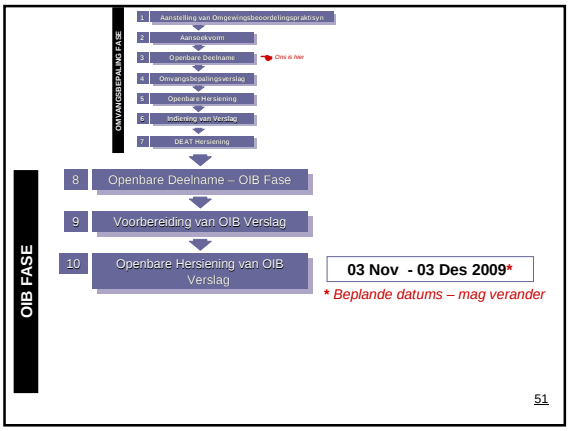
OIB FASE

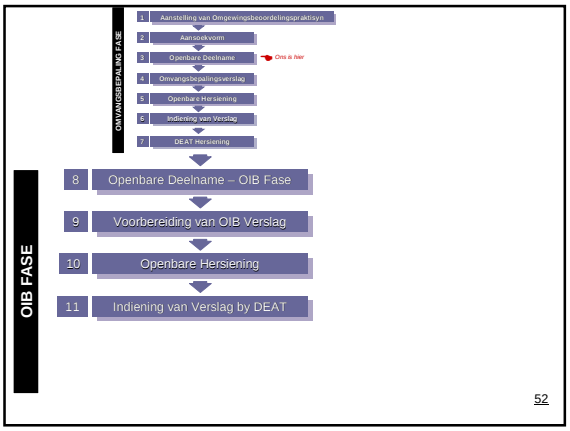
8. Openbare Deelname – Omgewingsimpakbepailings (OIB) Fase — **28 Sept - 28 Okt 2009***

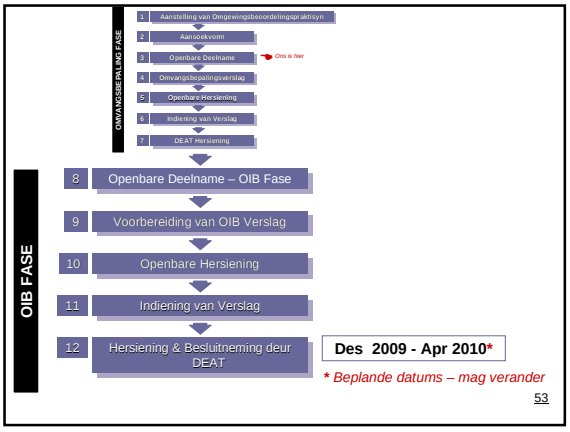
** Beplande datums – mag verander*

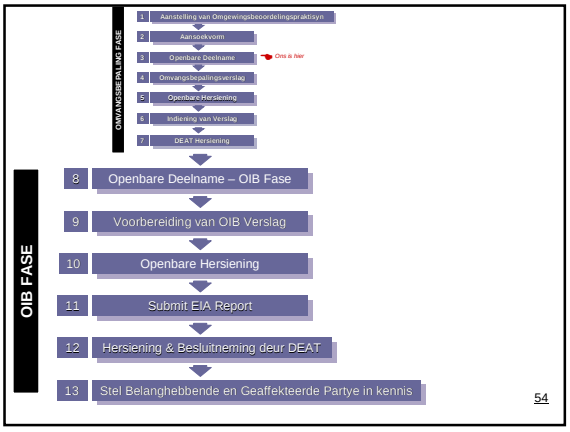

OMVANGSBEPALING FASE
1 Aanstelling van Omgewingsbeoordelingspraktisyn
2 Aansoekvorm
3 Openbare Deelname
Ons is hier
4 Omvangsbepalingsverslag
5 Openbare Hersiening
6 Indiening van Verslag
7 DEAT Hersiening
OIB FASE
8 Openbare Deelname – OIB Fase
28 Sept - 28 Okt 2009
Die projek span sal op die volgende maniere in verbinding tree met Belanghebbende en Geaffekteerde Partye gedurende die OIB fase:
1. Kennisgewing (geregistreerde pos, faks, epos)
2. Openbare Ope Dae
3. Een-tot-een konsultasie met geaffekteerde grondeienaars
49


OMVANGSBEPALING FASE
1 Aanstelling van Omgewingsbeoordelingspraktisyn
2 Aansoekvorm
3 Openbare Deelname
Ons is hier
4 Omvangsbepalingsverslag
5 Openbare Hersiening
6 Indiening van Verslag
7 DEAT Hersiening
OIB FASE
8 Openbare Deelname – OIB Fase
9 Voorbereiding van OIB Verslag
Bevindinge van spesialis studies
Evalueering van alternatiewe
Bepaling van omgewingsimpakte
Omgewingsbestuursplan
50


OMVANGSBEPALING FASE
1 Aanstelling van Omgewingsbeoordelingspraktisyn
2 Aansoekvorm
3 Openbare Deelname
Ons is hier
4 Omvangsbepalingsverslag
5 Openbare Hersiening
6 Indiening van Verslag
7 DEAT Hersiening
OIB FASE
8 Openbare Deelname – OIB Fase
9 Voorbereiding van OIB Verslag
10 Openbare Hersiening van OIB Verslag
03 Nov - 03 Des 2009*
* Beplande datums – mag verander
51


OMVANGSBEPALING FASE
1 Aanstelling van Omgewingsbeoordelingspraktisyn
2 Aansoekvorm
3 Openbare Deelname
Ons is hier
4 Omvangsbepalingsverslag
5 Openbare Hersiening
6 Indiening van Verslag
7 DEAT Hersiening
OIB FASE
8 Openbare Deelname – OIB Fase
9 Voorbereiding van OIB Verslag
10 Openbare Hersiening
11 Indiening van Verslag by DEAT
52


OMVANGSBEPALING FASE
1 Aanstelling van Omgewingsbeoordelingspraktisyn
2 Aansoekvorm
3 Openbare Deelname
Ons is hier
4 Omvangsbepalingsverslag
5 Openbare Hersiening
6 Indiening van Verslag
7 DEAT Hersiening
OIB FASE
8 Openbare Deelname – OIB Fase
9 Voorbereiding van OIB Verslag
10 Openbare Hersiening
11 Indiening van Verslag
12 Hersiening & Besluitneming deur DEAT
Des 2009 - Apr 2010*
* Beplande datums – mag verander
53


OMVANGSBEPALING FASE
1 Aanstelling van Omgewingsbeoordelingspraktisyn
2 Aansoekvorm
3 Openbare Deelname
Ons is hier
4 Omvangsbepalingsverslag
5 Openbare Hersiening
6 Indiening van Verslag
7 DEAT Hersiening
OIB FASE
8 Openbare Deelname – OIB Fase
9 Voorbereiding van OIB Verslag
10 Openbare Hersiening
11 Submit EIA Report
12 Hersiening & Besluitneming deur DEAT
13 Stel Belanghebbende en Geaffekteerde Partye in kennis
54

Einde van Voorlegging

Besigtig asb. die volgende voorlegging vir ‘n Google vlug van die pyplyn roete

U is welkom om vrae te rig aan die projek span nadat u die voorleggings besigtig het

MOKOLO AND CROCODILE RIVER (WEST): WATER AUGMENTATION PROJECT **(MCWAP)**

Phase 2: Transfer Scheme from the Crocodile River (West) to the Lephalale Area

Public Open Day

water & forestry
Department:
Water Affairs and Forestry
REPUBLIC OF SOUTH AFRICA

Introduction

- Welcome to this Public Open Day for **MCWAP Phase 2**
- Please ensure that you have signed the **Attendance Register**
- Open Day layout

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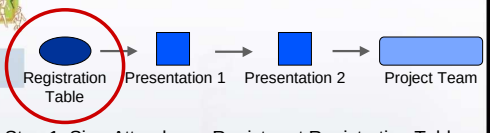
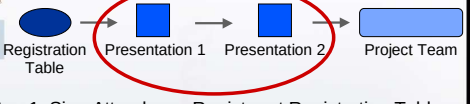
Open Day Layout



- Step 1: Sign Attendance Register at Registration Table

58

Open Day Layout



- Step 1: Sign Attendance Register at Registration Table
- Step 2: View Presentations 1 and 2

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Open Day Layout

- Step 1: Sign Attendance Register at Registration Table
- Step 2: View Presentations 1 and 2
- Step 3: Pose questions to Project Team

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Introduction

- Welcome to this Public Open Day for MCWAP Phase 2
- Please ensure that you have signed the Attendance Register
- Open Day layout
- Following the presentation, you are welcome to pose questions to the Project Team Members

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Project Team

Department of Water Affairs & Forestry

Representatives	Responsibility
O. van den Berg	Project Proponent

Aurecon

Representatives	Responsibility
F. Vogel	Project Coordination and Management Module
B. Smit	
J. Pienaar	Technical Study Module

Nemai Consulting

Representatives	Responsibility
N. Naidoo	Environmental Management Module
D. Henning	
S. Pienaar	

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Introduction

- Welcome to this Public Open Day for MCWAP Phase 2
- Please ensure that you have signed the Attendance Register
- Open Day layout
- Following the presentation, you are welcome to pose questions to the Project Team Members
- The content of this presentation includes the following:
  - Purpose of the Open Day
  - Project Background & Motivation
  - Technical Information
  - Environmental Impact Assessment

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Purpose of Open Day

- Part of Public Participation for Environmental Impact Assessment (**EIA**)
- Information sharing for **MCWAP Phase 2**
- Allow for project-related discussions

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Note:

- The planning and design of the project components is a dynamic process, hence the information presented could change.
- All Interested and Affected Parties will be kept informed of the project changes through the Environmental Impact Assessment process.

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PREVIOUS & CURRENT INVESTIGATIONS

- Crocodile (West) Reconciliation Strategy;
- Crocodile (West) Validation & Verification;
- Crocodile (West) Environmental Water Requirements;
- Crocodile (West) & Mokolo Catchment Water Transfer Reconnaissance Study;
- DWAF Lephalale Bulk Infrastructure Grant Feasibility Study.

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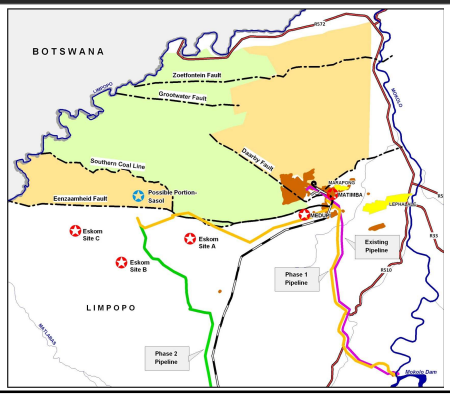
Project Background

- The MCWAP is a Government project that will augment the water available in the Lephalale Municipality area.
- The project entails the planning, design and construction of the infrastructure needed to transfer water to the delivery areas in the volumes required for current and future development.
- Currently two phases are planned for implementation:
  - Phase 1: Mokolo Scheme (upgrading of existing infrastructure)
  - Phase 2: Crocodile river (West) Scheme
  - Further phases will likely follow

Coal Fields



Project Motivation

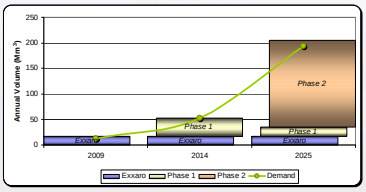
- The Waterberg coal fields creates opportunities for development.
- Existing development includes Ellisras Town, Marapong, Grootegeluk Mine, Matimba Power Station, Medupi Power Station (Under construction) and Irrigation.
- The planned future development includes further power stations, coal to liquid fuel plants, possible gas mining, further coal mines and the associated development.
- These industries all require water used in the beneficiation process which is not locally available in the quantities required.

Project Motivation (cont.)

- The Department of Water and Environmental Affairs is responsible for planning government water works to supply in the need of such developments.
- The MCWAP is the umbrella project under which the water transfer infrastructure is being planned and implemented.
- The tight deadlines are driven by the need for power generation (and liquid fuel) in South Africa, a high priority on the Governmental agenda.
- The Environmental Impact Assessment ensures that the applicable legislation is applied throughout the process.

Technical Information

- The graph compares the current and future demand with the combined capacity of the existing (Exxaro) and planned (Phase 1+2) capacity



Technical Information (cont.)

- Phase 2 infrastructure
  - Different options were considered for the location of the abstraction weir, de-silting works and high lift pump station; primarily Boschkop and Vlieëpoort but also many other locations in the Crocodile River (West)
  - Different route alignments for the transfer pipeline were considered
    - East of Thabazimbi and the railway line
    - A central route along the railway line
    - West of Thabazimbi and following the power line
  - Abstraction from Vlieëpoort and transfer along the Central route were selected based on a number of technical, economical and environmental criteria

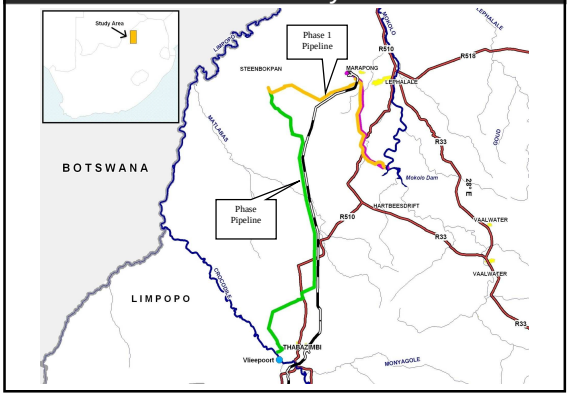
Technical Information (cont.)

- Infrastructure components:
  - At Vlieëpoort:
    - Abstraction weir;
    - Low lift pump station;
    - De-silting channels;
    - Balancing dam; and
    - High lift pump station,
  - Transfer pipeline:
    - Combination of pump and gravity lines (± 130 km), and
    - Intermediate and terminal reservoirs for operation of the scheme
    - Surge protection, air valves and scour outlets
    - Crossing the Matlabas River
- Capital Cost:
  - Estimated at R 8 500 million

Technical Information (cont.)

- Construction:
  - Planned to start mid 2010
  - Must be completed by mid 2014; it will require a high level of activity on site to achieve this target i.e. multiple work fronts
  - Further work programming is dependant on the contractors' construction method and plan
  - Site management, access control, health and safety is a contractual requirement and will be managed by the controlling officers
- Implementation arrangement:
  - Trans-Caledon Tunnel Authority (TCTA) will be the implementing agent
  - Negotiations and compensation as a deliverable of the implementation arrangements

Phase 2 Layout



Environmental Impact Assessment

Environmental Impact Assessment (EIA)

"the process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made"

Environmental Impact Assessment

Summary

- The EIA presentation focuses on:
  - Legal Framework
  - Scoping/EIA Process

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Environmental Impact Assessment

Legal Framework

- MCWAP requires authorisation in terms of the National Environmental Management Act (No. 107 of 1998)
- Process undertaken in accordance with the Environmental Impact Assessment (EIA) Regulations (Government Notice No. R385, R386 and R387)
- MCWAP Environmental Authorisation processes:

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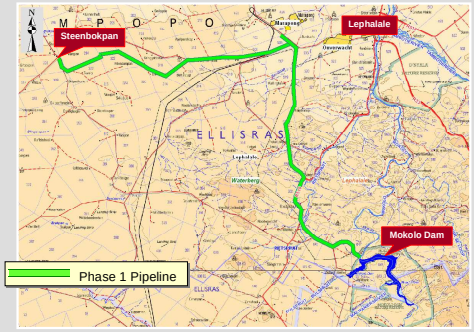
Phase 1 Scoping & Environmental Impact Assessment



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Phase 2 Scoping & Environmental Impact Assessment

Note: *This Open Day focuses on MCWAP Phase 2*

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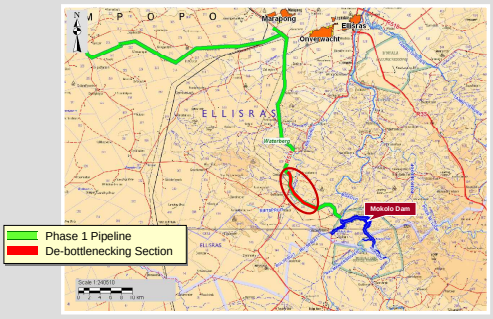
De-bottlenecking Basic Assessment



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Environmental Impact Assessment

MCWAP Phase 2
Scoping/EIA Process

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SCOPING PHASE

1 Appoint Environmental Assessment Practitioner → NEMAI CONSULTING

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SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

- Submitted to Department of Environmental Affairs and Tourism (DEAT) – April 09
- DEAT Ref No. for MCWAP Phase 2: **12/12/20/1466**

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SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

3 Public Participation ← *We are here*

87

SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

3 Public Participation ← *We are here*

14 May - 19 June 2009 * ** Planned dates - may change*

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SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

3 Public Participation ← *We are here*

14 May - 19 June 2009

- Notification:
  1. Notice Boards were erected along the route and at public places (14 – 15 May 2009)

Examples

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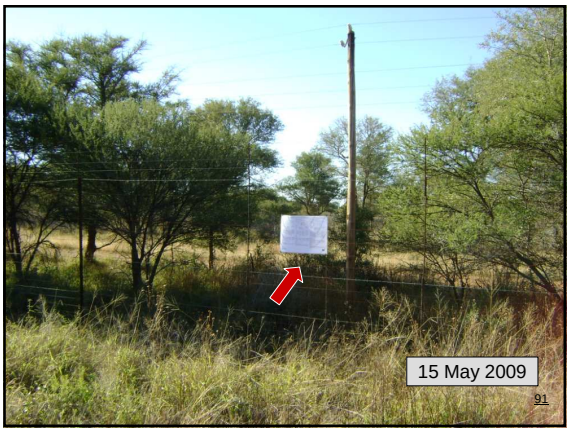

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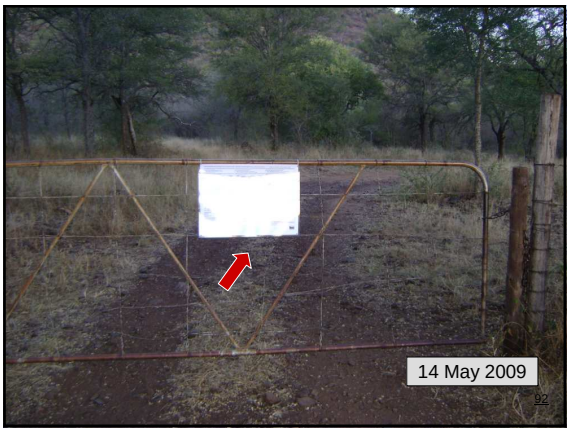

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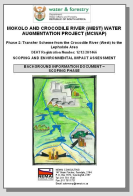
SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

3 Public Participation — *We are here* — 14 May - 19 June 2009

- Notification:
  1. Notice boards
  2. Background Information Documents (BIDs) were distributed via registered mail, fax and email to Interested and Affected Parties (I&APs)
     - Authorities
     - Stakeholders
     - General



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SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

3 Public Participation — *We are here* — 14 May - 19 June 2009

- Notification:
  1. Notice boards
  2. Background Information Documents
  3. Notices were placed in local and regional newspapers (14 – 15 May 2009)
     - Die Beeld
     - Kwêvoël
     - Daily Sun
     - The Star

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SCOPING PHASE

1 Appoint Environmental Assessment Practitioner

2 Application Form

3 Public Participation — *We are here* — 14 May - 19 June 2009

- Notification:
  1. Notice boards
  2. Written notices
  3. Newspaper advertisements
- Open Days

Phase 2	
27 May 2009	
Area:	Thabazimbi
Venue:	Kumba Bioscope Hall
Time:	08h00 – 13h00
27 May 2009	
Area:	Lephalale
Venue:	Mogol Conference Room
Time:	15h30 – 19h30

Phase 1	
28 May 2009	
Area:	Lephalale
Venue:	Mogol Conference Room
Time:	08h00 – 13h00

De-bottlenecking	
28 May 2009	
Area:	Mokolo Dam Area
Venue:	Ashante Conference Venue
Time:	15h30 – 19h30

Note: *You are welcome to attend Open Days that are not specific to MCWAP Phase 2*

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Prepare Scoping Report

- Content includes *inter alia*:
  1. Activity description & background
  2. Description of receiving environment
  3. Applicable legislation
  4. Description of potential environmental impacts
  5. Account of public participation process
  6. Identify specialist studies needed
  7. Plan of study for subsequent Environmental Impact Assessment

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Prepare Scoping Report

- Content includes *inter alia*:
  1. Activity description & background
  2. Description of receiving environment
  3. Applicable legislation
  4. Account of public participation process
  6. Identify specialist studies needed
- Specialist studies identified for MCWAP Phase 2:
  - Ecological (terrestrial and aquatic) Study;
  - Heritage Impact Assessment;
  - Visual Impact Assessment; and
  - Socio-economic Study.

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Scoping Report
5. Public Review - Scoping Report — **20 July - 20 August 2009***

** Planned dates - may change*

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Scoping Report
5. Public Review - Scoping Report — **20 July - 20 August 2009**

- Interested and Affected Parties are granted 30 days to review the Scoping Report
- Copies of the Scoping Report will be lodged at:
  1. Libraries, schools, Irrigation Boards and other suitable places
  2. DWAF website
  3. Further suggestions are welcome

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Scoping Report
5. Public Review
6. Submit Scoping Report

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Scoping Report
5. Public Review
6. Submit Scoping Report
7. DEAT Review Report

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SCOPING PHASE

1. Appoint Environmental Assessment Practitioner
2. Application Form
3. Public Participation — *We are here*
4. Scoping Report
5. Public Review
6. Submit Scoping Report
7. DEAT Review Report

End of Scoping Phase

EIA PHASE

8. Public Participation – EIA Phase — **28 Sept - 28 Oct 2009 ***

*** Planned dates - may change***

EIA PHASE

8. Public Participation – EIA Phase — **28 Sept - 28 Oct 2009**

- During the EIA phase we will engage with Interested and Affected Parties in the following manner:
  1. Notification (registered mail, faxes, emails)
  2. Open Days
  3. One-on-one consultation with affected landowners

EIA PHASE

8. Public Participation – EIA Phase
9. Prepare EIA Report

- Findings of Specialist Studies
- Comparative assessment of alternatives
- Assessment of environmental impacts
- Environmental Management Plan

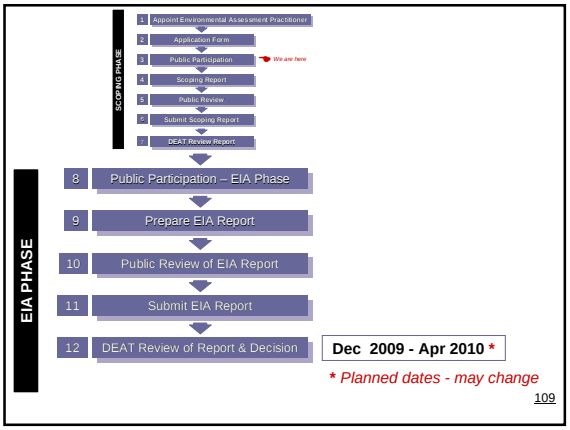
EIA PHASE

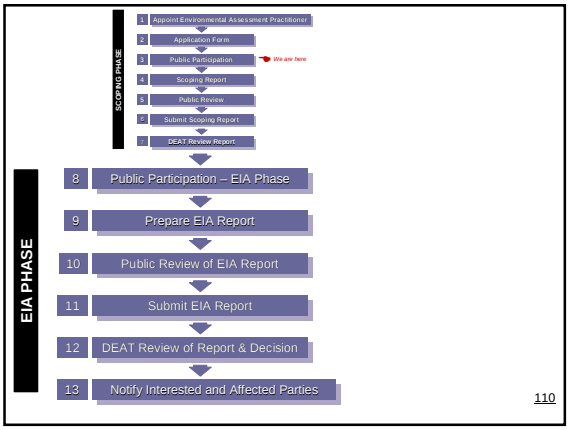
8. Public Participation – EIA Phase
9. Prepare EIA Report
10. Public Review of EIA Report — **03 Nov - 03 Dec 2009 ***

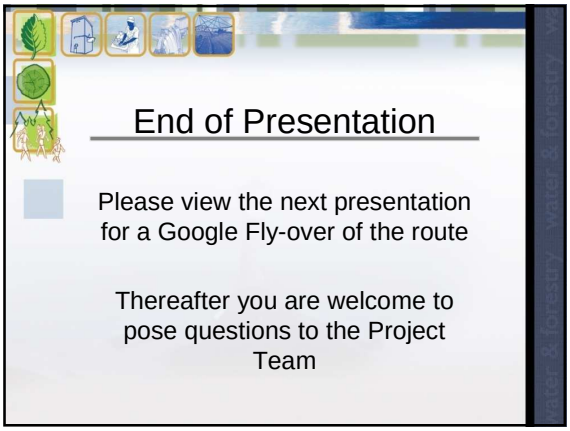
*** Planned dates - may change***

EIA PHASE

8. Public Participation – EIA Phase
9. Prepare EIA Report
10. Public Review of EIA Report
11. Submit EIA Report


SCOPING PHASE
1 Appoint Environmental Assessment Practitioner
2 Application Form
3 Public Participation
We are here
4 Scoping Report
5 Public Review
6 Submit Scoping Report
7 DEAT Review Report
EIA PHASE
8 Public Participation – EIA Phase
9 Prepare EIA Report
10 Public Review of EIA Report
11 Submit EIA Report
12 DEAT Review of Report & Decision
Dec 2009 - Apr 2010 *
* Planned dates - may change


SCOPING PHASE
1 Appoint Environmental Assessment Practitioner
2 Application Form
3 Public Participation
We are here
4 Scoping Report
5 Public Review
6 Submit Scoping Report
7 DEAT Review Report
EIA PHASE
8 Public Participation – EIA Phase
9 Prepare EIA Report
10 Public Review of EIA Report
11 Submit EIA Report
12 DEAT Review of Report & Decision
13 Notify Interested and Affected Parties


End of Presentation
Please view the next presentation for a Google Fly-over of the route
Thereafter you are welcome to pose questions to the Project Team