

Ok Birim Tailings Storage Facility Projek

Environmen na Sosl Impek Asesmen

Volium A — Eksektiv Samari





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Ripot refrens namba:
754-POMEN374244C_R08

22 June 2026

RIPOT BILONG	RIPOT I KAM LONG
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Kwaliti infomesen

Ol revisen

Namba bilong ripot	Wanem kain ripot	Deit	Husat i raitim ripot	Husat i wanbel wantaim ripot	Husat i givim tok orait long ripot
RevA	Draft	05.06.2026	Anna Gallagher, Lythiah Mizigi, Daniel Moriarty	Daniel Moriarty	Daniel Moriarty
Rev0	Final	22.06.2026	Anna Gallagher, Lythiah Mizigi, Daniel Moriarty	Daniel Moriarty	Daniel Moriarty

Distribusen

Namba bilong ripot	Hamas kopi blong ripot	Fomet blong ripot	Husat i kisim ripot	Deit
RevA	1	Word / PDF	OTML	05.06.2026
Rev0	1	PDF / Hardcopy	OTML	22.06.2026

Tok lukaut long pasin bilong tok aut na yusim ol data long dispela ripot

Dispela ripot Tetra Tech Coffey PNG Limited i redim long nem bilong Ok Tedi Mining Limited bilong Ok Birim Tailings Storage Facility Projek. As bilong dispela ripot em long helpim wok bilong skelim environmen na sosol impek bilong projek. Em i no bilong yusim long mekim narapela wok o as. Tetra Tech Coffey PNG Limited i no inap tru kisim asua o responsibiliti sapos narapela lain i yusim long mekim narapela wok. Dispela ripot i kamap long ol infomesen we i stap pinis na ol tingting i stap insait long deit we i stap long ripot. Husat i laik ridim dispela ripot i mas ridim ripot olgeta na i no hap hap bilong ripot tasol long wanem em i no inap soim gut olgeta stori. Em i tambu tru long yusim dispela ripot sapos yu no kisim tok orait pastaim.

Toksave long kopiraet

Tetra Tech Coffey PNG Limited 2026

Lo bilong kopiraet i lukautim olgeta tok na save i stap insait long dispela ripot. Tetra tech coffey na sampela narapela husat i gat rait long dispela save ol i holim kopiraet bilong en. Yu ken ritim na printim dispela ripot bilong yu yet long ol wok i no bilong bisnis o mekim mani. Tasol yu no ken kopi, serim o yusim dispela save long narapela rot sapos yu no kisim tok orait pastaim long ol husat i holim dispela rait.ol toktok i stap insait.



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OTML i gat plen long isi isi pinisim pasin
bilong putim tailings long Ok Tedi wara
we i bin stap inap moa long 40 yia.





1. Tok i go pas

Ok Tedi Main i stap long Mt Fubilan long Westen Provins, Papua Niugini (PNG). Em i wanpela open-cut kopa, gold na silva main. Ok Tedi Mining Limited (OTML) i bosim na ronim dispela main stat long yia 1984.

Ol i kisim ol ore na prosesim long prosesim plant we i ken tritim inap long 24 million ton long wanpela yia. Kopa concentrate (kopa mix wantaim wara) i ron insait long wanpela 156-km paipplain i go daun long Kiunga, we ol i draim na putim long kago na sip i ron long Fly Riva i go long daun long bikpela solwara na ron go long Pot Mosbi we dispela kopa ol i putim go long narapela bikpela sip long salim long narapela ol kantri (export). Pyrite concentrate or wesana nogut we ol i mekim long tailings processing plant (TPP) klostu long main, ol i salim em go daun long Bige long wanpela 125-km paipplain na em i go stap insait long wanpela bikpela raun wara ol kolim subaqueous storage pits long west bank long Bige, we em i stap aninit long wara bilong pasim em long kisim win (oxidation) na kamapim kemikol nogut (acid generation). Ol tailings o pipa wesana we em i nogat kemikol we i kamaul long TPP em ol i salim igo daun long wara Ok Kumiup long wanpela 1.5-km tailings paipplain, wesana we em i kam aut long paipplain save bihainim Harvey Creek na bihainim go bungim wara Ok Tedi. Ol pipia ston tu ol i dumpim i go long ol liklik wara antap long main. Ol dispela pipia ston i bihainim wara Ok Tedi i go daun, na ol ston o graun we i bikpla liklik dredge masin long Bige save rausim long wara Ok Tedi. Ol dispela ol ston/grauun we ol i dredgim pinis ol save putim long stockpile long is sait na wesait bilong wara Ok Tedi, dispela hap em sanap klostu long 25 km long maus bilong wara Ok Tedi we em i bung wantaim Fly Riva.

Klostu long 40pla krismas, Ok Tedi Main i putim ol tailings na ol pipia ston na graun (waste rock) i go insait long wara Ok Tedi. Long stat kam inap long yia 2025 namba bilong wesana we main i putim go insait pinis long wara Ok Tedi na Fly Riva i winim 2 billion ton.

OTML i wok long go het wantaim planti dievelopment plen bilong helpim envaironmen long longpla taim na bilong sapotim laif bilong maine lo go het yet we em stap insait long stretegi bilong main ol

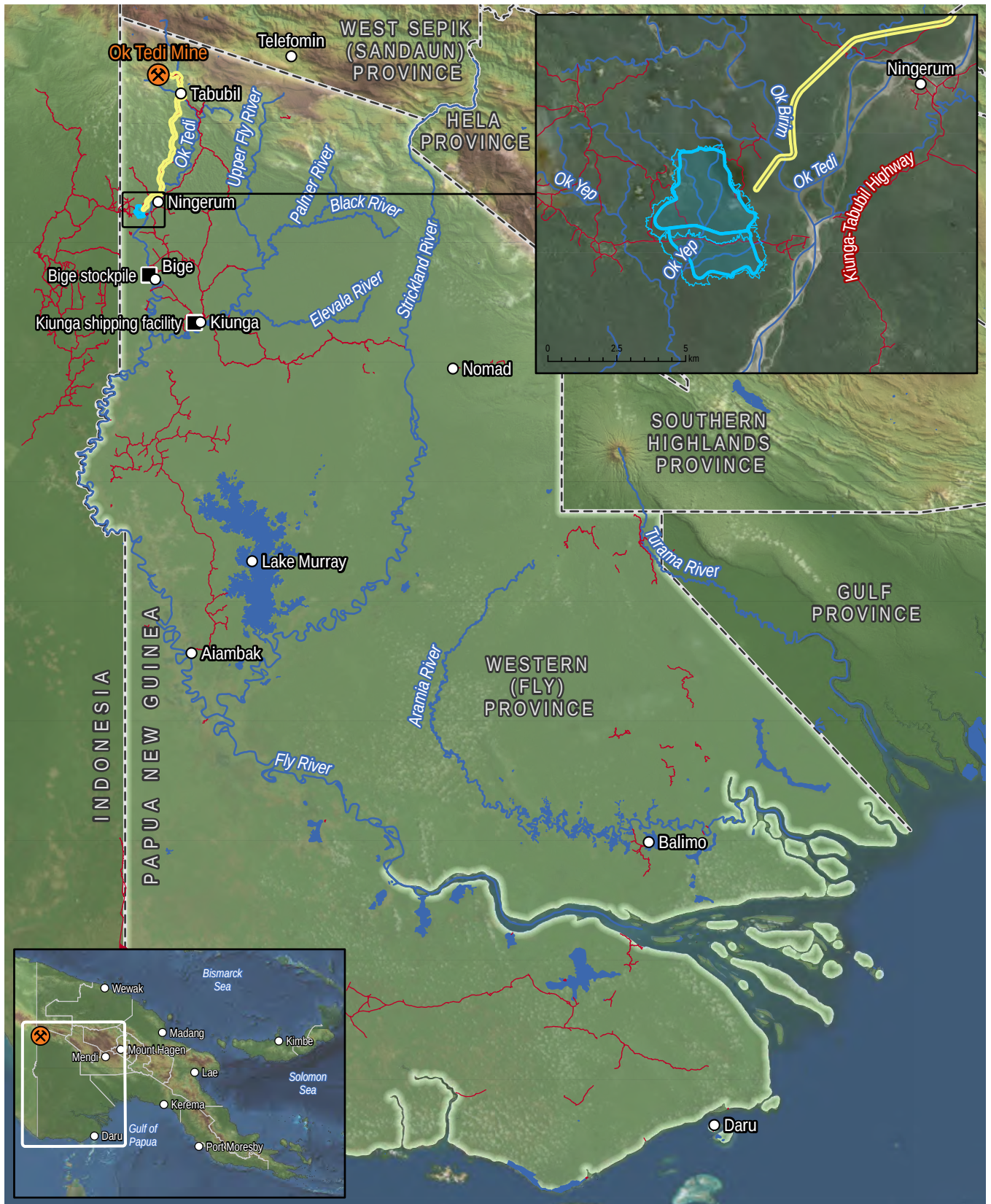
kolim Growth 2050. Sapos wok bilong maine i go inap 20250 em bai i gat planti moa pipia bilong miaine olsem tailings na waste rock, na dispela bai putim moa presa long wara stap daunstrim. Olsem na OTML i bin mekim stronpela komitmen long daunim pasin bilong putim ol tailings long wara. Niupla projek nau i lukluk long putim tailings long graun long wanpela tailings storage facility (TSF) stat long 2030 bilong stopim ol pipia bilong main (sediment) long go insait long wara Ok Tedi na Fly Riva sistem, daunim daunstrim impek long envaironment na sindaun bilong ol manmeri (social), na sapotim maining operesen i go inap long 2050. Dispela rot bai kamap olsem narapela gutpela wei bilong rausim tailings, na bai senisim pasin bilong tromoi tailings i go long wara olsem ol i mekim nau. Em tu i bihainim ol nuipela gutpela stendet bilong nau na ol mak bilong PNG long wokim developmen we inap long stap gut longpela taim.

1.1 Diskripsen bilong projek

Dispela hap we TSF bai kamap i stap klostu olsem 1 km long wesait bilong hap we Ok Birim na Ok Tedi i bung. Dispela ples istap klostu 55 km stret long saut bilong Ok Tedi Main we i stap long Western Provinces na em i stap klostu 800 km long hap west bilong Pot Mosbi, em biktaun bilong PNG. (Piksa ES.1) "Ok" em "wara" long tokples bilong ol as ples.

Projek bai i gat: (Piksa ES.2):

- Wanpela ring-dyke TSF bilong holim inap long 368 Mt tailings. Dispela em inap long bungim ol tailings bilong main bilong laip bilong main nau, na tu bai gat spes bilong ol tailings sapos main i go het inap long 2050.
- Wanpela on-site hydro- saiklon haus bilong seperatim ol strongpla na bikpla material long taim bilong construction long ol liklik material long go stap insait long TSF.
- Wanpela paipplain inap olsem 87 km, bilong karim ol tailings, wantaim ol pump stesin na choke stesin.
- Rot na bris bilong crosim wara.



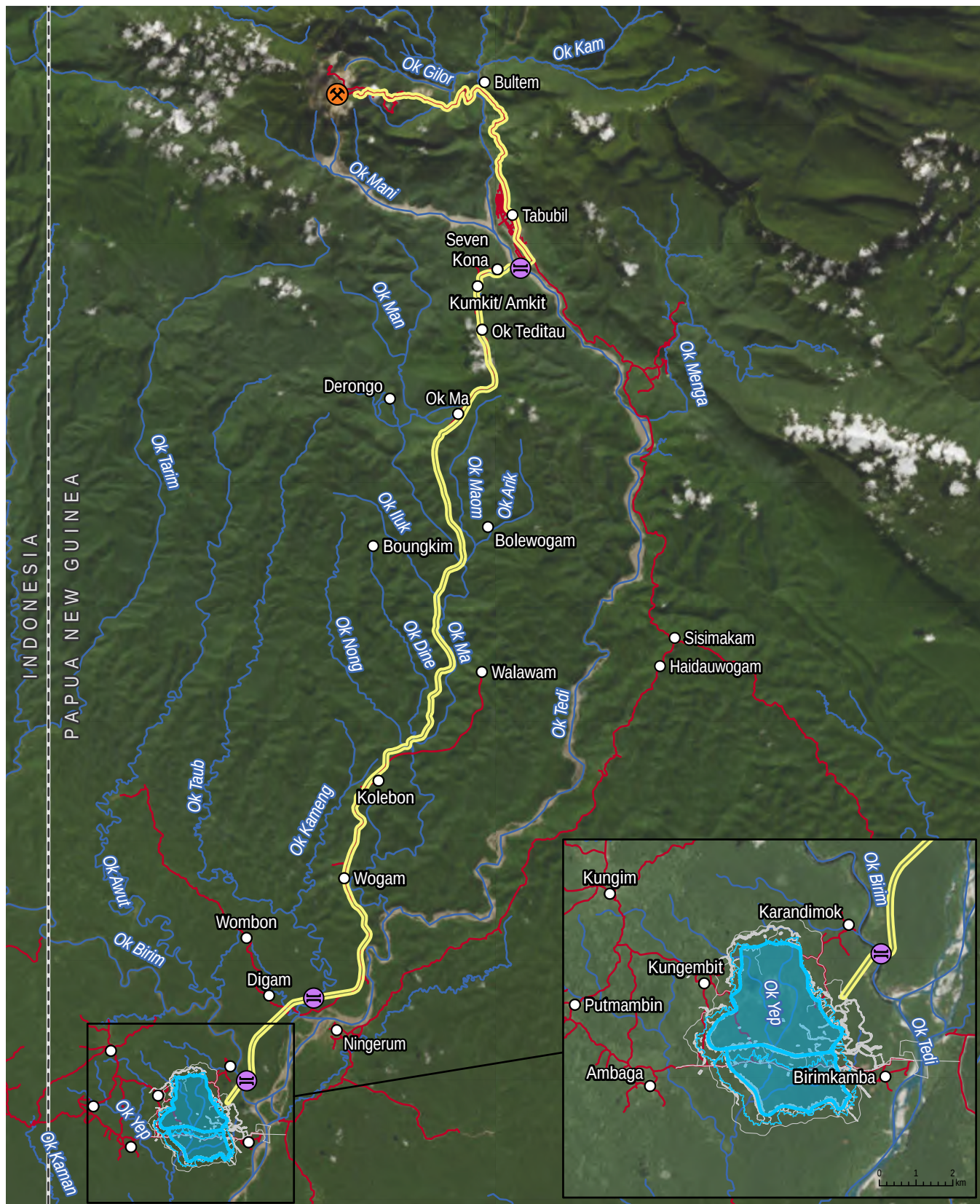
LEGEND

- | | | | |
|--|--------------------|--|----------------------------------|
| | Ok Tedi Mine | | Waterbody |
| | Key infrastructure | | Province boundary |
| | Town | | Proposed TSF footprint |
| | Road/track | | Proposed infrastructure corridor |
| | Watercourse | | |



0 25 50
km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.1 Ples we projek bai stap



LEGEND

- | | |
|----------------------|--------------------------|
| Ok Tedi Mine | Proposed layout |
| Community | Bridge (to be finalised) |
| Road/track | TSF detailed design |
| Watercourse | TSF footprint |
| International border | Infrastructure corridor |



0 2.5 5 km

PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.2 OI bikpela hap wok bilong projek



1.2 Bekgraun

Ok Tedi Main i stap long namel long ol bikpla maunten wantaim ol steep slope na bikpla bus, ren we i pundaun long wanpela yia i winim 10,000 mm (Poto ES.1). Wara i save kam aut long main long ol liklik hanwara bilong Ok Tedi na bihain i bung wantaim Fly Riva., Fly Riva save ron igo bung wantaim Strickland Riva, na bihain olgeta wara i ron go long basis bilong Gulf bilong Papua. Dispela em i stap klostu 900 km longwe long main (lukim Piksa ES.1). Klostu long 103,000 manmeri i stap long 158 ples long main eria igo daunstrim long main.



Poto ES.1 Ok Tedi Main

Ol sediment we i kam long main i winim tru sediment we i ron long olgeta hanwara klostu long main, ol sediment bilong main i mekim na levul bilong graun insait long wara i go antap (aggradation) (Poto ES.2). Long Lower Ok Tedi na Middle Fly Riva, sediment we i stap long hap i mekim na levul bilong graun stap insait long wara i go antap na wara i save tait (flood) klostu klostu na i save kisim

longpela taim stret long tait wara long slek. Dispela senis long ron bilong wara i mekim planti bus na diwai i dai, na dispela i karamapim klostu 2,000 km² bilong Ok Tedi na Fly Riva long ol hap we i wok long flood.



Poto ES.2 Piksa bilong Ok Kumiup, we wara bilong en i bung wantaim Upper Ok Tedi long Harvey Creek

Long 1998 i kam inap nau, wok bilong digim na rausim ol wesani i stap aninit long wara (dredging) i kamap long Bige, we i stap klostu 80 km daunstrim long main (Poto ES.3). Dredging i kisim bek sampela wesani bilong tailings na waste rock na putim antap long graun. Ol i rausim ol wesani na putim long tupela sait bilong wara, na yusim long planim gen ol diwai na bus we i bin dai pinis. I gat planti sediment i go insait long wara we dredging i no inap kisim bek olgeta. TSF i wanpela gutpela rot bilong stretim dispela hevi na em i ken bungim ol bikpela na liklik ol pipia bilong tailings long giraun, na dispela bai helpim husait manmeri i stap daunstrim. Ol bai go het yet long rausim PCon long ol tailings na putim em long Bige. Na tu, wok bilong dredging long Ok Tedi long Bige bai go het yet olsem nau.



Poto ES.3 Piksa bilong Bige dredging na stokpail operesen

Kwaliti bilong wara i bagarap, na planti sedimen i kam long main i bin bung long as bilong wara na senisim rot bilong riva. Planti sedimen i save ron wantaim wara, na dispela i bin bagarapim ol ples we ol pis na ol narapela abus bilong wara i save stap long en. Long dispela as, namba bilong ol pis na ol narapela abus bilong wara i go daun, na planti kain spisi tu i no stap olsem bipo long Middle Fly. Dispela kain hevi i kamap tu long sampela liklik wara na raunwara ausait long bikpela wara, tasol em i no bikpela tumas olsem long Middle Fly yet.

Long taim bilong main i kamap na i kam inap long nau, i bin gat ol stadi i kamap long skelim sapos wanpela TSF bai i ken wok gut o nogat. Long yia 2024, OTML i makim Klohn Crippen Berger long redim wanpela stadi bilong painimaut sapos dispela projek inap long kamap, na dispela stadi i bihainim ol stretpela lo na stiatok bilong indastri wantaim gutpela pasin bilong wokim ol kain projek olsem. Long namel long sampela ples we ol i bin skelim, Ok Birim em ples ol i makim olsem namba wan hap bilong wokim dispela TSF. Wok bilong fisibiliti stadi we Klohn Crippen Berger i mekim i wok long go yet na em bai pinis long namel bilong yia 2026

Ol wok bilong kamapim dispela TSF bai helpim stret long daunim tailingstailings bilong main nau na bihaintaim long go insait long wara.

1.3 Ol lain i go pas long dispela projek

Ok Tedi Mine i stap aninit olgeta long OTML, na OTML yet i bosim na ronim olgeta wok bilong dispela main. OTML em wanpela kampani bilong PNG we gavman i gat bikpela hap long en, tasol ol i no salim ol shea bilong en long maket. Gavman bilong PNG i holim 67 pesen bilong ol shea, na arapela 33 pesen em Gavman bilong Westen Provins wantaim ol pipol bilong Westen Provins i holim.

Het opis bilong OTML i stap long Tabubil, Westen Provins, PNG na tu kampani i gat narapela opis i stap long Pot Mosbi, na wanpela ofis na ples bilong lukautim na salim ol kago na saplai i stap long Brisbane, Australia.



Hydro-cyclone bai seperetim tailings.
Ol bikpela hap bai wokim ol banis
bilong TSF, na ol liklik hap bai i go insait
long TSF. TSF bai luk wankain olsem ol
stokpail long Bige.



2. Diskripsen bilong wok bai kamap na as tingting bilong dispela wok

2.1 Bikpela lukluk bilong wok

Mak bilong giraun we projek bai kamap long em i klostu long 1,900 hekta. Ol wok bilong projek bai kamap long tupela hap:

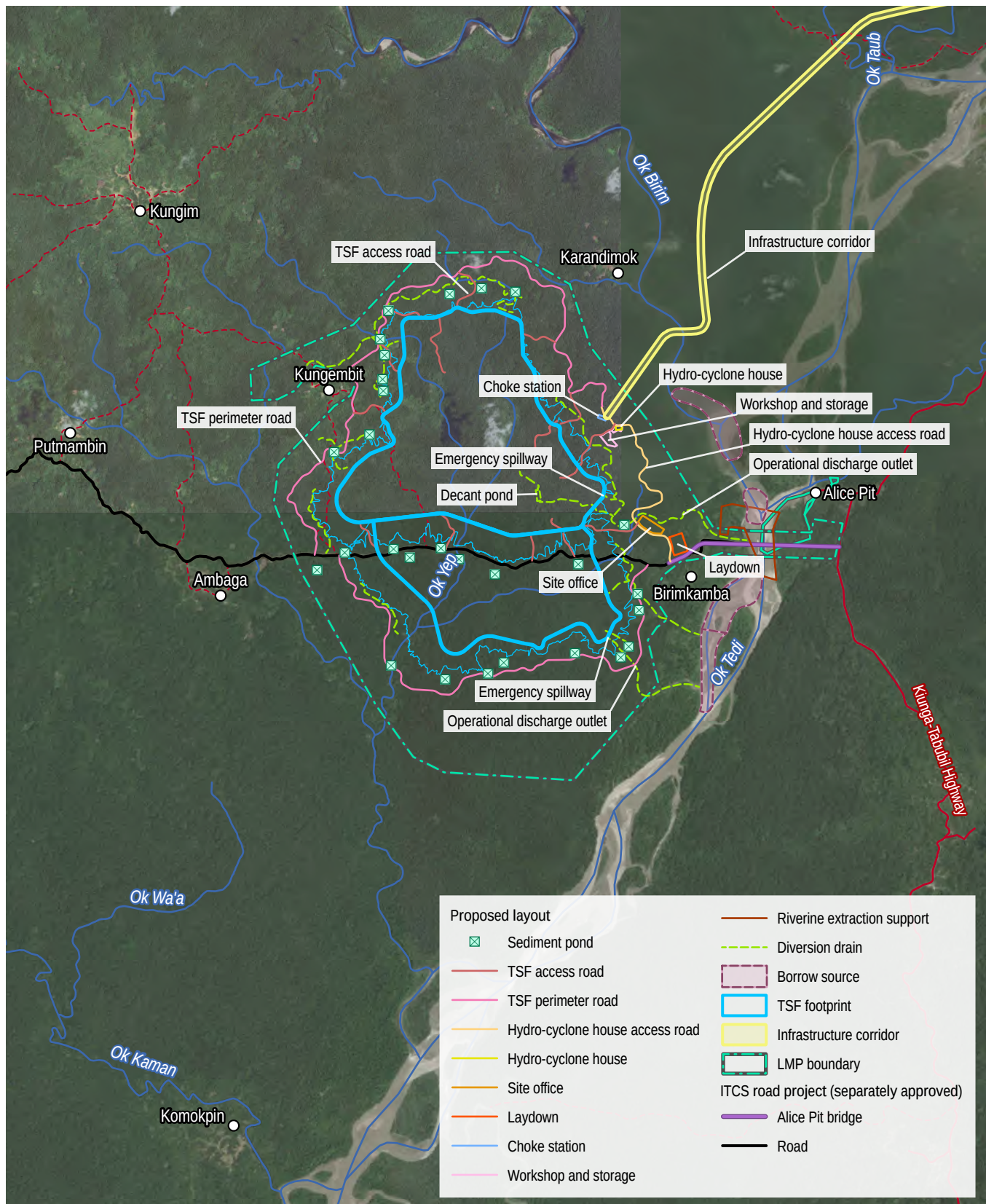
- TSF developmen eria em klostu long 1,500 hekta. Dispela em hap we TSF bai stap, hydro-saiklon haus, ol sapot infrastraksa, ol wok na fasiliti bilong lukautim na bosim wara we em ron antap long graun, na ol rot insait long TSF eria. Dispela eria i stap long wanpela ples we i stap tamblo, na graun bilong dispela hap i suruk isi isi i go daun long hap saut. Hap we TSF bai stap site i stap long wanpela liklik hap bilong kechmen bilong Ok Yep, long wes na saut sait bilong we Ok Birim na Ok Tedi i bung. Norten hap bilong TSF site i stap olsem 1 km long wes bilong dispela hap we tupela wara i kam bung. TSF site i gat flat ples liklik na ol hap wara i no go daun tumas. Hait bilong ol, dispela hap graun i stap namel long 40 mita (m) na 80 m antap long mak bilong level bilong solwara (mean sea level (AMSL)).
- Infrastarksa korido eria em i klostu long 400 hekta. Dispela eria em rot bilong paip lain, ol bris na hap bilong brukim wara, na ol narapela ol fasiliti bilong sapotim wok ausait long TSF developmen eria. Dispela korido eria i gat kain kain graun, stat long ol veli klostu long main we ol sait bilong en i stap stip tru na graun i hat long wokabaut long en, na i go inap long ol hap graun i go antap na daun isi isi wantaim ol ples daun we wara i save karamapim taim bikpela ren i pundaun.

Piksa ES.3 na ES.4 i soim ples we TSF na ol narapela infrastraksa bai stap.

Ol bikpla hap wok bilong projek em:

- Wanpela hydro- saiklon haus bilong separatim ol bikpela hap tailings na liklik hap tailings. Ol bikpela hap (underflow) bai ol i yusim long wokim banis bilong TSF (embankment), na ol liklik hap (overflow) bai ol i salim i go long ples bilong bungim taeilings insait long TSF.
- Wanpela ring-dyke TSF we ol bai divelopim isi isi, wantaim ol hap insait bilong bungim na putim tailings. Planti bilong ol banis raunim TSF bai ol i wokim long wes an ol i seperetim long hydro-saiklon.
- Wanpela 87-km paip lain bilong tailings long we TPP long Ok Tedi Main i stap nau i go long hap bilong TSF, wantaim wanpela pamp stesin long main na tupela choke stesin na wanpela teminol choke stesin.
- Wanpela korido bilong rot long paip lain wantaim tripela bris na sampla bilong brukim wara na liklik veli.
- Ol sapot infrastraksa olsem ol ofis bilong wok, ol laydaun eria bilong putim ol kago na masin bilong wok, ol woksop, hap bilong mekim ol maintenes, ol fasiliti bilong bosim pispis na toilet weist, ol hap bilong putim benzin, barow na grevol pits, na ol kem bilong silip (sapos i gat nid).
- Pawa saplai bai i kam long ol disel jeneraitors long sait, wantaim kapasiti inap long 11 megawat long taim bilong operesen.
- Wara saplai bai i kam long wara saplai bilong main i stap pinis. Long taim bilong operesen, bai ol yusim tu wara ol kisim bek long TSF (decant water). Renwara bai halvim dispela saplai, na sapos i gat nid, bai ol i kisim wara long ol wara klostu o long wara insait long graun bilong wok knotraksen na bilong dring wara.
- Ol bai kisim gravol na graun long wes sait bilong Ok Tedi klostu long TSF bilong wokim ol banis bilong TSF.

Wok bilong stretim gut final disain bilong projek na eria em bai yusim i wok long go yet. Ol wok long kisim moa save na data long ol diteil sait investigatesen, teknikol stadi na enjiniaring wok. Dispela proses bai halvim OTML long abrusim o daunim impek long sindaun bilong ol manmeri na long envaironmen.



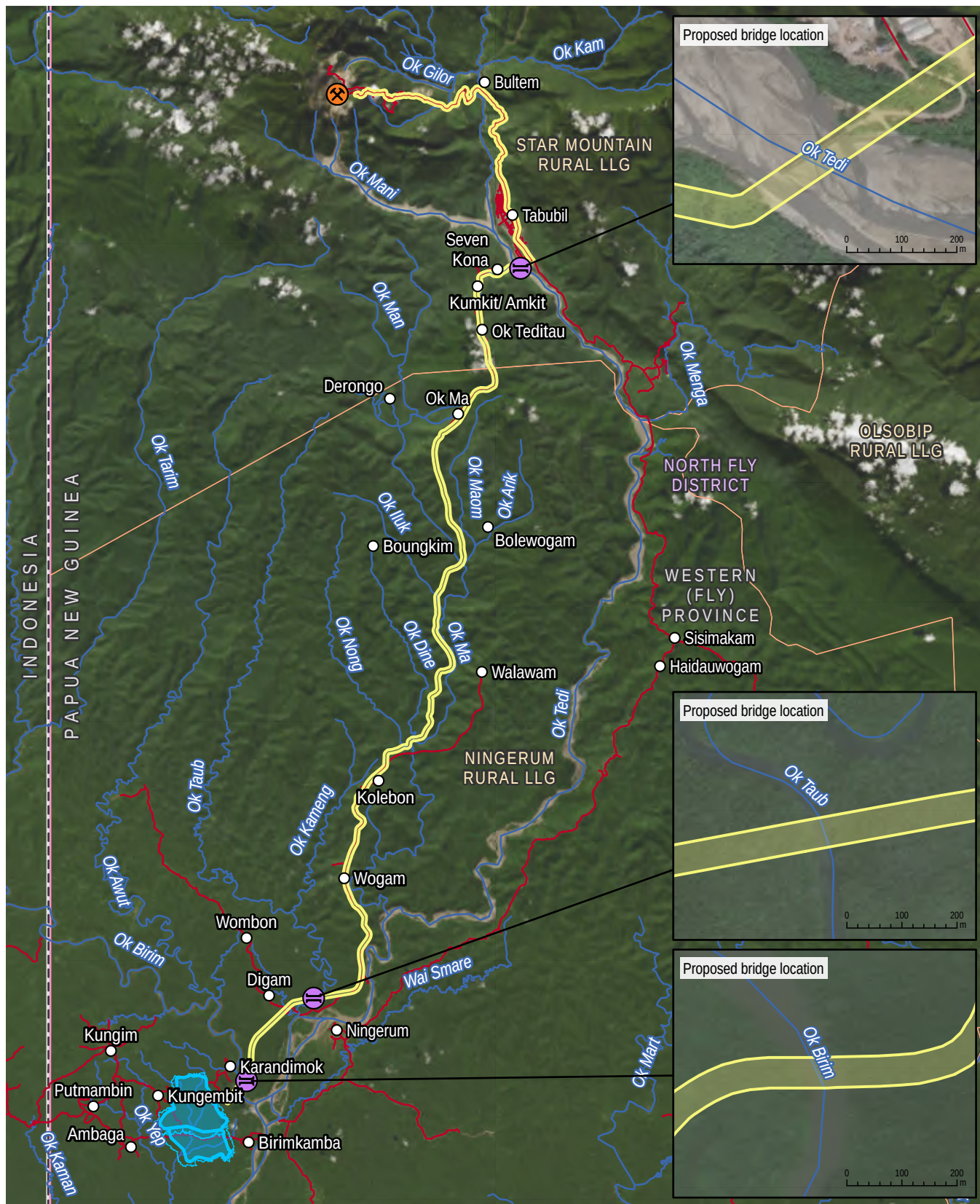
LEGEND

- Community
- Road
- - - Track
- Watercourse
- Existing LMP boundary



0 1 2 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.3 TSF – Ples we ol i laik wokim na layout bilong en



LEGEND

- | | | |
|--------------|-------------------|--------------------------|
| Ok Tedi Mine | LLG boundary | Bridge (to be finalised) |
| Community | District boundary | TSF footprint |
| Road/track | Province boundary | Infrastructure corridor |
| Watercourse | | |



0 2.5 5 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.4 Infrastraksa Korido – Rot ol i laik wokim na layout bilong en



2.2 Skedul bilong wok

Projek bai kamap long fopela bikpela stes bilong wok:

- Stes bilong disain: dispela stes bai kism klostu 6pela mun, long yai 2026 igo inap 2027.
- Stes bilong konstraksen: dispela stes bai kism klostu 36 mun, long yia 2027 i go inap 2030.
- Stes bilong operesen: em bai 20 yia olgeta, long yia 2030 i go inap 2049.
- Stes bilong pinisim wok na stretim ples: em bai kism klostu 36pla mun, long yia 2050 i go inap 2053.

2.3 Skelim ol narapela opsen

OTML i bin skelim planti narapela opsen bilong helpim ol long mekim wanem disain na layout we em i gutpela moa bilong dispela projek. Stat long taim projek em i stap olsem wangepela tingting tasol, i go long ol pre-fisibiliti na fisibiliti s tadi, ol i bin painim na skelim planti narapela opsen bilong makim sait bilong projek na disain bilong en. Dispela i karim tu opsen bilong no go het wantaim projek, ol narapela hap bilong putim tailings na ol kain teknoloji bilong meneijim tailings, na ol narapela opsen bilong ol sapot infrastraksa olsem rot bilong go long projek sait na paipain bilong tailings.

No go het wantaim projek

Wokim dispela TSF em wangepela bikpela rot bilong daunim ol hevi i save kamap long ol tailings bilong main. Dispela bai gat inap ples bilong bungim na holim ol tailings olgeta taim main i gat tok orait long wok yet, na bai helpim OTML long isi isi pinisim pasin bilong putim ol tailings i go stret long wara. Ol tailings i bin wok long go insait long wara long yia 1984 i kamap inap long nau na dispela i save helpim wok bilong prodaksen long main tasol dispela i givm planti hevi long envairamen na sindaun bilong ol manmeri dauntrim, olsem ol sediment i go bikpela, planti hap we i gat tait wara, ol diwai na grass i dai long arere bilong Ok Tedi na Fly Riva sistem. Taim TSF i kamap, dispela bai daunim ol impek long ol hevi we i kamap nau na tu em bai bihainim ol gutpla pasin bilong wok ol i save yusim long ol narapela kantri.

Sapos wok bilong dispela TSF i no kamap, OTML bai go het yet long putim ol tailings long wara na olgeta impek bai i stap wankein yet.

Ol narapela opsen bilong putim na bungim tailings na ol teknoloji bilong en

Stat long 1980, insait long namba wan developmen plen bilong Ok Tedi Main, ol i bin laik putim wanpela TSF long Ok Ma, tasol ol i lusim dispela hap long wanem graun i bin buruk long taim bilong konstraksen. OTML i bin wok insait long klostu 20pla krismas long painim wanpela gutpla na stretpela opsen bilong wokim dispela TSF na luksave tu long wanem hap bilong putim TSF. Ol stadi we i bin kamap em 2013 TSF Opsens Skoping Stadi we Kohn Crippen Berger i bin mekim. Long dispela stadi, ol i bin mekim wanpela pastaim skelim bilong 12pla ples we TSF inap long stap long en, na ol i yusim planti kain kriteria long makim ol. Ol sait we ol i luksave olsem em ol gupela opsen, wantaim Ok Birim sait, ol i kisim i go long wanpela sait seleksen stadi we ol i pinisim stadi long 2014.

Stat long dispela taim, ol wok painimaut bilong TSF i bin lukluk long tupla bikipela opsen bilong projek na ol hap em TSF inap long stap long en namel long Ok Tedi Main na Ningerum eria:

- Valley fill TSF long maunten ples, gupela samting long dispela em bai ino inap gat bikipela wok tumas long wok kontraksen bilong banisim TSF long wanem i gat gupela maunten long banisim ol tailings long stap gut insait. Bikipela asua o risk bilong dispela em graun i no inap strong tumas na graun i ken buruk na guria bikos planti ren i save pundaun na wara i save pulap na em bai bikipela hevi stret long stap seif.
- Turkey nest TSF long hap we i stap tamblo ples, gupela samting long dispela em graun i moa stron na stap gut. sampela hap i gat liklik risk long guria na i save kisim liklik ren moa. Dispela hap tu i gat liklik kechmen eria, na long save ol i kisim lon ol wok long Bige, i luk olsem bai isi moa long pasim na lukatim dispela TSF long bihain. Tasol dispela opsen bai nidim wanpela longpela paip plain na rot bilong go long en. Em bai kisim bikipela eria bilong graun, bai stap klostu long ol komuniti i stap pinis, na i gat tu sampela risk bilong tait wara long ol ples daun.

Ol hap ples maunten we ol i tingting long putim TSF long en, ol i bin rausim long stat bilong stadi. Dispela em bikos ol samting olsem envairamen, sindaun bilong ol manmeri, kost bilong projek na wok bilong pasim TSF long bihain ol i no luk olsem gupela opsen.

Taim ol i makim sait bilong TSF long 2014, ol i yusim planti kain mak bilong skelim ol narapela opsen. Ol samting ol i skelim em teknikal fisibiliti, kost bilong kirapim projek, ol mak bilong baihainim long pasim projek, kost bilong lukautim na stretim ol fasiliti, ol impek long komuniti na envairomen, pasin bilong bosim tait wara na erosen, na sapos graun inap long sapotim gut dispela wok long glasim ol opsen bilong sindaunim TSF. Long olgeta dispela opsen, wanpela bikipela samting em i mas stap longwe long main. Ol sait i stap moa long saut i save gat bikipela kost moa, bikos ol i nidim planti moa longpela paip lain bilong karim ol tailings.

Ol i makim Ok Birim olsem gupela sait bilong go het long ol pre-fisibiliti na fisibiliti s tadi. Dispela em bikos em i gat inap ples bilong bungim ol tailings, gupela kain graun bilong wokim TSF, em i stap klostu long ol infrastaksa i stap pini, i gat gupela data bilong helpim ol stadi, na em i stap longwe liklik long ol komyuniti na i gat liklik hevi moa long ol manmeri taim ol i skelim wantaim ol narapela gupela opsen. Long 2025, ol i mekim moa senis long disain bilong TSF bilong abrusim muvim ol vilis i stap pinis, na bilong muvim TSF i go olgeta ausait long Ok Birim kechmen. Dispela bai mekim wara i ron i kam long projek na wara i lusim TSF i stap tasol insait long Ok Tedi kechmen, em dispela kechmen we i bin kisim bagarap pinis long ol wok bilong main. Ol i muvim tu TSF i go moa longwe long boda bilong Indonesia na wok long daunim ol impek long ol ples we ol spesel kain pis bilong konsavesen i stap.

Ol i yusim tu planti kain mak bilong skelim ol narapela teknoloji olsem:

- Konvensenol TSF wantaim saiklon wesana bilong wokim banis bilong TSF. Em i yusim saiklons bilong seperetim tailings i go long ol bikipela hap na ol liklik hap. Ol bikipela hap bai ol i yusim long wokim ol banis bilong TSF, na ol liklik hap bai ol i putim long namel bilong ples bungim tailings. Gupela samting bilong dispela em olsem em i helpim ol long wokim TSF isi isis long ol stes bilong wok na pasim em long ol stes tu, na em i gat rot bilong lukautim wara gut. Dispela kain wok tu i bin kamap gut pinis long ol narapela wankain projek, olsem ol save wokim long Saut Amerika.
- Tailings we ol i bin rausim planti wara long en na stakim long ol drai layer insait long TSF. Dispela rot i yusim masin bilong rausim wara long tailings inap em i drai liklik, na bihain ol i putim wanpela layer antap long narapela. Planti taim ol i save yusim dispela rot long ol ples we ren i no save pundaun planti o we klaimet bilong en i no olsem tropik. Wanpela gupela samting bilong dispela em olsem long taim bilong opersen bai i no gat bikipela raunwara bilong bung insait long TSF.

TSF wantaim saiklon wesana bilong wokim banis bilong en em ol i makim olsem gupela moa winim filtered TSF, bikos long ol teknikal as na kost bilong em. Maski filtered TSF i gat sampela gupela samting olsem i no gat raunwara bilong bung insait long en na em i save stap drai moa, ol i no makim dispela teknoloji bikos em i gat bikipela kost, em i hatwok moa long operetim, na i no gat wanpela eksampel bilong en i bin wok gut pinis long dispela bikipela mak bilong prodaksen long PNG we planti ren i save pundaun. Long taim bilong ren na ples i save wet nogut tru, em bai hat long karim ol tailings long trak o salim ol long konveia i go long TSF. Na tu, dispela kain filtered tailings teknoloji i no bin soim yet olsem em inap long wok gut long dispela bikipela mak bilong wok na long kain klaimet olsem dispela.

Ol narapela opsen bilong ol sapot infrastraksa

Pastaim ol i bin lukluk long tupela opsen bilong infrastraksa korido bilong rot na paipain bilong tailings long TPP i go long TSF sait. Nambawan opsen em long bihainim Kiunga-Tabubil Highway long Main i go daun long not bilong Ningerum na bihain kalapim Ok Tedi na ron long not bank bilong wara inap long 14 kilomita (km). Namba tu opsen em long lusim Kiunga-Tabubil Highway klostu long Alice Pit long saut bilong Ningerum, kalapim Ok Tedi na bihain ron long wes bank bilong Ok Birim inap long 11 km. Bihain ol i painim wanpela namba tri rot na ol i makim em olsem gutpela opsen. Dispela korido i givim wanpela moa rot bilong go kam long dispela hap, wantaim wanpela stretpela koneksen i kam daun long not na i givim akses long ol vilis stap long displa hap. Ol i makim dispela hap long wanem em bai ino inap gat longpla paipain, kost bilong kontraksen i tamblo na tailings bai ron gut moa insait long paipain. Longpela taim bihain, dispela rot bai helpim tu ol komyuniti klostu long koridor long go kam na kisim ol sevis. Bikpela smating moa em olsem dispela rot bai kamap wanpela narapela bikpela akses rot bilong OTML na komuniti bilong karim kago, fuel, ol kaikai na ol narapla saplai i go kam, wantaim ol samting i kam long Indonesia tu.

2.4 Tingting na plen bilong pasim projek long bihain

Taim ol i no putim moa tailings, wok bilong pasim projek bai kisim klostu tripela yia, stat long 2050 i go inap long 2053. Olgeta infrastraksa na ol sevis we OTML yet i bosim, olsem pawa, wara saplai na sewage, bai ol i rausim taim operesen i stop. Ol asset we inap long yusim gen bai ol i givim o salim long ol narapela lain long yusim. Ol narapela asset bai ol i brukim o rausim na salim salim olsem skrep metal o risaikelim.

Long taim bilong pasim TSF, ol bai wokim em olsem wanpela strongpela hap graun we wara bai ron isi i go aut long en na bai i no bagarap hariap long erosion. Ol embankment na ol channel bai karim wara i go aut long gutpela na seif rot bilong lukautim ol hap we ol i rehabilitetim pinis na envaironmen i stap raunim. . Ol save na lainim ol i kisim long rehabilitesen bilong ol stokpail long Bige bai helpim ol long mekim dispela klosa plen.

Bikpela tingting bilong dispela konsept klosa plen em long wokim wanpela hap graun we i stap strong, bai i no kamapim ol kemikol hevi long bihain, na bai i stret wantaim ikoloji na pasin bilong yusim graun long dispela hap. Klosa disain bilong TSF bai stiaim olgeta wara long i go aut long Ok Tedi klostu long Cell 2.





Inap long 20 yia, OTML i bin wok long painim na skelim ol gutpela hap bilong wokim TSF.

Planti bilong dispela hap i no gat planti developmen yet. Ol manmeri i save sindaun long pasin bilong ples, na dispela hap i gat bikpela valiu long ol plen na animel.





3. Seting bilong projek

Dispela projek eria i stap long saut sait bilong Central Cordillera long Not Fly region bilong Western Provins. Em i stap klostu long boda wantaim Indonesia, na infrastraksa korido bilong projek i stat long Ok Tedi Main na bihainim rot i stap pinis long ist long Bultem, na bihain i go saut long Tabubil inap 22 km, na bihain i go long hapsait bilong Ok Tedi i go long Ok Ma, na bihain i go saut-sautwes inap long 65 km i go long TSF.

Ok Tedi Main i stap klostu long 1,750 m antap long mak bilong solwara long Mt Fubilan, na infrastraksa we i go daun long ol sait bilong ol maunten na long as bilong maunten, na dispela hap TSF bai i stap namel long 40 na 80 mita antap long mak bilong solwara. I save gat planti ren long olgeta yia. Long Mt Fubilan, ren inap long moa long 10,000 milimita (mm) long wanpela yia, na long ples tamblo em i stap klostu long 4,000 mm, na long TSF sait em i klostu long 7,000 mm long wanpela yia.

Long 2024, populesen bilong Western Provins em i klostu long 300,019 manmeri, na em i provins we i no gat planti manmeri insait long PNG (NSO 2024). Planti bilong ol manmeri long Western Provins i stap klostu long Fly Riva na ol liklik riva na han wara. Maski provins i gat liklik populesen, em i gat planti manmeri i stap long ol taun na ol senta bilong wok na bisnis. Planti bilong ol manmeri, sevis, na maket i save bung long provinsel kapitol long Daru na ol narapela senta olsem Kiunga na Tabubil. Not Fly distrik em i bikipela distrik long populesen sais, na long 2024 em i gat 102,633 manmeri, na dispela i makim olsem klostu long 1/3 bilong olgeta populesen bilong provins. Not Fly distrik i gat fopela bikipela taun — Kiunga, Tabubil, Ningerum, na Olsobip. Ol narapela komuniti em ol liklik vilis na setolmen we i stap klostu long ol wara, arere bilong bus o insait long bus. Dispela ol ples i helpim ol manmeri stap na wok gaden, painim abus, painim pis, na wokim saksak. Ol dispela liklik vilis na setolmen i no wankain long ol sais bilong ol. Planti bilong ol i stap longwe na ol i save yusim rot long bus o long wara bilong go i kam long ol narapela ples.

Planti bilong graun we projek bai yusim i stap olsem yet na i no gat planti developmen long en, tasol hap i stap klostu long Ok Tedi Main em i narakain. Planti bilong ol manmeri long dispela hap i save kisim kaikai na sapotim sindaun bilong ol long gaden, bus na wara. Maski Ok Tedi Main i bin kamapim bikipela envairamen na sosol impek long graun na ol manmeri i stap daunstrim long Main, ol dispela impek i no save bikipela tumas long projek eria bikos dispela hap i stap longwe na i stap em yet long wara Ok Tedi.

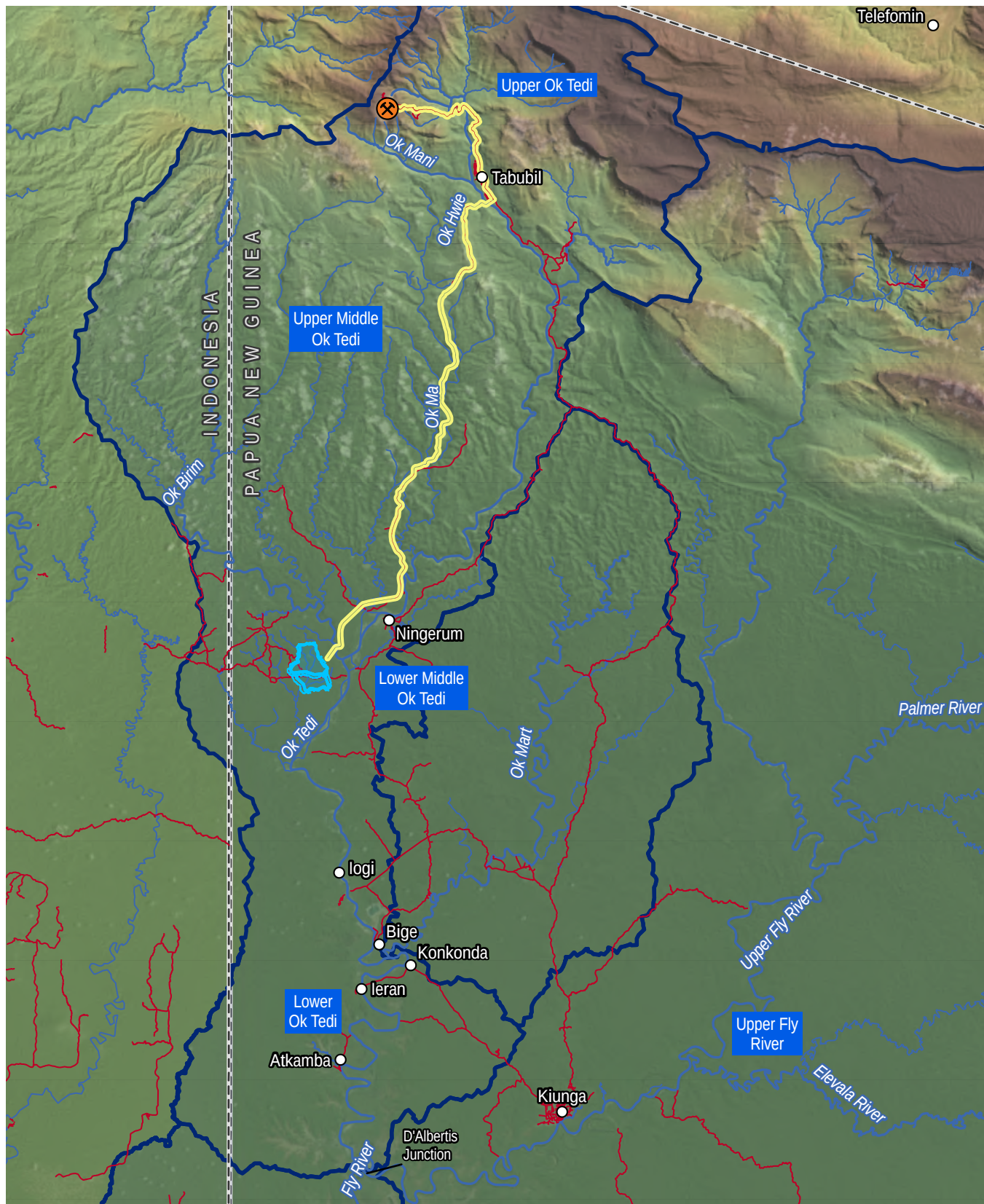
3.1 Hap bilong wokim TSF

Bikipela hap graun bilong wokim TSF i stap long ples we i tamblo. Graun bilong dispela hap i stap stret long liklik hap tasol na i gat sampela liklik veli we graun i go antap na daun isi isi. Dispela hap graun i kamap long kombinaisen bilong ol veli we i gat ol liklik slop na ol baret we wara i katim long helpim ron bilong wara. Ol dispela kain graun i save stiaim ron bilong wara igo insait long ol natrol baret, na dispela bai helpim stret disain na wok bilong lukautim TSF.

Ok Tedi em bikipela wara i ron long hap bilong wokim TSF developmen eria, na olgeta baret wara bilong TSF bai i go pinis long dispela wara. Ok Tedi sistem (Piksa ES.5) i bin kisim bikipela senis long ron bilong wara longpela taim bikos long ol wok bilong main, olsem putim tailings na waste rock long wara.

Stat long taim main i kirap, planti graun, sand na ston i kam long main na bung long as bilong Middle Ok Tedi wara. Long hap wara daunbilo long ples we Ok Mani i bung wantaim Ok Tedi, ol dispela samting i bin hipap planti tru na long sampela hap i inap long 8 mita dip. Long ol hap moa i go daun long wara, mak bilong dispela hipap i save go daun. Dispela em wanpela as na levul bilong wara long Middle Ok Tedi i bin senis (Poto ES.5 na Poto ES.6).

Lower Ok Tedi i ron long Konkonda i go inap long D'Albertis Junction, we em i bungim Fly Riva (Poto ES.7). Bikipela senis i kamap long dispela hap, long graun i stap olsem wanem na ron bilong wara bikos long wok maining na dredging wok long Bige. Stat long taim dredging i kirap, as bilong wara i bin go daun liklik liklik long planti hap bilong wara. Long sampela hap, ol i lukim olsem as bilong wara



LEGEND

- | | |
|--|--|
|  Ok Tedi Mine |  Province boundary |
|  Community |  Catchment |
|  Road/ track |  Proposed TSF footprint |
|  Watercourse |  Proposed infrastructure corridor |



0 5 10
km

PROJECTION: PNG94 PNGMG94 Zone 54

i go daun long sampela mita, maski long sampela narapela hap em i go antap liklik. Ol levee we i bin kamap bipo long taim dredging i no bin stat yet, long wanem planti sediment i kam long main na bung long ol arere bilong wara, ol dispela levee i stap yet o wok long kamap bikpela moa. Dispela i mekim sampela lilklik chanel bilong wara na ol hap wara long floodplain i stap moa longwe na ol no save join gut wantaim bikpela wara olsem bipo.



Poto ES.4 Hap we Ok Mani i bung wantaim Ok Tedi



Poto ES.5 Lukluk long antap bilong Ok Tedi bris



Poto ES.6 Middle Ok Tedi



Poto ES.7 Lower Ok Tedi

Ol impek bilong maining long Ok Tedi em bikpela na i stap longpela taim long ol samting i gro long graun (vegetation) daunstrim long main, dispela i bin wokim ol diwai long indai (dieback) na senis long vegetaisen . Hap we TSF bai kamap i nogat impek long maining. Long dispela hap, ol bikpela diwai na raunwara i stap gut yet, na i gat planti kain diwai, wel abus, pisin na ol narapela samting bilong laip we ol i gat bikpela valiu long konsevesen.

Ol i mekim wanpela stadi (terrestrial ikoloji asesmen) long ol planti kain diwai, gras, abus na ol narapela samting bilong envaironmen long tupela hap insait long TSF developmen eria. Ol i mekim tu wanpela stadi long kisim piksa bilong ol abus long kamera trep long narapela sait. Ol i mekim dispela wok wantaim ol stori we i stap pinis na ol sevei we i bin kamap pinis long Ok Birim na Bige. Dispela eria i gat ol bikpela diwai na ol liklik diwai we i karamapim gut graun. Ol hap saksak i stap insait long eria we TSF bai stap long en em ol bikpela hepitat bilong envaironmen. Ol dispela hap i gat bikpela valiu long envaironmen na tu long sindaun na kastom bilong ol manmeri bilong dispela hap. Ol survey long 2025 na ol toktok wantaim ol manmeri bilong ples i bin painim planti kain spesies (Poto ES.8–ES.10). Namel long ol dispela, i gat 69 spesies we i gat bikpela valiu long konsevesen. Dispela i karim ol flawa, ol flain fox (bat), ol mamol, ol snek na palai, ol rokrok, ol kain kain dragonflai na damselflai. Sampela bilong ol dispela spesies i stap long IUCN list bilong ol spesies we i stap long hevi bilong pinis, ol spesies we namba bilong ol i go daun, ol spesies we i klostu long kamap long hevi, o ol spesies we save bilong ol i no inap yet. Sampela tu i stap aninit long lo bilong PNG bilong lukautim ol abus (PNG Fauna (Protection and Control) Act 1966). I gat tu sampela spesies we ating saiens i no bin save long ol bipo, o ol spesies we ol saientis i no save gut yet long wanem kain grup bilong ol (Poto ES.11–ES.14).



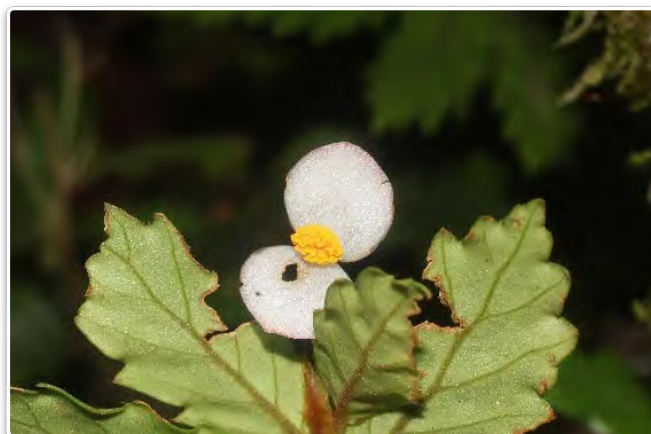
Poto ES.8 King bird of paradise (*Cicinnurus regius*)



Poto ES.9 *Nyctimene albiventer*



Poto ES.10 *Hylophorbus* sp.1



Poto ES.11 *Begonia* sp.1 ol i painim long TSF developmen eria; ating em wanpela nupela spesies



Poto ES.12 *Begonia* sp.2 ol i painim long TSF developmen eria; ating em wanpela nupela spesies



Poto ES.13 Juvenile *Dillenia* sp.1 ol i painim long TSF developmen eria; ating em wanpela nupela spesies



Poto ES.14 *Glochidion* sp.1 ol i painim long TSF developmen eria; ating em wanpela nupela spesies

Ol sediment i kam long main i no save kam bung long ol wara bilong TSF developmen eria. Tasol long hap we Ok Yep i bung wantaim Ok Tedi, ol dispela sediment i bin hipap planti long as bilong wara na mekim as bilong wara i go antap . Long olgeta hap bilong TSF developmen eria, ol metal long sediment bilong wara i stap long liklik mak tasol, na wara i gutpela long planti hap. Planti bilong ol metal i stap aninit long mak ol gaidlain i putim, tasol kopa tasol i no wankain . Taim ol i skelim kwaliti bilong wara, ol i painimaut olsem mak bilong kopa insait long wara i go antap long sampela hap. Wanpela sait tasol long Ok Yep i gat mak bilong metal na sulfur i antap long sediment bilong wara. Dispela sait i stap liklik antap long hap we Ok Yep na Ok Tedi i bung. Ol dispela antap mak inap long kamap bikos taim bikpela wara i ron long Ok Tedi, sampela wara i save go bek insait long Ok Yep na bringim ol sediment I gat minrol i kam bung long daunbilo bilong Ok Yep.

Insait long Ok Tedi, ol impek bilong maining i bin mekim namba bilong pis i go daun na planti kain pis i no stap olsem bipo long ol hap wara daunbilo. Dispela i kamap bikos as bilong wara i bin pulap long sediment, planti sediment i save ron wantaim wara, na

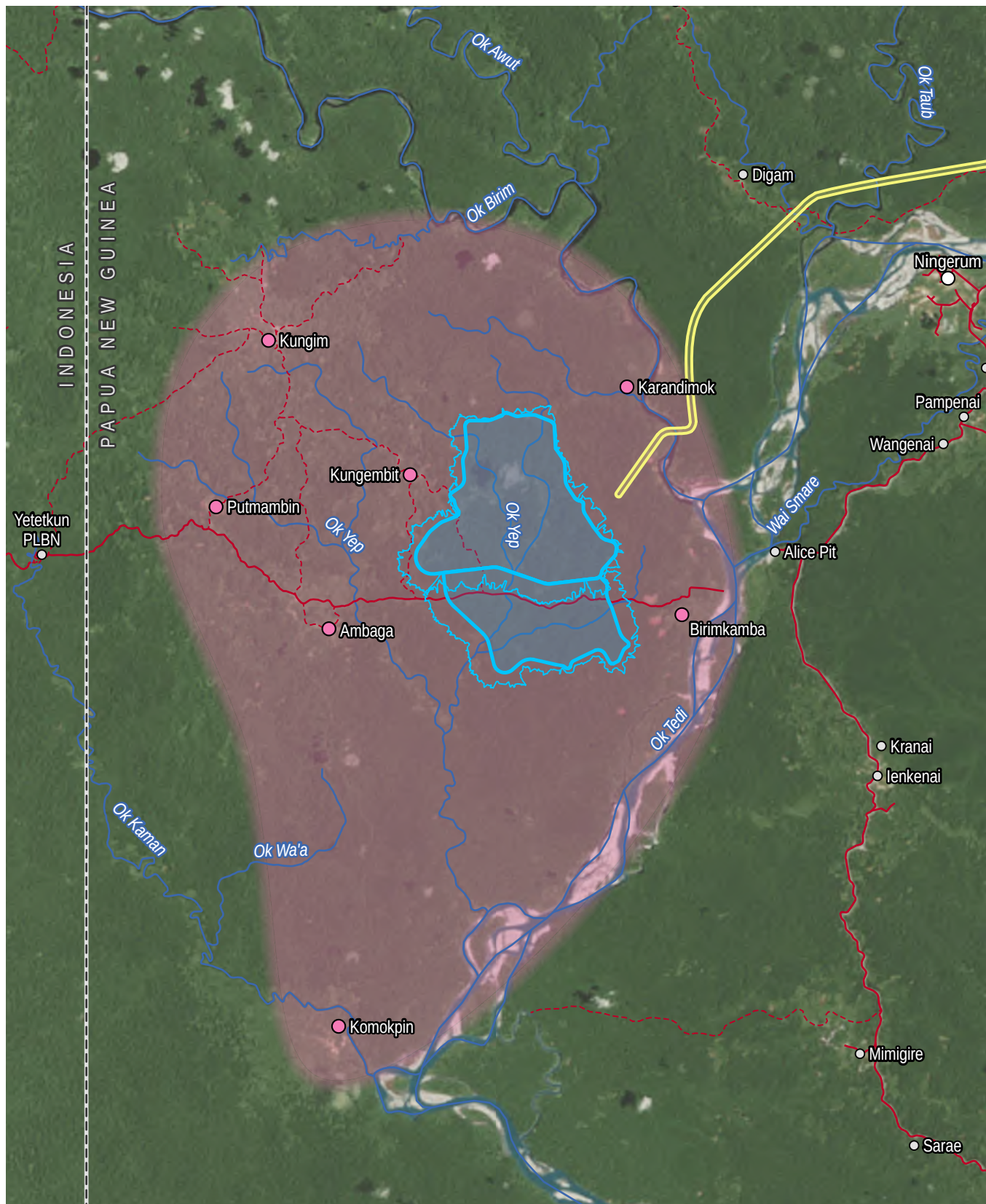
kwaliti bilong wara i no gutpela moa. Tasol planti wara insait long TSF developmen eria i gutpela yet na planti kain pis bilong ples, ol liklik animel i stap long wara, na ol getpela ples bilong ol samting i save stap long wara. Ol manmeri tu i save yusim ol dispela wara long kisim kaikai na ol narapela risos bilong sapotim sindaun bilong ol. Ol dispela wara tu i save kamap olsem gutpela ples hait bilong ol spisis we ol impek bilong maining long Ok Tedi i bin bagarapim. Akwatik ikoloji asesmen i bin mekim sevei long 24 sait insait long TSF developmen eria, bikpela long Ok Yep na ol hanwara bilong en. Ol dispela sevei long 2025–2026 i bin kisim helpim tu long ol olupela monitoring ripot bilong OTML na ol sevei bilong 2014/15 long 11pla narapela sait. Long olgeta sevei bilong 2014/15 na 2025, ol i bin rekodim 38 kain pis. Namel long ol dispela em Fly Riva rainbowfish (*Melanotaenia sexlineata*) (Poto ES.15) na swamp gudgeon (*Oxyeleotris stagnicola*), em ol kain pis we namba bilong ol i go daun na ol I stap long hevi. I gat tu Kiunga blue-eye (*Kiunga leucozona*) (Poto ES.16) wanpela kain pis ol I bin tokaut long en long ol yia i no longtaim i go pinis, na em i gat bikpela valiu long konsevesen bikos em i no save stap long planti hap. Taim ol i kisim hap mit bilong ol pis i no inap long kamapim hevi long helt bilong ol manmeri sapos ol i kaikai pis long mak ol manmeri i save kaikai long olgeta de.



Poto ES.15 Fly Riva Rainbowfish (*Melanotaenia sexlineata*)



Poto ES.16 Kiunga Blue-eye (*Kiunga leucozona*)



LEGEND

- TSF community
- Regional centre
- Study area community
- Road
- - - Track
- Watercourse

- Proposed TSF footprint
- Proposed infrastructure corridor
- Study sub-area
- TSF communities



0 1 2 km
PROJECTION: PNG94 PNGMG94 Zone 54

I gat sevenpla vilis i stap raun long hap we TSF bai kamap. Ol ples i stap klostu moa em Kungembit (Poto ES.17), Birimkamba (Poto ES.18), Karandimok (Poto ES.19) na Ambaga (Piksa ES.6). Ol dispela vilis i save stap longwe liklik na planti taim i stap ol yet, wantaim liklik namba bilong manmeri i stap olgeta taim long en. Planti bilong ol manmeri i save kisim kaikai na sapotim sindaun bilong ol long gaden, bus na wara (Poto ES.20 and Poto ES.21). Planti bilong ol manmeri long TSF eria ol bilong Yonggom lain na ol i gat ol strongpela femili koneksen namel long ol yet. Ol i gat strongpela femili koneksen tu wantaim ol komyuniti long Indonesia, na planti taim ol i save go kam long boda bilong mekim maket, liklik bisnis na lukim ol femili bilong ol.



Poto ES.17 Lukluk long antap bilong Kungembit



Poto ES.18 Birimkamba Village



Poto ES.19 Karandimok Village



Poto ES.20 Gaden eria long Ambaga (wantaim saksak sanap long beksait)



Poto ES.21 Liklik gaden long Putmambin

3.2 Paiplain infrastraksa korido

Infrastraksa korido i stat long ol maunten na ol hills. Bihain em i brukim ol baret na ol sait graun i slop long hap saut na is bilong main i go long Tabubil, na tu long sautwes bilong Tabubil i go long Ok Ma. Long hap moa i go saut klostu long Ningerum, korido i ron long ol ples daun we wara i bin wokim long taim bipo. Long dispela hap i gat ol liklik baret stap klostu klostu, ol liklik veli i gat ol ples tais, na ol ples daun bilong tait wara klostu long ol bikpela wara olsem Ok Tedi.

Ol hanwara bilong Ok Tedi we i stap insait long dispela korido em Ok Hwie, Ok Ma, na Ok Birim (lukim Piksa ES.5; Poto ES.22). Ol dispela hanwara em ol wara i save ron olgeta taim long yia, na mining i no bin mekim bikpela senis long ol. Sediment i save ron na bung long ol wara dispela pasin i save bihainim natural erosion na sedimentation. Em i save depend long hamas wara i ron na wanem kain hap wara i go long en.

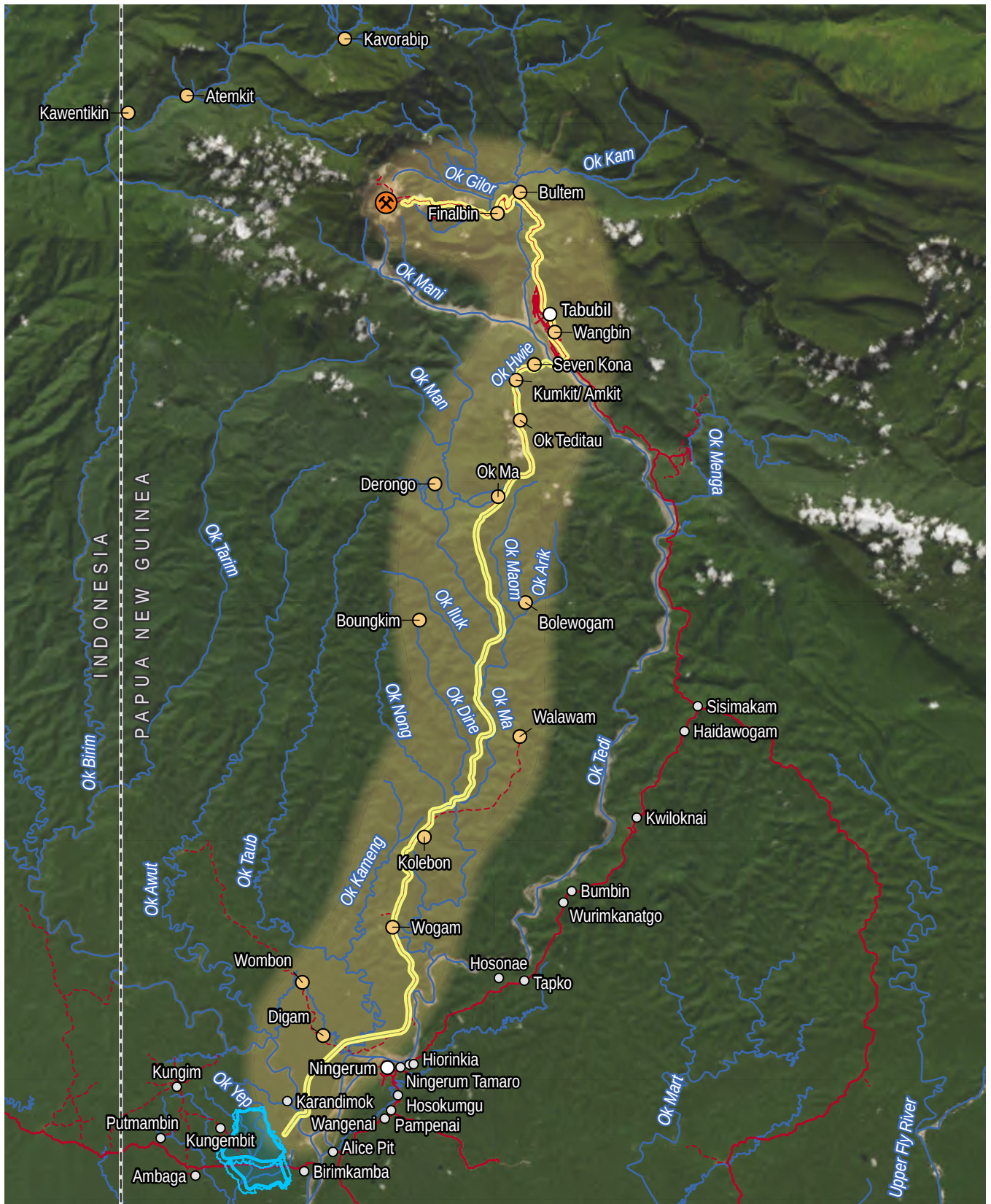
Long dispela site, metal na sulfur long sediment i bin liklik tasol. Tasol water quality monitoring i soim olsem natural graun na ston bilong hap i stap, na dispela i bin mekim pH i go antap liklik na dissolved copper tu i go antap liklik. Ol dispela elevated level i gat strongpela chance long kamap long Ok Ma bikos em i stap klostu long area we i gat planti natural mineral, raun long Mt Fubilan na Ok Tedi Mine, na dispela i no bilong mining activity tasol. I bin gat stadi bilong ol kainkain diwai na bus na ol abus na ol narapela animel long tupela hap insait long infrastraksa korido. Long tamblo long ol maunten we i stap long 200 i go inap 460 mita antap long mak bilong solwara long Ok Ma. Dispela hap i gat ol bikbus bilong ples daun we i stap olsem yet na i no kisim planti senis. Ananit long ol bikpela diwai i gat planti ol liklik diwai, gras, rop bilong bus na fern i gro raun. I gat ol liklik wara na tais. Long dispela hap i gat ol liklik baret, ol hanwara we i save ron long sampela taim bilong yia tasol, na planti kain ples we ol kain plent na abus i save stap long en. Samplea hap i drai liklik na sampela hap i save stap wet liklik. Long sampela hap i gat bus we i bin kamap bihain long ol man i bin katim na yusim long mekim garden, na i gat tu saksak na ol ol karanas olsem Lukwi Karst sistem. Ol sevei long 2025 na stori wantaim ol manmeri long ples i bin painim 34 spisis bilong plent na animel insait long infrastraksa korido we i gat bikpela valu long konsevesen. Dispela i karim ol plent, bat, mamel, snek, palai, rokok, na dragonfly spisis. Sampela bilong ol dispela spisis i stap long IUCN list bilong ol spisis we i stap long hevi bilong pinis, ol spisis we namba bilong ol i go daun, ol spisis we i klostu long kamap long hevi, o ol spisis we save bilong ol i no inap yet. I gat tu ol spisis we PNG Fauna Act i lukautim, na sampela spisis we ating sains i no bin save long ol bipo, o ol spisis we ol saientis i no klia gut long wanem kain grup bilong ol.

Akwatik ikoloji asesmen i bin mekim sevei long 13 saits insait long infrastraksa korido, planti bilong ol long Ok Ma na ol hanwara bilong en. Ok Birim i gat bikpela wara rot na wara bilong en i save ron olgeta taim. Em i gat koneksen wantaim hanwara bilong en, na dispela i mekim em wanpela gutpela ples bilong ol pis long stap, hait na painim kaikai. Fopela saits long Ok Birim we ol i seveim i soim olsem em i gat planti pis na planti kain spisis bilong pis we namba bilong ol i go daun liklik long Ok Tedi sistem. Ol i painim wanpela kain pis (eel-tailed catfish) spisis long Ok Birim we i luk olsem em wanpela niupela spisis we saiens i no bin save long en bipo. Wankain tu long Ok Ma we ol i painim olsem em i stap olsem ol gutpela ples hait bilong ol pis spisis we ol impek bilong maining long Ok Tedi i bin mekim ol i lus o i sot. Ol i bin rekodim 36 spisis long ol wara long hap bilong infrastraksa korido.

I gat 21 vilis i stap long infrastraksa korido (Piksa ES.7). Ol dispela komyuniti i stap long wei long wei long ol yet, na planti bilong ol em ol liklik setelmen ol i mekim long bus materyal namel long ol gaden. Sindaun bilong ol manmeri dipen tru long graun bilong tumbuna na ol natural risos bilong ol. Ol i save kisim kaikai na moni long gaden, painim abus, painim pis, paitim na wokim saksak, salim buai na wok gol. Planti manmeri long ol ples i muv i go stap long setelmen long korido bilong Kiunga-Tabubil haiwei, o ol i go long ol bikpela senta olsem Ningerum na Tabubil bilong kisim gutpela sevis olsem skul, helt kea, na maket. Tasol rot bilong go painim dispela sevis i hat yet, na planti taim ol i mas wokabaut o ron long bot bilong go long kisim ol dispela sevis.



Poto ES.22 Ok Birim, klostu long ples Karandimok



LEGEND

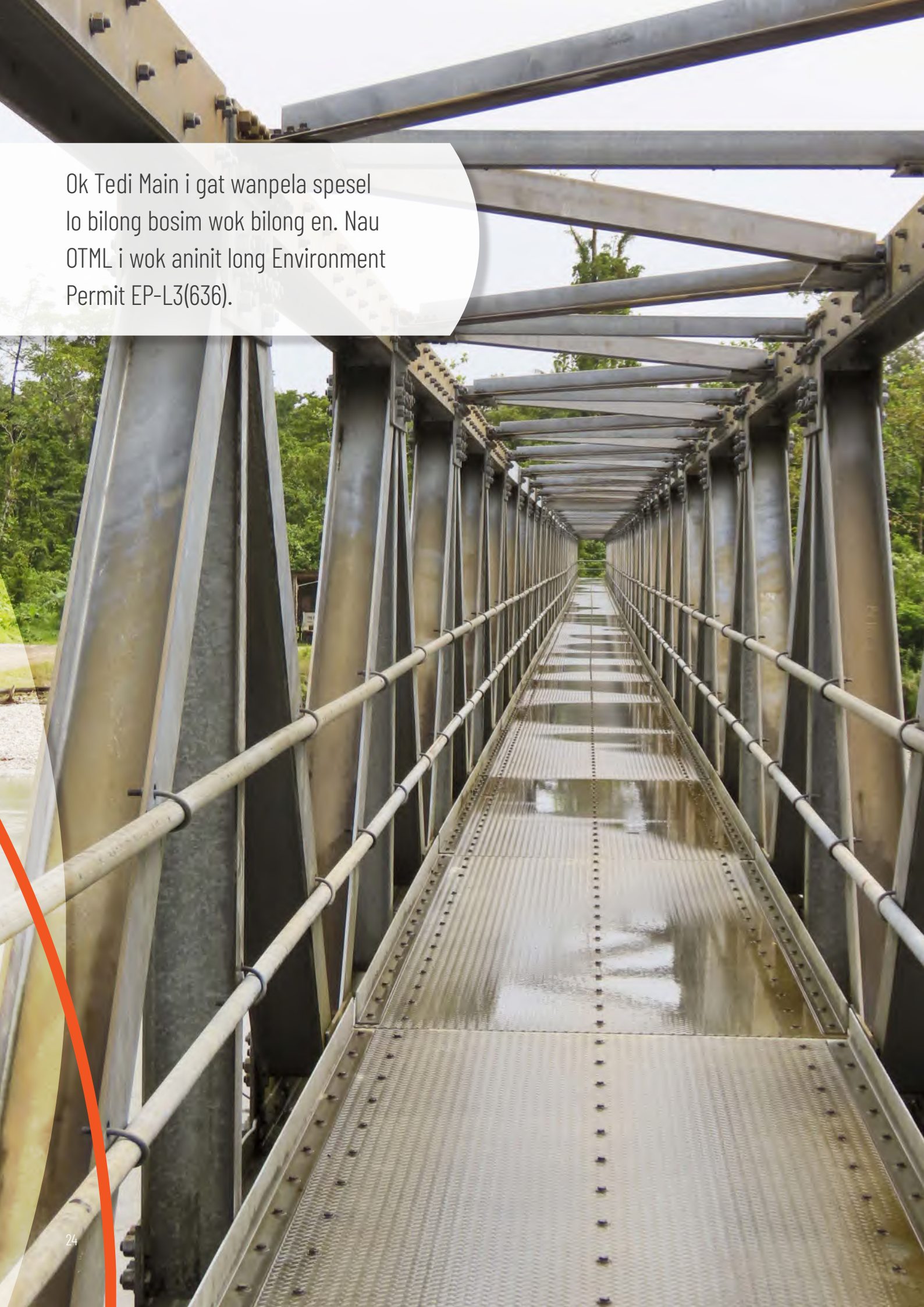
- Ok Tedi Mine
- Infrastructure corridor community
- Regional centre
- Study area community
- Road
- Track
- Watercourse

- Proposed TSF footprint
- Proposed infrastructure corridor
- Study sub-area
- Infrastructure corridor communities



0 5 10 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.7 OI komuniti long tailings paipain korido - Ok Tedi Main i go long TSF



Ok Tedi Main i gat wanpela spesel
lo bilong bosim wok bilong en. Nau
OTML i wok aninit long Environment
Permit EP-L3(636).



4. ESIA Proses

Dispela ESIA i skelim tasol ol impek we dispela projek inap kamapim (olsem ol impek tru), ol indairek impek, na ol impek we inap bung wantaim ol narapela impek na kamap bikipela moa (Piksa ES.2). Em i no lukluk long olgeta envairamen na sosel impek we Ok Tedi Main i gat pinis o i wok long kamap yet, tasol sapos sampela bilong ol dispela i pat bilong projek em bai i stap tu insait long stadi. Ekstensen long laif bilong main bihain long 2050 (olsem Stretejik Bisnis Plen i soim) na ol wok painim aut bilong em ino kamap yet olsem na i no stap insait long dispela ESIA. Bai ol i skelim ol dispela samting long narapela taim aninit long *Ok Tedi Environment Management Act 2019* (OTEMA).

4.1 Reguletori proses

Ok Tedi Main i no wankain olsem olgeta narapela main long PNG, Ok Tedi main i wok aninit long wanpela spesel lo bilong em yet. *Mining (Ok Tedi Agreement) Act 1976* na ol narapela agrimen aninit long dispela lo i givim as na stong bilong lo long wok bilong Ok Tedi Mining Limited (OTML). OTEMA tu i kamapim wanpela spesel sistem bilong bosim na lukatim envairamen bilong Ok Tedi Main. Long dispela taim, OTML i wok aninit long Environment Permit EP-L3(636) we i bin kamap aninit long OTEMA. Tasol dispela permit bai mas senis bikipela pastaim bilong ol i ken go het wantaim dispela TSF projek.

Proses bilong senisim permit bilong projek aninit long OTEMA em envairamen impek asesmen na sabmisen bilong envairamen impek steitmen (ESIA). Dispela proses i gat ol dispela stes:

- Sabmisen bilong envairamen inepsen ripot (EIR), we i tokaut long ol bikipela samting na hevi bai ol mas stadi long en insait long envairamen impek steitment.
- Sabmisen bilong envairamen impek steitment we i kamap bihainim EIR.
- Asesmen bilong envairamen impek steitmen we State bilong PNG bai skelim na pablik bai gat sans long lukluk na givim tingting bilong ol.
- Disisen bilong Minista sapos em i orait long projek ken go het.
- Sapos projek i kisim tok orait, bai ol i givim Environment Permit EP-L3(636) we ol i bin senisim long OTML.

Dispela ESIA i mekim wok bilong envairamen impek stetmen bilong helpim dispela asesmen. Ol i bin redim em bihainim ol mak na requaiment bilong OTEMA long skelim envairamen na sosel impek, na tu bihainim ol gaidlain bilong Department of Environment and Conservation (DEC) *Guideline for Conduct of Environmental Impact Assessment and Preparation of Environmental Impact Statement* (DEC 2004).

I gat tu ol narapela laisens, tenemen, na tok orait we Mineral Resources Authority i bai givim aninit long *Mining Act 1992*.

4.2 ESIA straksa

Dispela ESIA i gat fopela volium:

- Volium A – Eksektiv Samari (dispela ripot). Dispela i no longpela teknikal ripot. Dispela ripo i kam long Inglis na Tok Pisin, na em i givim sampela bikpela ol toktok bilong ol wanem wok painim aut i kamap long impek asesmen.
- Volium B – Mein ripot. Dispela em i bikpela ripot em yet. Em i tokaut long ol risalt bilong ol teknikal stadi, wantaim ol hevi we projek i ken kamapim long envairamen, sindaun bilong ol manmeri, na ol ples tumbuna na kastom. Em i tokaut tu long ol rot bilong bosim na daunim ol dispela hevi, ol hevi we inap stap yet bihain long ol dispela wok bilong bosim, na ol gutplea samting we projek inap bringim. Dispela ripot i stap long Inglis tasol.
- Volium C – Ol atechmen
- Volium D – Apendiks. Dispela em ol teknikal ripot we i stori long ol samting i stap pinis long envairamen, sosel na kalsaral veliu na bilong helpim long painim ol impek we i ken kamap long projek. Ol apendiks i stap long tok Inglis tasol. Table T004 i soim olgeta apendiks.

Tebol ES.1 Sampela ol teknikal ripot we i sapotim ESIA

Volium D – Ol Apendesis		
Apendiks	Nem	Husat i raitim
A	Ol risal bilong luksave long ol ston na graun	Environmental Geochemistry International Pty Ltd
B	Ripot bilong riva, ron bilong wara, ol sediment insait long wara na ol kain graun na ston long wara.	Dr G. Pickup
C	Ripot bilong kwaliti bilong wara we i ron antap long graun	Environmental Geochemistry International Pty Ltd
D	Ripot bilong wok painimaut long ron bilong wara aninit long graun, na piksa i soim wanem samting i ken kamap bihain.	KCB Australia Pty Ltd
E	Ripot bilong akwatik ikoloji (laif i stap insait long wara)	SLR Consulting Australia Pty Ltd
F	Ripot bilong ol kainkain laip i stap insait long ol bus na diwai	Ecomate Management Limited and Dr S. Richards
G	Ripot bilong wok painimaut long ol impek long ol kainkain laip insait long ol bus na ol diwai	F. Crome
H	Ripot bilong wok painimaut long kwaliti bilong win na ol kain ges i save senisim klaimet.	Tetra Tech Inc.
I	Ripot bilong wok painimaut long ol nois we i ken kamap long taim bilong wok	Sonus Pty Ltd
J	Ripot bilong wok painimaut long ol risk long taim klaimet i senis	Tetra Tech Inc.
K	Ripot bilong graun	KCB Australia Pty Ltd
L	Ripot bilong ol samting long bifo yet na kalsaral heriteij	Indigenous Heritage Management Consultancy Ltd
M	Ripot bilong luksave long laip na sindaun bilong ol manmeri	Tetra Tech Coffey Pty Ltd



ESIA i soim ol risal bilong ol teknikol stadi long ol inap imek na gutpela samting bilong projek, ol rot bilong bosim ol hevi, na wanem bai i stap bihain. Ol dispela stadi i bin kamap wantaim sapot bilong ol speselis na strongpela wokbung bilong ol PNG lain.

Ol wok toktok bilong projek i bin bihainim pasin bilong givim save pastaim, larim ol manmeri long tokaut long tingting bilong ol, na mekim disisen wantaim gutpela save long ol samting bilong projek.





5. Stekholda engeijmen

5.1 As tingting

OTML i save bung na toktok wantaim olgeta lain i gat tingting long projek (stekholda). Em ol papa graun (landowners), ol komuniti, provinsel na nesenel gavman, ol wokman, ol kontrakta, ol saplaia, na ol narapela grup husait i igat interes long main. Long dispela wok, OTML i givim toksave long ol wok bilong em we bai i kamap long dispela projek, harim tingting bilong ol manmeri, bekim ol askim na hevi ol i bringim i kam. Dispela wok bilong toktok na bung i save kamap long miting na toktok wantaim ol manmeri long ol ples insait long nainpela CMCA eria na sikspela ples long main, na insait long ol stekholda forum.

OTML i gat wanpela sistem bilong kisim, rekodim na bihainim proses long stretim ol toktok, wari, na hevi bilong ol manmeri yusim OTML Complaints na Grievens Menesmen Sistem. Komuniti Relesen tim bilong OTML i lukautim dispela sistem. Ol i mekim dispela wok bihainim ol lo na mak bilong Yunaitet Nesens na International Finance Corporation.

Bikpela as bilong dispela wok em long:

- Tokaut long ol komuniti na ol narapela lain we projek inap bagarapim o senisim samting bilong ol;
- Harim tingting bilong ol manmeri long olsem wanem projek bai senisim ples, graun, wara, na laip bilong ol;
- Strongim gutpela wok bung namel long OTML na ol stekholda, bilong wok wantaim long mekim gutpela helpim na daunim nogut samting;
- Inapim olgeta lo we dispela projek i mas bihainim.

5.2 Prinsipols bilong engeijmen

OTML i mekim wok bung na toktok wantaim ol stekholda bilong dispela projek long pasin i bihainim free, prior na informed consent (FPIC) prinsipols. Ol dispela prinsipols em:

- **Informed consent (kisim tok orait):** OTML i mas givim klia na stretpela toksave long ol manmeri, na givim gutpela taim na rot bilong ol i ken toktok na bekim. Toksave i mas isi long kisim, na i mas rispektim tingting bilong ol manmeri na i mas stap konfidensel.
- **Participatory (wok wantaim):** Ol stekholda i mas wok wantaim na i mas gat gutpela rot long kisim tingting bilong ol. OTML i mas givim inap taim na risos we ol i nidim long mekim bekim na tingting long dispela proses na i mas go wantaim kastam na pasin bilong ples.
- **Integrity (stretpela pasin):** Engeijmen i mas ples klia, tru, na stret olgeta taim na em bai isi long ol stekholda long givim tingting bilong ol.
- **Inclusiveness (pasin bilong tingim olgeta lain):** OTML i mas mekim ol stori na toktok i isi long olgeta manmeri long kisim, na em i mas traime long kisim tu igo long ol lain we i hat liklik long go long ol. Toksave i mas stap long wei we ol manmeri i klia long em, na dispela i mas bihainim kastom bilong ples. OTML i mas harim tingting bilong olgeta klen, ol meri na ol valnarabol grup.
- **Rispek na wok bung wantaim:** OTML i mas rispektim olgeta stekholda na harim gut ol toktok bilong ol. Engeijmen i mas kamap long pasin bilong gutpela toktok na gutpela save bilong ol raits bilong ol manmeri.
- **Transparency na accountability (op na klia pasin):** OTML i mas gat sistem bilong ripot na monitarim we i klia, stret, na tru. Ol i mas bihainim OTML grievens na komplein sistem long stretim wari na hevi bilong ol stekholda.
- **Independen:** ESIA engeijmen i mas kamap long pasin we i independen, na i nogat wansait tingting na politik.

5.3 Ol wok bilong konsultesen

Wok bilong bung na toktok wantaim ol stekholda long dispela ESIA i bin gat fopela fes:

- Toksave long ol manmeri long stat bilong projek.
- Kisim tingting bilong ol manmeri na skelim ol impek.
- Konsultesen raun wantaim ol komuniti pastaim long sabmitim ESIA.
- Tokaut long environmen impek steitmen (EIS) bihainim lo bilong *Ok Tedi Environment Management Act 2019* (OTEMA) - em taim bilong tokaut long EIS bihainim ol tok bilong OTEMA. Dispela ESIA i inapim ol tok bilong EIS aninit long OTEMA.

Ol tripela pastaim fes i helpim long redim dispela ESIA. Bihain long ESIA i go insait long Conservation and Environment Protection Authority (CEPA), bai ol i tokaut long EIS na mekim em i stap long ol manmeri na ol arapela lain long lukim.

Dispela seksen i stori gut moa long wanwan bilong ol dispela feis. Piksa ES.8 i soim ol dispela ples.

Toksave long ol manmeri long stat bilong projek

Long Me na Jun 2025, ol i bin mekim wanpela konsultesen long ol ples klostu long TSF, Ningerum, na Kiunga . As tingting bilong dispela konsultesen em long givim toksave long ol komuniti na ol narapela stekholda long projek, proses bilong EIS, na toksave long ol wok painimaut na wok bung we bai kamap. Dispela konsultesen i tokaut long dispela ol samting:

- Olgeta diteil bilong projek, olsem long TSF na infrastraksa korido.
- Toksave gut long EIS proses aninit long OTEMA, wantaim ol bikpela wok bai kamap na taim bilong ol dispela wok, na tu long wok bilong CEPA long dispela proses.
- Toksave gut long ol stadi long envairomen na sosel we bai kamap long ESIA.
- Kisim tingting bilong ol komuniti na ol stekholda, ol askim ol i gat long projek na autim ol wari bilong ol long projek na ol samting em inap kamapim, na tu long ol samting we bai helpim ESIA long skelim;
- Tokaut long rot we ol manmeri long ples na ol narapela stekholda inap bringim ol hevi na wari bilong ol i kam long OTML long dispela projek.

Ol i painimaut tu husat ol lain i mas kisim save long projek, na wanem kain rot ol komyuniti i laik bai ol i yusim long toktok wantaim ol. Dispela bai helpim ol long planim gut ol wok bilong konsultesen na toktok wantaim ol manmeri long bihain.

Ol stekholda grup long dispela feis em:

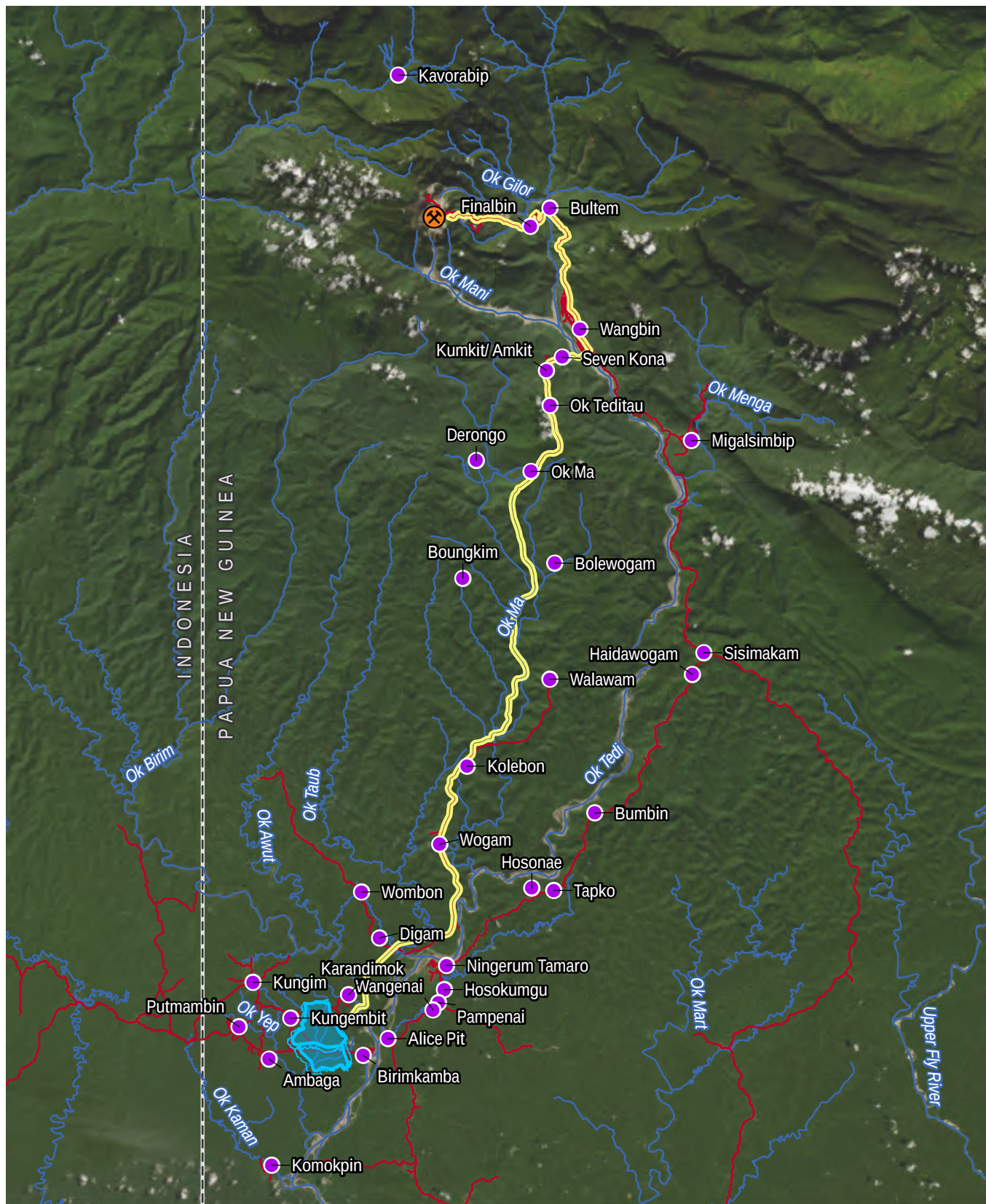
- Ol papa graun na ol komuniti klostu long TSF eria em Birimkamba, Putmambin, Karandimok, Kungembit, Ambaga, na Kungim
- Ol gavman wok manmeri long North Fly District na Ningerum Rural Local Level Government;
- Ol non-gavman oganaisesen olsem Ok Tedi Development Foundation na Montfort Catholic Diocese.

Ol i mekim dispela wok taim ol i toktok wantaim difrent grup bilong komuniti, toktok wantaim grup bilong ol man, toktok wantaim grup bilong ol meri, na toktok wantaim ol ki infoment

Kisim tingting bilong ol manmeri na skelim ol impek

As tingting bilong dispela feis em bilong givim infomesen bilong projek na ol wok bilong ESIA na kisim infomesen long ol ples na ol narapela stekholda long wanem i stap pinis long envairomen na sosel na tingting bilong ol long ol impek we i ken kamap na ol gutpela samting bilong projek. OTML, Tetra Tech Coffey, na ol saveman bilong mekim ol dispela wanwan wok i bin mekim dispela ol wok painimaut. Long dispela feis, ol wok painim aut i kamap long:

- Aquatic ecology (2025). Stadi long ol laip insait long wara olsem ol pis na kuka
- Terrestrial ecology (2025 na 2026) Stadi long ol laip samting bilong graun olsem ol bus, diwai na ol abus long bus.
- Archaeology and cultural heritage (2025). Stadi bilong samting long bifo na kastam bilong ples
- Stadi bilong sindaun bilong ol manmeri long ples (sosel stadi) wantaim luksave long wanwan kain manmeri insait long ples, impek asesmen, asesmen long ol risos olsem bus, graun, wara, na impek long raits bilong ol manmeri.
- Wok painimaut long sindaun bilong ol manmeri i bin kamap wantaim OTML Komuniti Rilesen na Sasteinabiliti Dipatmen na Tetra Tech Coffey. Ol stekholda long dispela taim em:
- Ol afekted papagraun na ol komuniti klostu long TSF, em Ambaga, Birimkamba, Karandimok, Komokpin, Kungembit, Kungim, Putmambin, na ol manmeri bilong Buseki.
- Ol afekted papagraun na ol komuniti long rot bilong konstraksen long Tabubil i go long Alice Pit; Alice Pit, Ningerum i bin gat ol lain i kam long Bumbin, Kiorinkia, Hosokumgu, Hosonae, Pampenai, Tapiko and Wangenai, Wirimkanatko, Wolawam, Haidawagam na Sisimakam
- Ol afekted papagraun na ol komuniti long rot bilong tailings paipain, em Kumkit na Ankit, Okteditau, Boungkim, Wombon long Ok Ma setelmen, Digam, Ningerum-Tamaro na Wombon long Ningerum na Bolewogam na Wogam. (lukim Piksa ES.8)



LEGEND

-  Ok Tedi Mine
-  Community
-  Road/track
-  Watercourse
-  International border
-  Proposed TSF footprint
-  Proposed infrastructure corridor



0 5 10
km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.8 Piksa i soim ol ples we i bin stap insait long ol engeijmen

Ol rot bilong mekim ol engeijmen long dispela feis em:

- Miting wantaim ol lida bilong ol komuniti i stap klostu long ples we TSF bai kamap, na tu ol ples long rot bilong konstraksen korido na rot bilong tailings paipain.
- Ol grup toktok wantaim komuniti, na dispela i gat narapela narapela toktok bilong ol man na ol meri.
- Intaviu wantaim ol bikpela manmeri we i gat bikpela wok/tingting long komuniti, olsem ol komuniti sevis provaidas.
- Ol komuniti toksave (Toksave na Komuniti Nius).
- Ol i rait long askim long kisim moa toksave

Konsultesen bilong ESIA pastaim long sabmisen

Bilong makim wanpla hap pat bilong stekholda engeijmen bilong dispela ESIA proses, na bilong sapatim prinsipol bilong fri praiar na infom consent, wanpela konsultesen i bin kamap long mun Epril na Mei 2026. Dispela konsultesen i bin kamap bilong toksave long ol komuniti na ol stekholda long ESIA proses na ol wok i kamap bilong dispela projek, bilong presentim draft ESIA risalt bilong ol envairanmen na sosel stadi i bin kamap pinis, na bilong toksave tu long ol engeijmen i bin kamap pastaim long fainal ESIA ripot i go long CEPA.

Dispela wok i bin kamap long olgeta komuniti klostu long TSF na tailings paipain korido, na tu wantaim ol komuniti lida na ol lain i makim LLG. Dispela engeijmen i bin go tu long Seven Kona komuniti bilong Kumkit, Ankit, na Ok Ma, wantaim ol lida na ol lain i makim ol bilong ol sikspela ples long main eria na tupela narapela stekholda grup i bin kam insait long dispela raun bilong engeijmen.

Engeijmen i bin kamap long olgeta komuniti yusim ol slaidsho na ol postas, na tu ol stekholda i bin gat taim long givim tingting na askim long wanem ol samting ol i no klia long em long projek na long ol risalt bilong ol wok painimaut we i bin kamap bilong dispela ESIA. Ol Tetra Tech Coffey PNG tim i bin go pas long dispela ol engeijmen na ol engeijmen i bin kamap long Tok Pisin na Inglis, na wanpela komuniti lida i tanim tok long tokples, sapos i gat nid long mekim olsem. Ol OTML tu i bin stap long ol dispela engeijmen.

Dispela engeijmen i bin kamap long ol dispela hap:

- Ol komuniti long eria bilong TSF, long Ambaga, Birimkamba, Karandimok, Komokpin, Kungembit, Kungim, Putmambin, na ol manmeri bilong Buseki.
- Ol afekted papa graun na ol komuniti long rot bilong konstraksen korido namel long Tabubil na Alice Pit, long Alice Pit, Ningerum Tamaro, Bumbin, Wombon, Digam, Bolewogam na Kolebon.
- Ol afekted papagraun na ol komuniti long infrastraksa korido, em ol komuniti long Ok Ma settlement i bin insait, na dispela i gat ol lain i makim ol komuniti Okteditau, Bounkim, Nioksikwi na Derong.

Ol lida na ol lain i makim sikspela ples long main eria long Tabubil, ol komuniti bilong Seven Kona long Kumkit, Ankit, Ok Ma na ol komuniti i stap klostu, ol i makim tupela niupla stekholda grup na ol tu i stap insait long dispela raun bilong engeijmen.

Ol komuniti bilong Walawam, wantaim ol lain i makim Kiunga Rural, Kiunga Urban na Star Mountain LLG ward, i no bin stap insait long dispela raun bilong engeijmen.

5.4 Ol risalt bilong konsultesen

Ol tingting na wari we i bin kam long ol manmeri long olgeta ESIA stekholda engeijmen i no bin wankain olgeta taim long ol hap ol i go, tasol ol risalt i soim olsem i gat klostu wankain as tingting na wari we i kamap insait long olgeta komuniti na wanem hap ol komuniti i stap long eria bilong projek, ol ples klostu long projek eria na ol dispela long paipain korido, ol lokal institusen na ol gavman stekholda. Ol bikpela samting ol i toktok long en, em graun na laivlihud, sekuriti, ol i no save bai ol i stap yet long ples bilong ol o nogat (resettlement uncertainty), lukaut long envairamen, na kompensesen we i fe long olgeta, rot bilong kisim ol sevis, seifti na sekuriti na ol tingting long ol rot bilong mekim mani.

Wanpela bikpela tingting we i kam aut long dispela engeijmen proses em olsem projek i mas bringim ol gutpela samting i kam insait long ol komuniti olsem ol gutpela infrastraksa, wok bilong ol manmeri, ol training bilong helpim ol manmeri, haus, rot, gutpela sevis na rot bilong go painim helt, edukesen na ol polis. Ol dispela tingting i bin kam wantaim planti askim long ol samting i mas kamap long klia na i mas gat stretpela wok painim aut, stretpela kompesesen, olgeta i mas stap insait long wanem ol tingting i kamap, bikpela moa yet long ol lain husat i no inap kisim impek tru bilong projek.

Ol stekholda i bin toktok na wari long ol narapela man husat i ken kam (kam man) insait long ol komunit, lo na oda, sekuriti long boda, na ol hevi insait long ol ples i ken kamap long taim ol manmeri i muv i go kam planti long ol hap we wok bai kamap long em long paiplain korido na klostu long Indonesian boda, long dispela ITCS rot. .

Ol bikpela toktok na tingting we i bin kamap long ol dispela ESIA engeijmen em:

- Ol impek long envairamen: ol manmeri i bin soim wari long das we i ken kamap, ol smel nogut, senis long kwaliti bilong wara, impek long ol riva, graun bai bagarap, ol bus, diwai, abus bai i nogat moa, na tait wara. I bin gat strongpela tingting tu long rot bilong rihabilitesen bilong ol eria i ken kisim hevi, na ol i laik kisim gut tok long kampani olsem bai i gat gupela proses long helpim na stretim bek taim graun na wara i bagarap.
- Ol impek long sindaun bilong ol manmeri: ol komuniti i bin toktok long sampela impek we i ken kamap long sosel na helt bilong ol we i ken kamap long kwaliti bilong win ol i pulim na long kwaliti bilong wara we i ken bagarapim laip bilong ol manmeri.
- Long sait bilong bosim o menejmen bilong ol dispela impek em olsem i mas gat gupela proses bilong monitaring long olgete feis bilong projek long taim bilong konstraksen, operesen na long taim main i laik pas (klosa). Ol komuniti i bin strongim tingting olsem ol impek we i ken kamap i mas gat gupela meneijmen bilong ol, ripotim ol long stretpela rot, na stretim gut insait long taim bilong abrusim o daunim risk na komuniti i ken gat strongpela bilip long wok bilong projek.

Maski planti wari i bin kamap long ol gupela samting bilong projek na wanem kain kompesesen bilong ol papagraun, dispela i no stap insait long wok bilong dispela ESIA proses, olsem na ol i no bin kamap long ol stekholda engeijmen wok bilong dispela ESIA.

Engeijmen proses i soim olsem ol manmeri i amamas long developmen we bai kamap. Tasol, ol i laikim olsem projek i mas kamap long stretpela rot, olgeta i mas stap insait long ol toktok bilong projek, we i luksave long ol na dispela bai helpim long abrusim na stretim ol impek long envairamen na sindaun bilong ol manmeri long ol komuniti ol i stap.



5.5 Ol konsultesen i mas kamap yet

Bilong tokaut long pablik long dispela ESIA, olgeta proses i mas bihainim na inapim stret lo bilong OTEMA. OTML wantaim Tetra Tech Coffey bai mekim dispela wantaim CEPA na Mineral Resources Authority. Dispela proses bai gat dispela ol wok:

- Presentim ESIA long nesenel na provinsel gavman long Port Moresby na Kiunga.
- Presentim ESIA long olgeta komuniti we projek bai afektim insait long projek eria, long Ningerum na Tabubil, long wanpela EIS konsultesen we bai i kamap long Tok Pisin, Inglis na, sapos i gat nid, long tokples tu wantaim helpim bilong wanpla husat i ken tanim tok.

As tingting bilong dispela feis em bilong presentim ol risalt bilong dispela ESIA na bilong bekim ol wari we ol komuniti na ol narapela stekholda toktok long em long ol narapela engeijmen. Long dispela sait, dispela bai helpim long:

- Presentim ol toktok i stap insait long dispela ESIA.
- Stori long ol bikpela wari na hevi we i bin kamap long ol engeijmen we i bin kamap pastaim.
- Toksave long ol komuniti long olsem wanem ol i bin lukluk long ol dispela ol hevi na ol rot bilong stretim ol dispela.

CEPA bai makim taim bilong EIS konsultesen wantaim OTML. Dispela bai kamap namel long tripela na sikispela mun bihain long sabmisen bilong ESIA long CEPA.

Ol narapela ol engeijmen wantaim ol komuniti na ol narapela stekholda bai i kamap yet na diepls em:

- Givim apdet na toksave long ol steikholda long ol bikpela disisen bilong projek na ol bikpela wok em i bin pinisim o mak em i bin kisim .
- Engeijmen wantaim ol papagraun we projek bai i yusim o mekim impek long graun bilong ol, bilong eksplenim ol long kompensesen bai ol inap kisim.

Sapos projek i go het, OTML bai wok yet long toktok na stori wantaim ol manmeri long taim bilong konstraksen. Long dispela taim, ol bai givim save long ol wok bilong konstraksen, ol impek we inap long kamap, na ol rot bilong bosim na daunim ol dispela impek.

5.6 Rot bilong stretim ol wari na hevi

OTML i gat wanpela sistem i stap pinis bilong kisim, rekodim, lukluk long na stretim ol hevi na wari bilong ol stekholda. Dispela sistem i bihainim ol polisi bilong kampani na i helpim long stretim ol sosel hevi inap long mak em inap, wantaim wok long mekim olgeta samting i stap klia na stret.

Ol hevi na wari i kamap long dispela projek na long EIS proses bai bihainim wankain sistem bilong luksave na stretim ol hevi we OTML i yusim pinis long Ok Tedi Main.





TSF bai helpim long daunim tru pasin bilong putim tailings long wara na bai helpim long lukautim environmen long ol hap wara i stap daunstrim. Tasol maski projek i gat planti gutpela samting, sampela hevi long environmen na sindaun bilong ol manmeri bai i no inap long abrusim olgeta, moa yet long hap we TSF bai stap long en.



6. Ol gutpela samting na ol impek we bai kamap long envaironmen na sindaun bilong ol manmeri

Long bihain, wok bilong Ok Tedi Main bai kamap bikpela moa na dispela bai mekim planti moa pipia bilong main i kamap. Dispela bai putim moa hevi long sistem bilong wara. Long dispela as, em i bikpela samting long daunim hamas sediment i go insait long wara, wantaim ol narapela rot bilong bosim ol tailings, bilong daunim ol hevi long envaironmen. OTML i laik wokim wanpela bikpela na nuipela rot bilong daunim ol dispela hevi, em wokim TSF. Dispela bai helpim long daunim ol impek bilong Ok Tedi Main long ol hap tamblo long wara. Taim TSF i kamap, hamas tailings i save go stret long wara bai i go daun, maski main i wok long karim na muvim planti ol materyal. Dispela bai helpim long daunim na kontrolim ol hevi we wok bilong maining inap kamapim long envaironmen bilong ol hap i stap daunstrimwara. Dispela wok i bihainim ol gutpela pasin bilong IFC bilong pastaim abrusim ol hevi, na sapos i no inap, daunim na kontrolim ol. Em i bihainim tu wok OTML i mas mekim aninit long OTEMA, *"long isi isi daunim o kontrolim ol hevi long envaironmen taim teknoloji na ekonomi i mekim dispela i kamap inap long mekim."*

Maski projek i gat planti gutpela samting, sampela hevi long envaironmen na sindaun na ekonomi bilong ol manmeri bai i kamap long taim bilong konstraksen, operesen na taim bilong pasim projek. Sampela bilong ol dispela hevi i no inap long abrusim olgeta, tasol ol rot bilong daunim ol hevi bai helpim long mekim ol i no bikpela tumas.

Dispela EIS ol i bin wokim bilong skelim ol hevi na ol gutpela samting bilong projek long sait bilong graun na wara, ol plent/diwai na animel, na sindaun na ekonomi bilong ol manmeri, olsem ol i bin makim pinis long EIR. Ol samting ol i painimaut long dispela stadi i stap tamblo.

6.1 Gutpela samting bilong projek

Sapos ol i stopim pasin bilong putim tailings i go stret long wara, dispela bai kamapim planti gutpela samting long envaironmen na sindaun bilong ol manmeri. Dispela em wanpela bikpela rot bilong mekim wok bilong main i kamap gutpela moa long sait bilong envaironmen na ol manmeri, na bai helpim long larim gutpela nem bilong main long bihain olsem wanpela main we i save wok gut na lukautim envaironmen long longpela taim.

Dispela projek bai givim wanpela gutpela na inap long stap longtaim rot bilong bungim na lukautim ol tailings, na bai helpim wok bilong main long go het inap long 2050. Dispela bai mekim tu ol gutpela samting bilong ekonomi i save kam long wok bilong main i go het yet. Dispela i karim mani main i save givim long provins na kantri, moa yet long rot bilong royalty, dividen, na takis.

Ol bikpela gutpela samting em ol dispela:

- Long level bilong kantri – Dispela bai helpim PNG long bihainim ol tok promis bilong en long sait bilong sustainable developmen na gutpela pasin bilong wokim maining. Dispela bai helpim tu long pulim moa invesmen bilong ol maining projek i kam insait long kantri.
- Long level bilong provins – Dispela bai daunim ol hevi long envaironmen long ol wara daunbilo, em ol wara na riva sistem we ol komyuniti i save dipen long en bilong sindaun bilong ol.
- Long level bilong ol ples klostu – Dispela bai helpim long stretim ol hevi bilong envaironmen we ol manmeri i bin wari long en long planti yia pinis.

Ol gupela samting long envaironmen

Wokim dispela TSF bai helpim long daunim pasin bilong putim ol tailings i go stret long wara long mak bilong ol samting ol i save rausim long main nau na long bihain. Dispela em bilong daunim planti wara wara wesana na sediment i save go insait long wara nau. Long bihain, dispela inap long kamapim sampela gupela samting long envaironmen, olsem daunim isi isi pasin bilong graun, wesana na gravel i save bung long as bilong wara, na helpim ol ples bilong ol pis, animel na ol plent/diwai long kamap gupela moa. Em inap tu long helpim helt bilong envaironmen na ol ekosistem bilong dispela hap.

Ol gupela samting long sindaun bilong ol manmeri

Sampela gupela samting bilong dispela projek we inap long helpim ol manmeri long narapela rot em:

- Main bai inap long go het long givim mani long gavman na ol manmeri long rot bilong takis, fi, dividen na kompensesen, na ol narapela gupela samting i save kamap long dispela, inap long 2050.
- Wok bilong konstraksen bai helpim long kirapim bisnis na ekonomi bilong ol ples klostu na tu long wider region.
- Ol nuipela rot, bris na ples bilong brukim wara bai helpim ol manmeri long kisim gupela akses long ol sevis olsem skul, helt kea na maket. Taim TSF i pas pinis long bihain, sampela bilong ol dispela rot na bris inap long stap yet bilong ol komyuniti long yusim.

Ol dispela gupela samting bai kisim moa eksplenesen long ol narapela hap bilong dispela ripot.

6.2 Terrestrial envaironmen

Graun na ol kain ples bilong graun

Taim ol i katim, digim na putim graun bilong wokim projek, dispela inap long senisim ol natural kain ples bilong graun. Dispela senis inap long mekim wara i ron long narapela rot, mekim graun i save bruk isi isi long wara, na senisim pasin bilong yusim graun long bihain. Taim ol i wokim TSF, kain ples bilong graun bai senis olgeta. Taim ol i pinisim wok na pasim projek, TSF bai kamap olsem wanpela bikpela hap graun inap long 1,500 hekta na klostu long 30 mita antap.

Wok bilong klinim bus na mekim bikpela graun wok bai bagarapim graun na ol kain ples bilong en. Dispela bai kamap long wokim TSF development area, olsem ples bilong bungim tailings, hydro-saiklon haus, laydown area na ol narapela sapotim infrastraksa. Dispela bai kamap tu long infrastraksa korido, olsem ol rot, ol bris, ol hap bilong brukim wara, paip lain bilong tailings na ol narapela fasiliti bilong sapotim projek. Sapos ol i no bosim gut ol dispela wok, graun bai stap ples klia na wara inap long rausim isi isi. Graun inap long kamap strong tumas na pas wantaim, na dispela bai mekim i hat long ol diwai, gras na ol narapela plan long gro gut. Ol dispela wok inap tu long bagarapim strong bilong graun na mekim sampela hap i bruk o pundaun. Ol dispela hevi bai bikpela moa long taim bilong konstraksen taim planti graun wok i kamap.

Ol narapela senis long graun inap kamap taim ol masin i wok long antap bilong graun na mekim em i pas na strong tumas. Senis inap tu long kamap sapos ol i no lukautim gut ol hip bilong graun ol i bungim bilong yusim bihain. Taim ol i wokim ol infrastraksa bilong projek, planti hap bilong graun bai kamap pas na strong moa. Dispela bai mekim i hat long ol natural plan na bus long kamap bek gut taim rehabilitesen i kamap. Ol kemikol hevi inap kamap tu sapos wara o ol narapela samting i bagarapim graun. Dispela inap long daunim kwaliti bilong graun na mekim em i hat long sapotim ol plan long gro. Ol dispela hevi bai inap long bikpela moa long taim bilong operesen na, sapos ol i no bosim gut, inap long stap yet taim projek i pinis.

Ol rot bilong bosim ol dispela hevi bai lukluk long daunim bikpela eria bilong bagarap, bosim erosion, daunim pas bilong graun na stopim ol kemikol long bagarapim graun. Ol bai lukautim tu graun bilong yusim long rehabilitesen. Planti bilong ol hevi bai stap long ol sensitif baret na ol hap antap bilong graun insait long TSF development area we bai senis long wok bilong projek. Long olgeta narapela hap, ol hevi long graun bai stap tasol long ol ples we wok i kamap, na wok bilong rehabilitesen bai helpim long mekim ol dispela hap i kamap strong na stap gut longpela taim bihain.

Wara insait long graun (groundwater)

Ol hevi we inap long kamap long wara insait long graun bai kamap bikpela long taim TSF i stap long operesen. Dispela i ken kamap taim ron bilong wara insait long graun i senis, level bilong wara i senis, o taim ol samting i ken bagarapim kwaliti bilong wara. Long taim bilong konstraksen, ol hevi long wara insait long graun inap long kamap long wok bilong digim graun na wokim ol embankment bilong TSF, wok long infrastraksa korido na starter dam, wok bilong digim trenis na putim paip lain, katim bus na rausim ol plan, na tu long ol spil o lik bilong ol kemikol o ol narapela samting i ken bagarapim envaironmen.

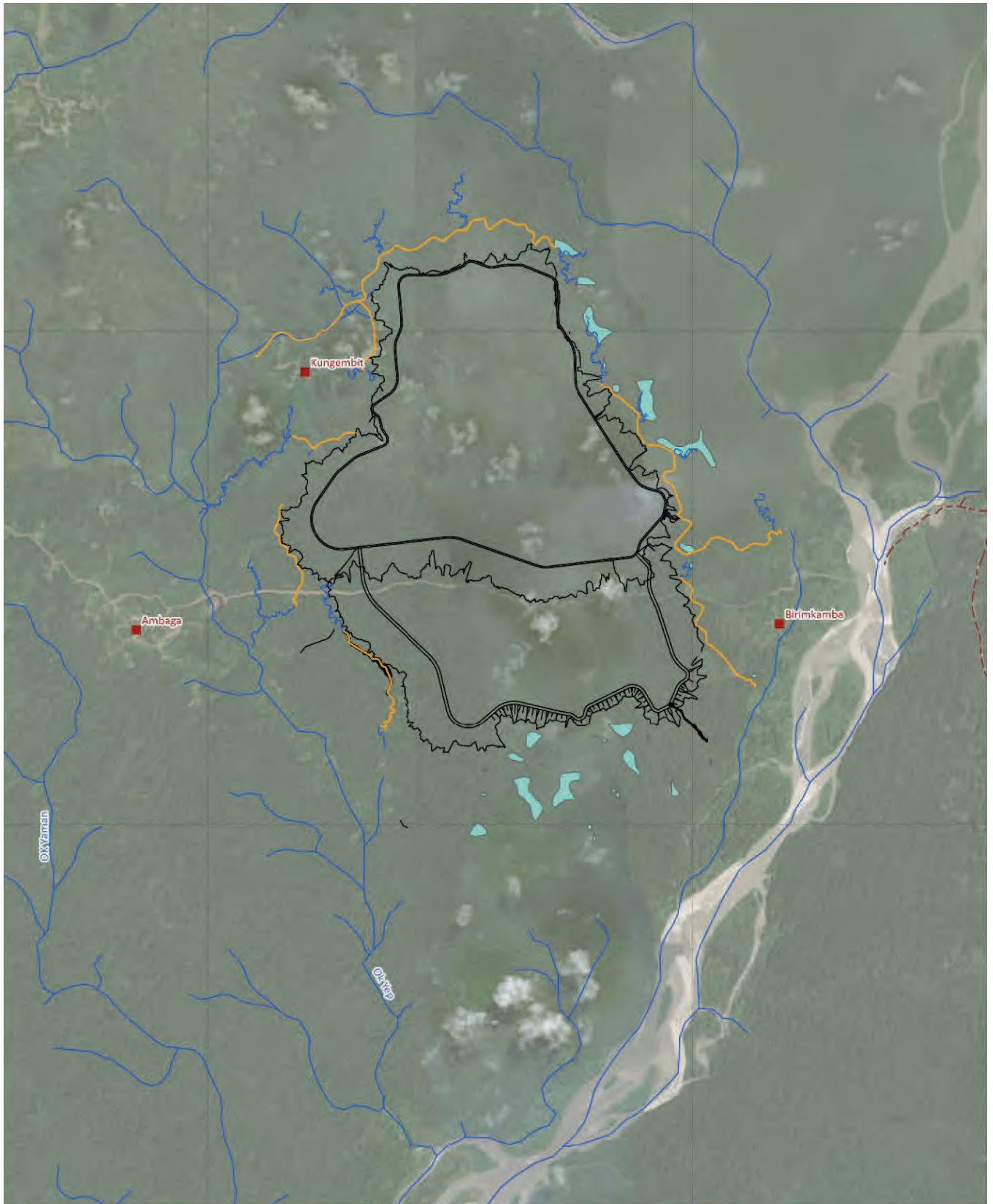
Ol dispela wok inap long senisim liklik pasin bilong wara long go insait long graun, ron bilong en, level bilong en, na pasin bilong en long kamap gen long ol wara na hanwara. Long taim TSF i stap long operesen, sampela wara inap long lus isi isi long TSF na go insait long graun. Dispela bai mekim level bilong wara insait long graun i go antap liklik long hap raunim TSF na bai moa wara i ron i go long ol liklik wara na drainage lain klostu long en. Piksa ES.9 i soim ol hap we dispela wara inap long kamap long antap bilong graun. Ol stadi bilong groundwater i soim olsem ol dispela senis bai stap bikpela long hap raunim TSF tasol, na ol i no bilip olsem bai i gat hevi long wara bilong ol vilis.

Wara i save lus isi isi long TSF, wara i stap insait long tailings, o wara ol i kisim bek long TSF inap long miks wantaim wara insait long graun. Dispela wara inap long gat sol na sampela metal long en. Taim ol i stat long putim tailings insait long TSF, dispela wara bai stat long lus isi isi i go long graun, na dispela inap long go het yet bihain long pasim TSF. Ol stadi i soim olsem sampela hap wara insait long graun klostu long TSF inap long gat moa sol, sulfate na sampela metal long en (Piksa ES.10). Tasol taim wara i go longwe moa long TSF, mak bilong ol dispela samting bai i go daun bikos ol i save miks wantaim narapela wara. Ol stadi i soim tu olsem dispela bai i no kamapim bikpela hevi long wara bilong ol vilis, na mak bilong kopa o arsenic long wara bilong ol vilis bai i no go antap long mak bilong dring wara gaidlain.

Ol rot bilong bosim ol dispela hevi bai i gat disain bilong TSF bilong daunim wara i save lus, wok bilong lukluk na testim wara insait long graun, stiaim gut ol klinpela wara i go longwe long ol hap we wok i kamap, pasin bilong stopim spil na lik, ol plen bilong bekim kwik taim long ol hevi, na ol narapela rot bilong bosim kontaminesen. OTML bai mekim wok bilong monitorim wara insait long graun long taim bilong konstraksen na operesen bilong projek.

Bihain long ol dispela rot bilong bosim hevi i stap, sampela liklik impek inap yet long stap. Dispela i ken karim liklik senis long level bilong wara insait long graun, ol hap we wara i kamap long antap bilong graun, moa wara i ron i go long ol liklik baret, na sampela senis long kwaliti bilong wara klostu long TSF tasol i no i nap afektim ol vilis. Sampela bilong ol dispela impek bilong wara i save lus long TSF inap long stap yet bihain long pasim TSF, tasol ol bai wok long lukluk na bosim ol bihain.





LEGEND

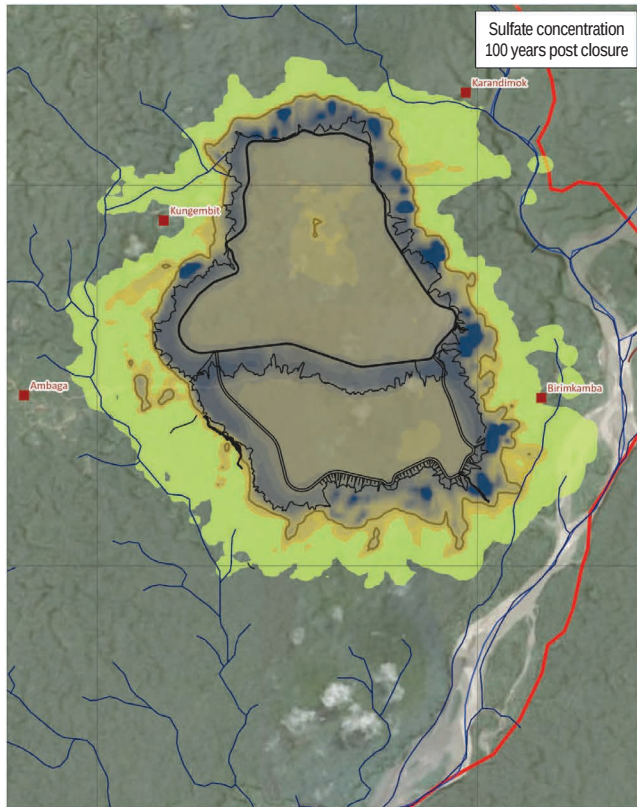
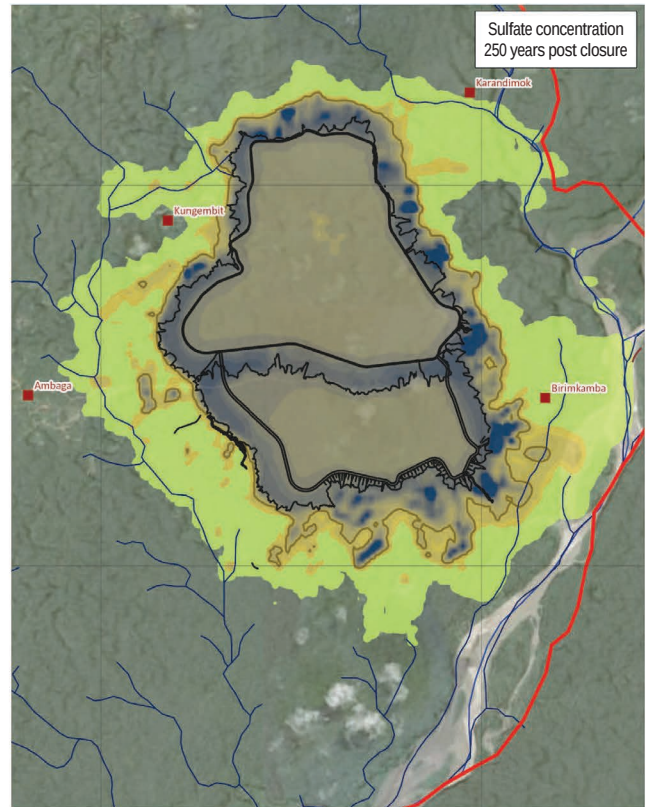
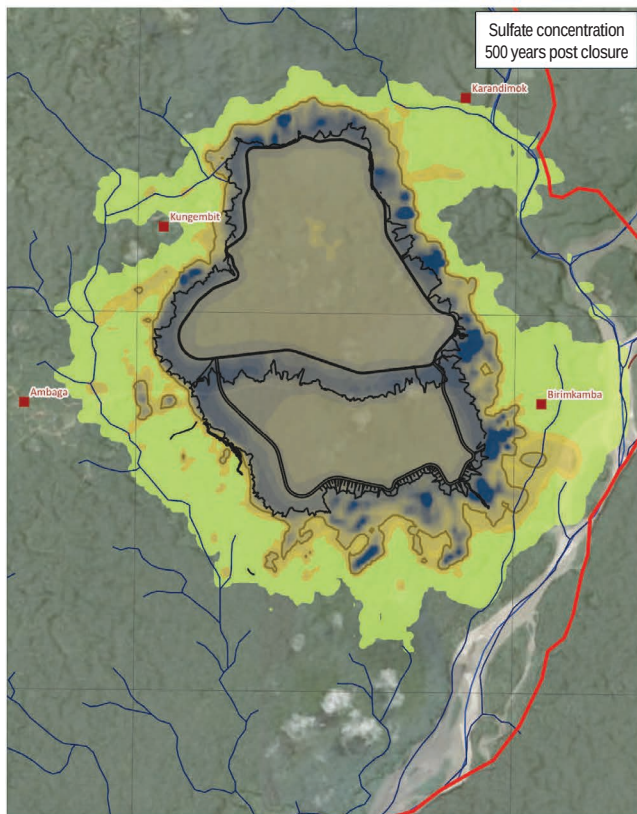
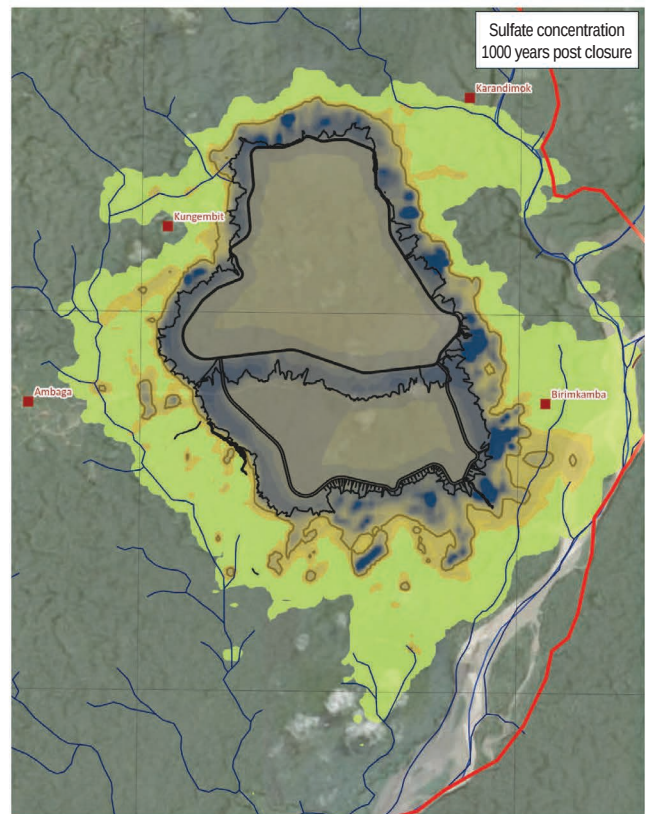
- | | |
|---|---|
| ■ Villages of Interest | Proposed TSF footprint |
| --- Road | --- Diversion |
| --- Watercourse | TSF Seepage |



0 0.5 1
km

PROJECTION: PNG94 PNGMG94 Zone 54
SOURCE: KCB, 2026

Piksa ES.9 Ol hap we wara i save lus isi isi na kamap long antap bilong graun



LEGEND

■ Villages of Interest	— Contour (250 mg/L)	 250 - 500	 1,500 - 1,750
— Stream	Sulfate Concentration	 500 - 750	 1,750 - 2,000
— Watercourse	 0.5 - 50	 750 - 1,000	 2,000 - 2,250
— Proposed TSF footprint	 50 - 100	 1,000 - 1,250	 2,250 - 2,500
 Model Domain	 100 - 250	 1,250 - 1,500	 > 2,500



0 1 2 km
PROJECTION: PNG94 PNGMG94 Zone 54
SOURCE: KCB, 2026

Piksa ES.10 Mak bilong sulfate long wara insait long graun bihain long taim TSF i pas

Terrestrial ikoloji

Projek bai nidim long kliaim na brukim klostu long 1,980 hekta bilong graun bilong wokim TSF, infrastraksa korido, ol akses rot na ol narapela fasiliti. Dispela inap long mekim sampela hevi long ol plan na animel bilong dispela hap. Sampela bilong ol dispela hevi em lus bilong ol ples bilong ol plan na animel long stap, brukim ol habitat i go long ol liklik hap, bagarapim ol wara na ol plan i stap long arere bilong wara, erosion na sediment i ron i go long wara, kontaminesen, bagarap long ol animel, na ol hevi long ol kev na ol animel i stap long ol kev. I gat tu sampela narapela hevi inap long kamap taim moa manmeri i kisim akses long dispela hap, moa haning, kamap bilong ol spesis i no bilong dispela hap, na ol narapela wok bilong manmeri.

Ol stadi i painim olsem projek eria i gat planti kain gutpela samting bilong envaironmen. Dispela i karim ol bus bilong ples daun, ol wara na ol plent/diwai long arere bilong wara, ol kev, ol spisis i stap long hevi, ol spisis ating saiens i no bin save long ol bipo, na ol spisis i gat bikpela kastom na konsevesen valiu. Maski sampela habitat bai lus insait long projek footprint, planti bilong ol dispela habitat i stap tu long ol narapela hap bilong dispela region. Ol i bin wokim ol plen bilong daunim bagarap, lukautim ol habitat i sensitif, bosim erosion na sediment, kontrolim ol spisis i no bilong dispela hap, stopim ol wokman long hanim o kilim abus nating, na sapotim rehabilitesen na planim bek ol diwai na gras.

Long daunim pasin bilong putim tailings long wara wantaim paisin bilong dregin ol i wok long wokim long Bige, ol i bilip bai dispela bai daunim tru ol hevi bilong sediment long Ok Tedi na Fly Riva floodplain. Ol model stadi i soim olsem longpela taim bihain, ol plent na habitat long floodplain inap long kamap gut gen na dispela inap long winim ol habitat bai lus taim projek i wokim ol fasiliti bilong en. Ol i ting olsem inap long 3,700 hekta i go inap long 9,000 hekta bilong habitat inap long kamap gut gen, taim projek bai bagarapim klostu 1,722 habitat hekta. Planti bilong dispela em ol bus bilong ol ples antap liklik long maunten sait, na klostu 1,563 hekta bilong dispela bai ol i rausim.

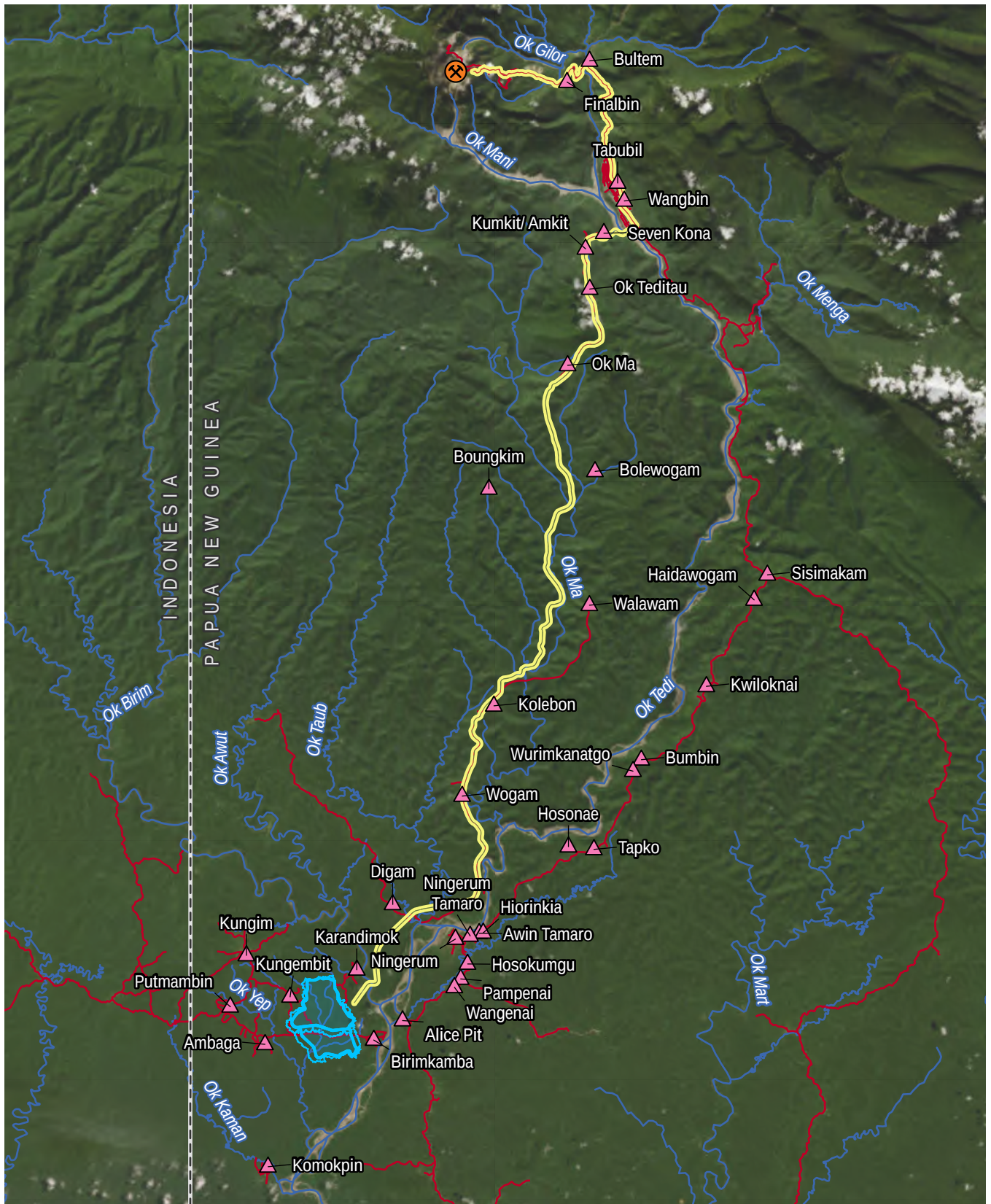
Sampela hevi bai stap yet long ol wara na ol habitat long arere bilong wara, tasol ol i ting dispela bai stap long namel mak tasol. Ol hevi long ol kev bai stap liklik o namel mak bikos ol i wok long abrusim ol kev ol i save long ol pinis na mekim ol pasin bilong lukautim ol. Sampela animel bai stap yet long hevi bikos moa manmeri bai kisim akses long dispela hap na moa haning o pasin bilong painim na kilim abus inap long kamap. Tasol planti spisis bilong ol plent i stap long hevi, sampela spesis ating saiens i no bin save long ol bipo, na ol habitat bilong bus bilong ples daun bai kisim sampela gutpela senis bihain long floodplain i kamap gut gen, rehabilitesen i kamap, na wok bilong planim bek ol diwai na gras.

Long olgeta samting ol i skelim, ol i ting projek bai kamapim moa gutpela senis long ol plent na animel long bihain. Ol gutpela samting bai kamap long floodplain i kamap gut gen na ol habitat i wok long kisim bek strong bilong ol, na dispela inap long winim ol habitat bai lus insait long projek footprint. Ol bai go het long mekim monitoring na bihainim Biodiversity Action Plan bilong lukim sapos ol dispela gutpela senis i kamap tru na bilong stretim wok sapos nid i kamap long olgeta taim bilong projek.

Kwaliti bilong win

Doti na smuk bai kamap long taim bilong wokim infrastraksa korido na ol akses rot. Tasol ol dispela impek bai stap long liklik hap tasol na bai i no stap longpela taim. Long taim bilong konstraksen, doti long graun na smuk i kam long ol masin bai kamap long ol hap we wok i stap long en. Mak bilong dispela doti na smuk bai i go antap moa long taim ol i mekim ol bikpela graun wok, digim baret, katim bus na pairapim ston (sapos ol nidim), bikos long dispela taim planti doti bai kirap long graun. Long wankain taim tu, planti hevi masin bai wok na planti ol manmeri na ol kago bai ol i karim i go kam. Planti bilong ol impek long kwaliti bilong win long taim bilong konstraksen bai kam long doti i kirap long graun na i ron long win. Piksa ES.11 i soim mak bilong dispela doti em wok bilong wokim TSF inap long kamapim.

Ol rot bilong bosim dispela hevi bai karim ol wok olsem kontrolim das taim longpela drai taim i kamap, daunim spet bilong ol kar na masin, wokim rehabilitesen isi isi long ol hap ol i pinisim wok long en, daunim mak bilong graun ol i brukim na larim i stap op, bosim gut ol stak bilong graun na ston, lukautim gut ol kar na masin, na kontrolim ol wok we i save kirapim planti das, moa yet long ol hap i stap klostu long ol vilis long taim bilong drai wesens. Sapos ol i bihainim ol dispela rot bilong bosim hevi, ol impek bilong kwaliti bilong win bai stap sotpela taim tasol na long ol liklik hap tasol. Ol i ting olsem mak bilong das long win bai stap daun long ol mak projek i bin putim bilong lukautim kwaliti bilong win. Long taim projek i wok long operesen, ol impek bilong das bai stap daun liklik tasol. Tasol smok na ges i kam long ol diesel generator bilong wokim pawa bai stap olsem bikpela impek long kwaliti bilong win longpela taim. Maski olsem, ol i ting mak bilong ol dispela ges bai stap daun yet long ol mak bilong ol intanesenel gaidlain na referens valiu.



LEGEND

-  Ok Tedi Mine
-  Sensitive receptor
-  Road/track
-  Watercourse
-  International border
-  Proposed TSF footprint
-  Proposed infrastructure corridor



0 2.5 5 km

PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.11 Ol ples o eria we kwaliti bilong win, pairap na seksek inap long afektim o impektim



GHG (Ol ges we i save kamapim senis long klaimet)

Long taim bilong konstraksen, planti bilong ol ges we i save kamapim senis long klaimet (Scope 1 emissions) bai kam long katim na rausim ol bus na diwai, yusim diesel na ol narapela fuel long generator, wok bilong ol bikpela masin na trak, wok bilong konstraksen, yusim eksplosiv long brukim ston, na wok bilong wokim simen long sait bilong projek. Long taim bilong operesen, we bai go inap long 20 yia, planti bilong ol dispela ges bai kam long yusim diesel long ol generator long sait bilong projek, na yusim fuel long ol trak, masin na ol hevi ekipmen bilong wok na mentenens. Scope 2 emissions bai liklik tasol, na dispela bai kam bikpela long paoa saplai bilong Main bilong ronim tailings paipplain.

Ol i ting olsem olgeta Scope 1 emissions long taim bilong konstraksen bai inap long 1,031,020 t CO₂e. Long dispela, 30,670 t CO₂e bai kam long yusim diesel na ol narapela fuel long masin na ekipmen, na 1,000,350 t CO₂e bai kam long lus bilong karbon taim ol i klirim bus na diwai. Long taim bilong operesen, ol i ting olsem klostu 44,790 t CO₂e bai kamap long olgeta yia long yusim diesel na ol narapela fuel long masin na ekipmen. Ol bikpela as bilong ol dispela ges em yusim diesel long ol masin na generator, na klirim graun na bus long sait bilong projek. Maski mak bilong ol dispela ges i bikpela taim yu lukim namba bilong en, dispela em i stret wantaim bikpela sais na longpela laip bilong wanpela maining infrastraksa projek olsem dispela. Ol i bin skelim na makim ol dispela namba long ol rot na pasin bilong wok ol narapela kantri i save yusim na luksave long en. Long olgeta yia bilong operesen, ol i ting olsem projek bai kamapim klostu 44,793 t CO₂e long wanpela yia. Dispela em i mekim klostu 0.42 pesen tasol bilong olgeta ges Papua Niugini i bin kamapim long 2024 (EDGAR 2025). Dispela i soim olsem, long taim bilong operesen, projek bai putim liklik hap tasol long olgeta ges bilong PNG we i save kamapim senis long klaimet.

Nois na vibration (guria long graun ol masin bilong projek i wokim)

Long taim bilong konstraksen, planti nois bai kamap long ol hevi masin bilong muvim graun na wokim TSF embankment, olsem ekskeveta, doza na kompakta. Bai i gat tu nois long wok bilong putim paipplain, yusim ol trak bilong karim kago, kisim na bringim ol materyal, na long ol diesel generator na ol narapela masin bilong pawa. Ol trak na ol narapela kar bilong karim graun, ol materyal, ol masin na ol wokman bai tu mekim nois i go antap. Ol dispela nois inap long kamapim bikpela hevi long ol hap we wok i stap klostu long ol vilis na setelmen. Long ol dispela hap, nois inap long bagarapim sindaun isi bilong ol manmeri, stopim ol wok bilong olgeta de, na mekim ol manmeri pilim hat, no slip gut na kisim wari. Nois inap tu long bagarapim pasin bilong ol abus long stap na raun long ol hap klostu long wok.

Long olgeta taim, wok bilong konstraksen bai kamap namel long 7 klok long moning na 10 klok long nait. Bikos ol wok bilong konstraksen em ol wok bilong sotpela taim tasol, na em i hat moa long daunim nois long dispela stes bilong projek, ol bai no yusim wampela stretpela mak bilong skelim nois bilong de. Tasol ol bai yusim ol gutpela pasin bilong bosim nois inap long mak em inap. Ol model stadi bilong nois i soim olsem, sapos ol dispela pasin bilong bosim nois i stap, ol wok bilong konstraksen long TSF development area na infrastraksa korido bai inap long bihainim ol mak bilong projek long sait bilong nois. Nois bilong ol trak bilong konstraksen tu bai i no kamapim bikpela hevi taim ol i skelim wantaim nois na trafik i stap pinis long dispela hap.

Long stat bilong ol wok, inap long gat dril na kontrol blast long ol hap we strongpela ston i stap. Ol dispela wok inap long kamapim guria long graun na strongpela pairap long win we inap long mekim hevi long ol manmeri na ol narapela samting i stap klostu. Ol blast bai bihainim ol pasin OTML i save yusim nau wantaim ol gutpela pasin ol i save bihainim long ol narapela kantri, na ol bai putim ol pasin bilong daunim ol hevi long ol manmeri na ol narapela ples i ken kisim impek.

Long taim bilong operesen, ol bikpela as bilong nois bai kam long hydro-saiklon haus, ol decant pump, ol masin bilong putim na kompaktim tailings, ol generator bilong pawa na ol wok bilong mentenens. Ol stadi bilong nois i soim olsem nois bilong operesen bai stap insait long ol mak bilong projek long ol hap we ol manmeri i stap long taim bilong dei. Long nait, nois inap long go antap liklik long ol mak bilong projek long vilis bilong Kungembit taim ol wok bilong putim tailings na kirapim moa embankment i kamap insait long klostu 1,500 mita long vilis. Tasol ol dispela impek bai kamap long liklik hap tasol na bilong sotpela taim, na ol bai bosim em wantaim ol pasin bilong kontrolim nois long taim bilong operesen.

6.3 Akwatik envaironmen

Hap bilong ron bilong wara

TSF bai helpim long stretim planti bilong ol hevi we maining i bin kamapim long Ok Tedi na Fly Riva sistem longpela taim. Taim ol tailings i no go daun moa long wara olsem bipo, dispela bai helpim wara long kamap gutpela moa long bihain. Ol bikpela senis we TSF bai kamapim long wara em:

- Senis long levul bilong wara long Ok Tedi: Longpela taim bilong putim tailings na waste rock long wara i bin senisim pasin bilong wara long ron. TSF bai helpim long daunim wara levul long Lower Ok Tedi isi isi long bihain. Dispela senis bai i go liklik moa taim yu go daun long wara na bai i no gat bikpela senis long ol hap wara bihain long Mabaduam na Middle Fly.
- Sediment i ron na bung long wara: Tailings na ol narapela sediment i save senisim as bilong wara, ol arere bilong wara na ol ples bilong ol pis. TSF bai daunim tru ol wesana silt i save kam long main na ron i go daun long wara. Dispela bai mekim na sediment bai ino inap kamapim wara tumas olsem long bipo.
- Sediment i bung long as bilong wara na ol ples daun: Taim sediment i go daun, as bilong wara bai i no kam antap hariap moa, na tait wara bai i no save kamap planti hap olsem bipo. Tasol planti sediment i stap pinis long wara na floodplain, na dispela bai wok yet long senisim wara inap long planti yia i kam.
- Ol ples daun na ol levee bilong wara: Longpela taim bilong sediment i bung long Lower Ok Tedi na Middle Fly i bin mekim tait wara i kamap planti moa. TSF bai helpim long daunim dispela proses isi isi long bihain, maski sampela levee bai wok long kamap yet.
- Ol kemikol long sediment bilong wara: Longpela taim bilong putim tailings na waste rock long wara i bin mekim mak bilong kopa na sulfur long sediment i go antap. Sampela gutpela senis i bin kamap pinis long mill fid, tasol sediment bilong main i stap yet olsem as bilong ol dispela kemikol. TSF bai helpim long daunim tru mak bilong kopa na sulfur we i go insait long wara bihaintaim, na bai daunim risk bilong asid wara long kamap.

Taim ol i wokim rot, paipain bilong tailings, ol bris na ol hap bilong brukim wara, dispela bai bagarapim sampela graun, senisim rot wara i save ron long en, na mekim moa graun i bruk na ron i go insait long wara. Dispela bai kamap moa long ol hap graun i stap stip na klostu long ol wara we i no bin kisim planti bagarap yet, olsem Ok Birim na Ok Taub. Long taim wok i go het, sampela wara daunbilo long ol hap we ol i wok long en bai kamap doti moa na gat moa graun na sediment i ron insait long en na bung long as bilong wara. Taim projek i go long operesen, planti bilong ol dispela impek bai i go daun. Tasol wok bilong yusim na lukautim ol rot, ol hap bilong brukim wara na ol narapela infrastraksa bai inap long mekim sampela graun i bruk yet na ron i go long wara. Dispela inap long kamapim sampela hevi long kwaliti bilong wara long ol liklik wara na ol bikpela wara klostu long dispela hap.

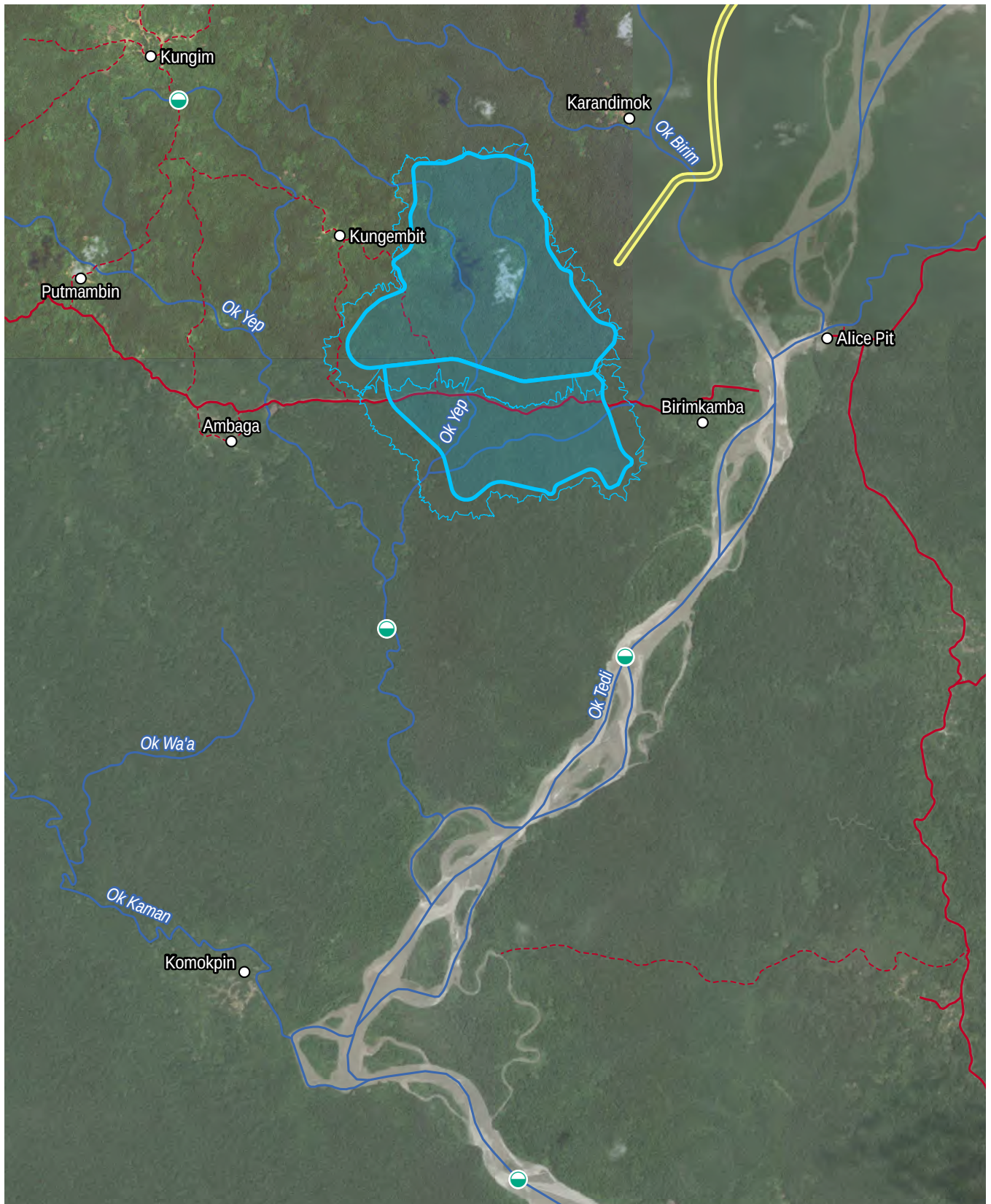
Insait long TSF developmen eria, wok bilong brukim na senisim graun, katim bus, senisim rot bilong wara, na wokim TSF wantaim ol narapela infrastraksa bai kamapim bikpela hevi long ol wara bilong dispela hap. Dispela bai senisim pasin bilong wara long ron, karim graun na sediment, na bai kwaliti bilong wara i go daun. Long hap is bilong Ok Yep kechmen, ol natural baret wara bai senis olgeta. Dispela bai mekim sampela hap graun i bruk isi moa, sediment i bung planti moa long wara, wara i kamap doti moa, na i gat moa liklik hap graun i ron wantaim wara. Long taim TSF i stap long operesen, ol dispela hevi bai stap yet bikos TSF, ol wara daivesen na ol narapela straksa bai stap oltaim na bai senisim pasin bilong wara long ron long dispela hap. Ol i ting tu olsem bai i gat sampela hevi long sediment na kwaliti bilong wara long ol wara i kam long projek na long wara ol i rausim long TSF. Tasol ol dispela hevi bai stap bikpela tasol klostu long ol hap wara i kam aut long en, na bai i go daun isi isi taim wara i ron i go longwe moa.

Long taim bilong konstraksen, ol liklik hevi bai i stap yet long Middle Ok Tedi. Dispela ol hevi bai i no bikpela tumas na bai kamap tasol long sampela hap. Wara inap long karim moa sediment na graun, na wara inap long kamap doti liklik moa bikos long wara i ron i kam long ol hap bilong wok na ol ples we ol i kisim graun na ston bilong konstraksen. Tasol ol dispela hevi bai stap sotpela taim tasol, na wara bilong bikpela wara bai hariap miksim na rausim ol dispela samting. Long taim bilong operesen, ol i no ting bai i gat ol bikpela hevi i stap yet long Middle Ok Tedi. Dispela em bikos wara i kam aut long TSF bai i gat liklik tru senis long ron bilong wara na kwaliti bilong wara taim ol i skelim wantaim bikpela volium wara bilong Ok Tedi.

Ol model stadi i skelim wara bai kamaut long TSF long taim bilong operesen i soim olsem dispela wara bai gat moa sulfate na kopa insait long en taim ol i skelim wantaim sampela hap wara long Ok Tedi i stap antap long TSF. Taim ol i pinisim wok long wanwan hap bilong TSF, mak bilong ol dispela samting bai i go antap liklik long wara i kamaut long TSF. Tasol, ol dispela senis bai i no gat bikpela impek long kwaliti bilong wara long Ok Tedi. Dispela bai kamap tasol long liklik hap wara daunbilo stret long ples wara i kamaut long TSF, na bai i stap olsem maski wara i liklik o wara i bikpela.

Ol stadi na kalkulesen ol i bin mekim i soim olsem TSF inap long mekim liklik senis long mak bilong sulfate insait long Ok Tedi wara. Long ol taim wara i ron olsem em i save ron olgeta taim, mak bilong sulfate long ol hap wara i stap daunbilo inap long go antap liklik, namel long 6 na 9 mg/L. Long ol taim wara i stap daun tumas o long taim bilong El Niño, dispela mak inap long go antap moa. Tasol, mak bilong kopa i stap insait long wara bai i no gat bikpela senis. Ol i ting dispela bai go antap liklik tasol ($\leq 0.2 \mu\text{g/L}$), bikos sampela kopa inap long pas wantaim ol liklik hap sediment i save ron wantaim wara. Piksa 10-5 i soim ol hap we ol bai skelim na monitrim kwaliti bilong wara bilong ol dissares i kam long TSF. Dispela bai helpim long lukim sapos kwaliti bilong wara i stap insait long mak ol i bin tok bai kamap. Sapos ol mak i go antap moa long wanem ol i bin ting bai kamap, ol trigger mak bai soim sapos i gat nid long mekim moa investigesen o kisim sampela aksan bilong stretim dispela hevi.

Piksa F106 na F107 i soim olgeta eria we projek inap long mekim ol impek long ol wara na tu ol gutpela senis bai kamap long envaironmen long taim bilong konstraksen na operesen bilong projek. Ol dispela piksa i soim tu hamas bikpela o liklik ol dispela impek na gutpela senis inap long kamap long ol narapela hap.



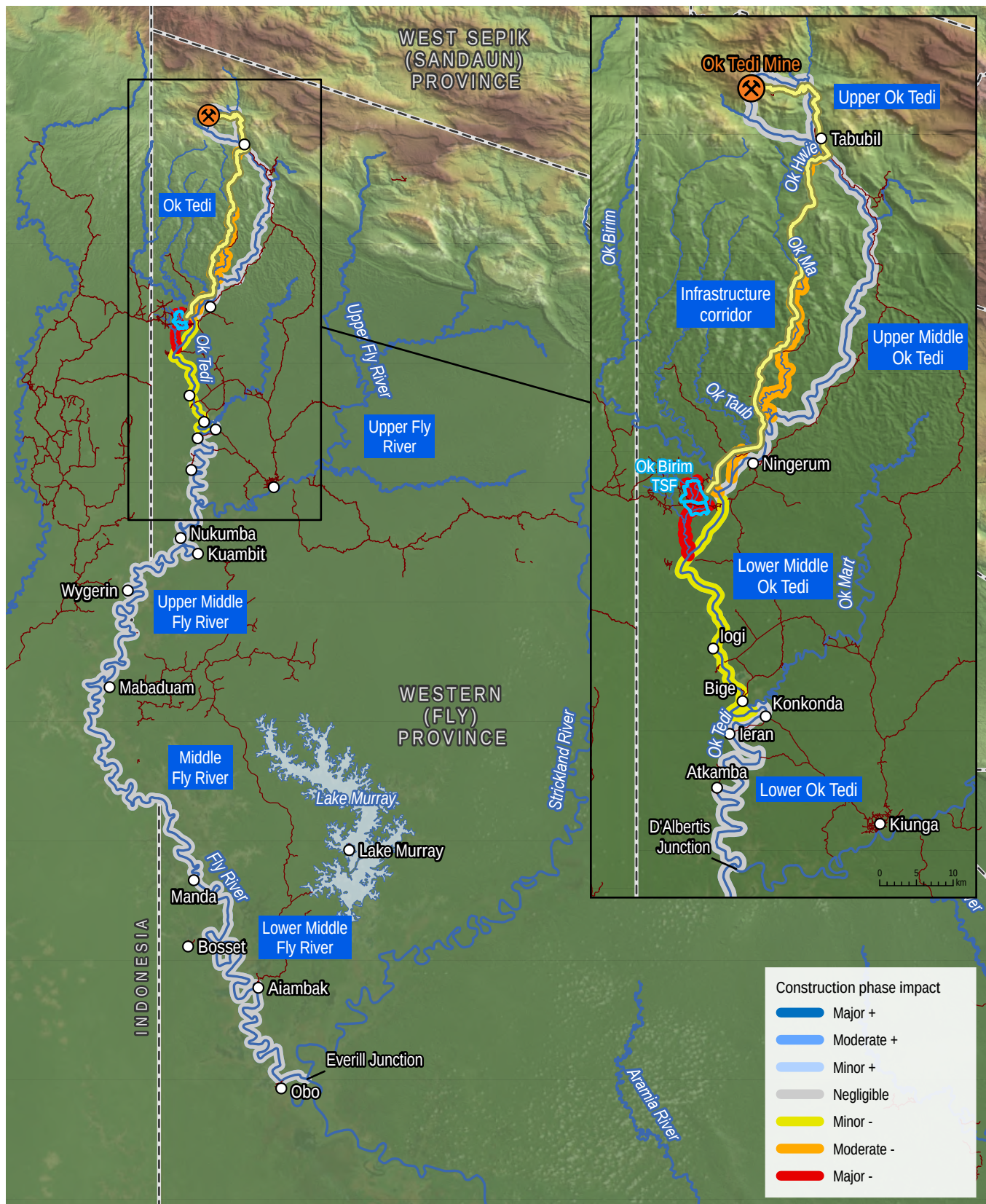
LEGEND

- Proposed surface water monitoring location
- Community
- Road
- - - Track
- Watercourse
- Proposed TSF footprint
- Proposed infrastructure corridor



0 1 2 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.12 OI hap bilong skelim na monitarim kwaliti bilong wara bilong projek



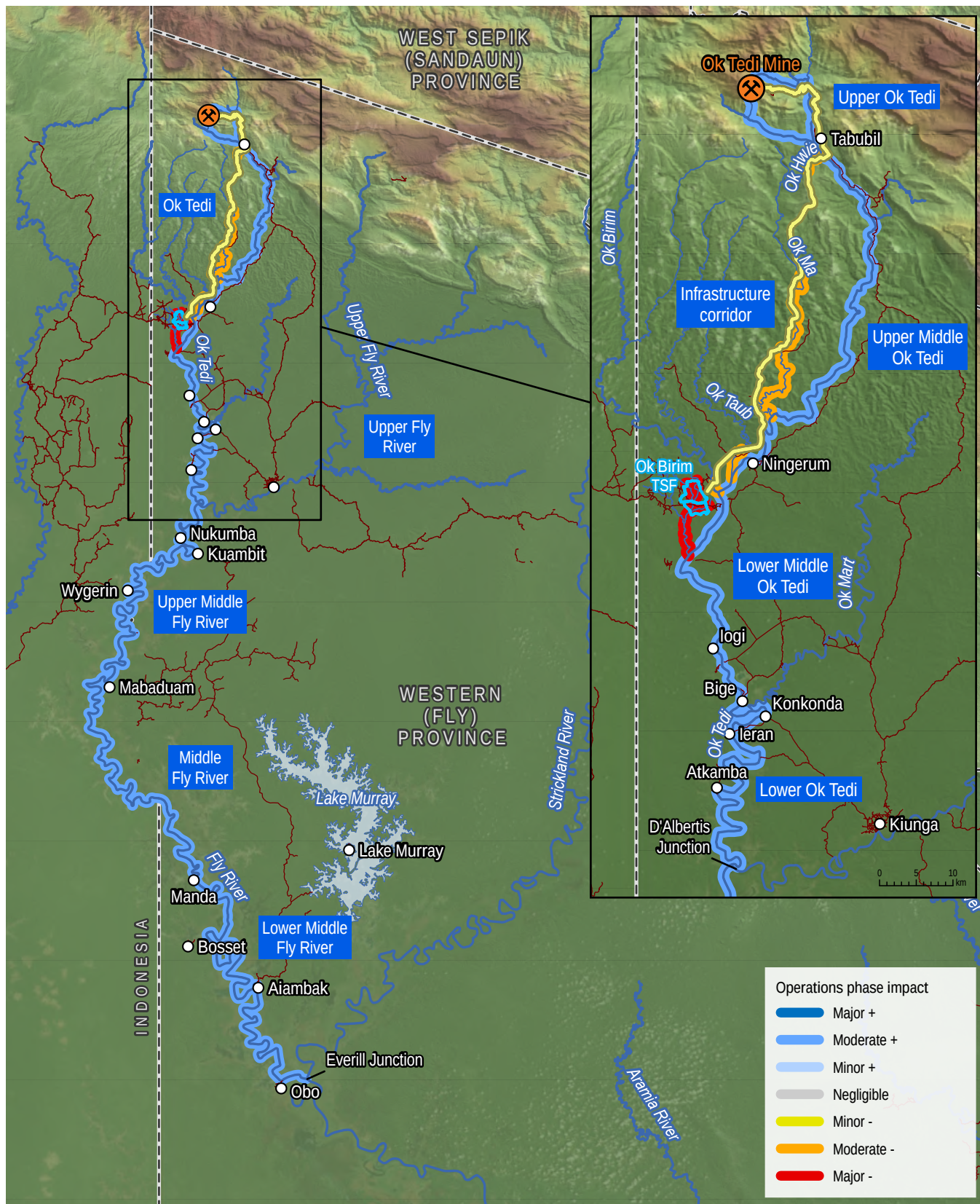
LEGEND

- Ok Tedi Mine
- Town
- Road
- Province boundary
- Major watercourse
- Waterbody
- Proposed TSF footprint
- Proposed infrastructure corridor



0 20 40 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.13 Ol imek projek bai mekim long ol wara long taim bilong konstraksen



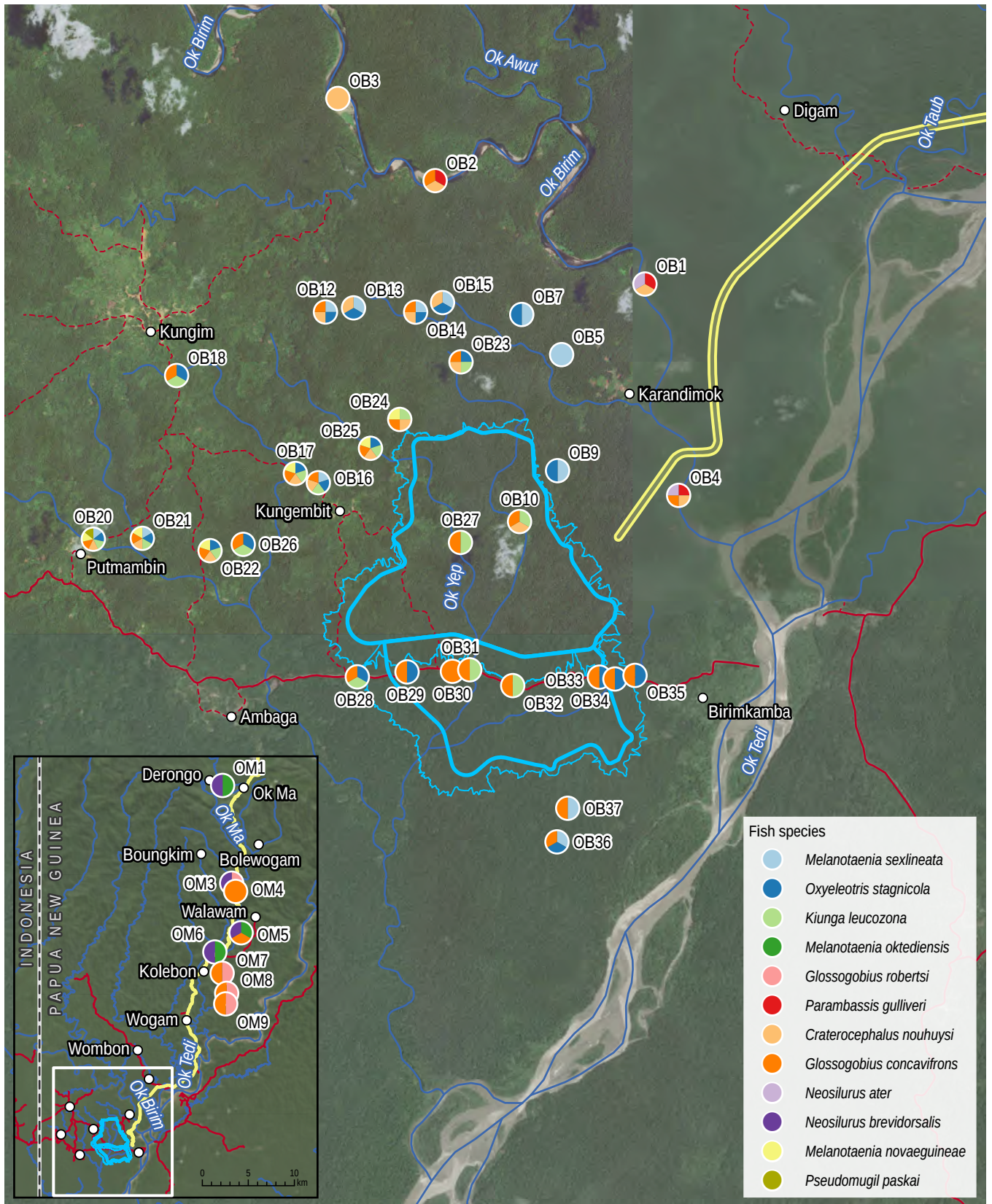
LEGEND

- Ok Tedi Mine
- Town
- Road
- Province boundary
- Major watercourse
- Waterbody
- Proposed TSF footprint
- Proposed infrastructure corridor



0 20 40 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.14 Ol impek na ol gutpela senis long ol wara we projek bai kamapim long taim bilong operesen



LEGEND

- Community
- Road
- - - Track
- Watercourse
- Proposed TSF footprint
- Proposed infrastructure corridor



0 1 2 km
PROJECTION: PNG94 PNGMG94 Zone 54

Piksa ES.15 Ol kain pis na hap ol i bin painim ol long akwatik ikoloji sevei

Akwatik ikoloji

Dispela projek bai kamapim sampela bikpela hevi long ol wara na ol samting i save stap long wara long hap we wok bai kamap, moa yet long taim bilong wokim TSF. Tasol longpela taim bihain, dispela projek bai bringim bikpela gutpela senis long Ok Tedi na Fly Riva, bikos ol tailings bai no go stret moa insait long wara olsem ol i save mekim nau.

Taim ol i wokim TSF, sampela liklik wara we wara bilong graun i save kamaut long en na ol spesel ples bilong ol pis na ol narapela samting i save stap long wara insait long TSF eria (long hetwara bilong Ok Yep) bai pinis olgeta. Long taim bilong kontraksen tu, moa sediment na doti bilong graun bai ron i go long wara, na dispela inap long bagarapim ol wara na ol samting i save stap long ol wara daunbilo. Ol dispela ples bilong wara i sapotim sampela kain pis na ol narapela samting bilong wara we i gat bikpela valiu long konsevesen na i no save stap long planti hap. Taim ol dispela ples i lus, dispela bai kamap wampela bikpela impek long dispela hap tasol, na em bai hat long stretim o bringim bek gen long bihain. Piksa ES.15 i soim ol kain spisis bilong pis we i gat valiu long konsevesen long stadi eria na isoim tu olsem klostu 40% bilong Kiunga leucozona i stap long eria we TSF ol i laik kamapim. OTML bai mekim moa wok bilong skelim na painimaut wanem ol hap dispela spisis i save stap long en, bilong kisim moa save long raun bilong en na sapos em i stap long ol narapela hap tu.

Sampela spisis i gat bikpela valiu long konsevesen, olsem Kiunga blue-eye na Fly Riva rainbowfish, bai kisim impek long lusim ples bilong ol long stap, planti sediment i go long wara, na kwaliti bilong wara i go daun. Long taim bilong operesen, ol i ting olsem sediment bai bung yet long Ok Yep na wara i kam long TSF (seepage) bai gat ol metal insait long en. Dispela inap long mekim wara bilong Ok Yep i no gutpela longpela taim, na sampela senis long kwaliti bilong wara inap long go antap long ol mak bilong lukautim ol samting i stap long wara. Long dispela as, em bai bikpela samting long bosim gut wara i lusim TSF na sediment bilong en.

Long narapela sait, taim ol tailings i no go moa long Ok Tedi na ol i salim i go long TSF, dispela bai helpim Ok Tedi na Middle Fly Riva. Longpela taim bihain, bikos liklik moa sediment bai kam long tailings, ol wara bilong Ok Tedi na Fly bai kisim bek gutpela rot bilong ron, kwaliti bilong wara bai kamap gutpela moa, na ol ples bilong ol pis na ol narapela samting i stap long wara bai kamap gutpela moa tu. Dispela bai helpim ol pis na ol liklik animel bilong wara long kamap planti gen long Lower Ok Tedi na Middle Fly Riva.

Infrastraksa korido, wantaim rot bilong go kam na paipain bilong tailings, bai bihainim Ok Ma long planti hap na bai brukim bikpela wara bilong Ok Birim. Taim ol i wokim na operetim paipain na rot, moa sediment na sampela narapela samting inap long ron i go long wara bilong Ok Ma. Ok Ma na Ok Birim em ol bikpela ples hait bilong ol pis na ol narapela samting bilong wara, na ol i sapotim sampela

spisis we namba bilong ol i go daun o i no stap moa long Ok Tedi na Middle Fly. Long dispela as, em bikpela samting long bosim gut ol impek na lukautim gut helt bilong ol dispela wara na envaironmen bilong en, bai ol pis na ol narapela spisis inap long kam bek gen long Ok Tedi na Fly Riva bihain long pasim main.

6.4 Sosio-ekonomik envaironmen

Dispela projek bai bringim planti gutpela samting long ekonomi na sindaun bilong ol manmeri. Dispela bai kamap long rot bilong wok mani, bisnis na kontrak, skulim ol manmeri long ol nupela save na skil, peim kompensesen, gutpela rot na bris, na mekim i isi moa long ol manmeri long kisim ol sevis. Long taim bilong kontraksen, bai i gat klostu 300 wokman. Taim projek i go long operesen, dispela namba bai go daun long klostu 150 wokman. Ol wok mani na bisnis opsen bai helpim ol komyuniti long North Fly Distrik na Westen Provins long kisim moni na nupela save bilong wok longpela taim. Wokim rot bilong paipain na ol bris long Ok Tedi na Ok Birim bai helpim tru ol komyuniti i stap long wes sait bilong Ok Tedi long go kam isi moa. Dispela bai mekim i isi long kisim helt sevis, skul, maket na ol bikpela senta bilong gavman na bisnis.

Tasol, sampela hevi tu inap long kamap. Dispela i gat wok long yusim graun bilong ol manmeri, lusim sampela hap bilong gaden na ol narapela risos ol i save yusim bilong sindaun, ol samting bilong kastom na tumbuna, sefti bilong komyuniti, planti manmeri i kam long narapela hap bilong painim wok o bisnis, moa presa long ol sevis bilong komyuniti, na senis long pasin bilong sindaun bilong ol manmeri. TSF developmen eria bai kisim sampela graun ol manmeri i save yusim bilong wok gaden, painim abus, painim pis, wokim saksak na bungim ol samting long bus. Dispela bai kisim bikpela hap long ol komyuniti i stap klostu long TSF olsem Birimkamba, Kungembit, Ambaga na Karandimok. Long helpim ol manmeri i kisim bek na kamapim gen ol rot bilong sindaun bilong ol, bai ol i mekim ol livelihood restoration plan, peim kompensesen na lukluk gut long ol dispela samting longpela taim.

Dispela projek inap tu long gat sampela impek long ol samting bilong kastom na tumbuna. Dispela i karim ol ples tambu, matmat ples, ol ples tumbuna i bin stap long en bipo, mak bilong ol klaan, na ol hap graun i gat bikpela kastom valiu. Ol bikpela impek inap long kamap insait long TSF development area, we sampela bilong ol dispela kastom valiu bai hat long abrusim olgeta. Long daunim ol dispela impek, bai ol i mekim wampela Cultural Heritage Management Plan, mekim moa detailet investigesen long ol sait, wok long abrusim ol hap i gat kastom valiu, go het long toktok wantaim ol komyuniti, na bihainim ol prosedja sapos ol i painim ol samting bilong kastom taim wok i go het. Ol stadi i no painim wampela sait we i inap long mak bilong Critical Cultural Heritage aninit long IFC Performance Standards 7 o 8.

Ol hevi bilong seifti long komyuniti inap long kamap bikos bai gat planti moa kar na masin i wokabaut, wok bilong konstraksen, ol wokman na ol manmeri bilong ples bai bung planti moa, na namba bilong ol manmeri inap long go antap bikos long projek. Planti moa trafik long ITCS Road, Kiunga-Tabubil Highway na rot bilong paipain inap long kamapim aksiden long ol manmeri i yusim ol rot na ol komyuniti i stap klostu long ol. Moa manmeri i kam stap long dispela hap inap tu long putim hevi long ol sevis, kamapim kros namel long ol lain, bagarap na stil, faimil na seksual violens, na ol hevi bilong sanguma tok. Projek bai wok long daunim ol dispela hevi long gutpela bosim bilong trafik, ol lo bilong pasin ol wokman i mas bihainim, ol program bilong seifti long komyuniti, ol rot bilong harim na stretim tok lukaut bilong ol manmeri, na wok bung wantaim gavman na ol komyuniti.

Projek bai gat tu sampela senis long kaikai na wara saplai bilong ol manmeri. Sampela gaden, bus risos na ol hap bilong kisim ol samting long wara insait long TSF eria bai lus olgeta, na dispela bai gat bikpela hevi moa long ol komyuniti i stap klostu long TSF. Sampela hap bilong wara inap tu long kisim liklik senis insait long TSF eria na long sampela hap bilong infrastraksa korido. Long daunim ol dispela hevi, projek bai wok long daunim bagarap long graun na envaironmen, lukautim gut kwaliti bilong wara, givim narapela wara saplai sapos i gat nid, helpim ol manmeri long kisim bek sindaun bilong ol, na wok long sevei na lukluk gut long ol senis i kamap.

Stadi bilong ol risos bilong envaironmen i soim olsem projek inap long gat hevi long sampela samting ol manmeri i save yusim bilong sapotim sindaun bilong ol, olsem gaden graun, ples bilong painim abus, pis, wara na ol bus risos. Em inap tu long gat hevi long ol samting bilong kastom na kalsa olsem ol tambaran ples, save bilong tumbuna na pasin bilong yusim graun bilong tumbuna. Ol dispela hevi bai bikpela moa long ol komyuniti i stap klostu long TSF eria na infrastraksa korido. Projek bai wok long stretim dispela long kompensesen, program bilong helpim ol manmeri long kisim bek sindaun bilong ol, lukautim ol ples na samting bilong kastom, na ol program bilong lukautim envaironmen.

Stadi bilong ol human rights i painimaut olsem ol bikpela risk inap long kamap long sindaun bilong ol manmeri, kaikai na wara saplai, rait bilong kastom na kalsa, helt na seifti bilong komyuniti, violens long meri na pikinini, planti manmeri i kam stap bikos long projek, akses long ol sevis, na rait bilong ol wokman. Projek bai bihainim ol bikpela lo na standar bilong wol long human rights na bisnis. Dispela bai karim wok bung wantaim ol manmeri i gat stake long projek, kisim tok orait bilong ol manmeri taim lo i tok em i mas kamap, ol rot bilong harim na stretim tok lukaut bilong ol manmeri, gutpela bosim bilong ol wokman, ol program bilong helt bilong komyuniti, na wok long lukluk gut oltaim long ol hevi bilong human rights inap long kamap.

6.5 Ol impet we ol narapela projek inap kamapim wantaim

Ol i bin skelim nainpela projek bilong luksave sapos ol inap kamap wantaim dispela projek na mekim ol narapela impek. Long ol dispela projek, faivpela projek ol i luk olsem inap long wok long wankain hap na long wankain taim wantaim dispela projek, na long dispela as ol inap long kamapim ol impek wantaim. Ol dispela projek em:

- The P'nyang Gas Field Development
- The Stanley Gas-Condensate Project
- The Elevala-Ketu-Tingu Condensate Recovery Project
- The West-Agro Fly Vanilla Project.
- The Alice Pit to Border Road (ITCS road).

Sapos ol dispela projek i kamap, ol inap long kamapim ol impek long katim bus na diwai, sediment i go long wara, yusim ol rot, planti trak na kar i go kam, yusim wof, na long ol wokman bilong kontraksen. Ol rot bilong daunim ol dispela inap kamap impek bai stap insait long ESMP bilong Ok Birim TSF Projek na ol bai bihainim ol dispela rot long bosim na daunim ol hevi. Ol narapela kampani na projek tu bai nid long bihainim ol kain rot bilong bosim ol impek i kamap wantaim. Dispela bai helpim olgeta lain long gat wanpela stretpela rot bilong bihainim taim ol kondisen i senis long bihain. Ol bai kirapim Westen Provinsal Gavman long putim ol dispela rot insait long ol plen bilong developmen bilong provins. Dispela bai helpim long bosim planti manmeri i kam stap long dispela hap, nid bilong wokman, na ol senis long ekonomi i kamap long taim planti projek i wok long provins. Em bai helpim tu long daunim ol impek long envaironmen.

6.6 Hevi bilong neicha, klaimet senis na ol samting we i no bin plen long kamap

Dispela projek inap long kamapim sampela hevi we ol i no bin plen long en taim wok i go het. Ol dispela kain samting i save kamap wantu na ol man i no save long en pastaim. Sampela taim ol i kamap long ol samting bilong olsem guria, bikipela ren o nogutpela klaimet. Sampela taim tu ol i kamap long rong bilong man, bagarap bilong masin o ol narapela aksiden. Maski sans bilong ol dispela samting long kamap i no bikipela tumas, sapos ol i kamap ol inap long kamapim bikipela hevi long envaironmen, sindaun bilong ol manmeri na wok bilong projek. Dispela inap karim bagarap long graun na wara, lus bilong habitat bilong ol plan na animel, hevi long helt na sefti bilong ol manmeri, bagarap long pasin bilong kisim kaikai na yusim ol risos, bagarap long ol ples na samting bilong kastom, na ol narapela bikipela bruk bilong lo bilong envaironmen.

ESIA i bin skelim ol dispela kain hevi we inap long kamapim bikipela impek long infrastraksa bilong projek, ol komyuniti bilong ples na envaironmen. Em i tokaut tu long ol disain, ol rot bilong daunim hevi na ol plen bilong redi long bekim ol kain aksiden sapos ol i kamap. Long planti hap, ol dispela rot bilong bosim hevi i bihainim pinis ol sistem na prosedja OTML i yusim nau long bosim risk na bekim ol emergensi. Ol bikipela hevi we ol i ting inap long kamap long taim bilong konstraksen na operesen em ol samting olsem ol disasta bilong natur, wara i pulap antap long TSF, bagarap o bruk bilong TSF o ol bikipela wara kalap na bris, na bagarap bilong tailings paiplain.

TSF i bruk o bagarap

Sapos TSF i bruk, em inap long kamapim bikipela hevi long envaironmen, sindaun bilong ol manmeri na ekonomi. Dispela bai dipen long wanem hap bilong TSF i bruk, wanem as i mekim em i bruk, na wanem kain wara i stap long dispela taim. Long dispela stadi, ol i bin skelim sampela kain senario bilong TSF i bruk long taim bilong gutpela klaia na tu long taim bilong bikipela ren, long faivpela hap insait long Cell 1 na Cell 2 bilong TSF.

Sapos TSF i bruk, ol hevi inap long kamap em bagarap long envaironmen daunbilo, doti bilong wara, pas bilong ol rot bilong go kam, bagarap long pasin bilong kisim kaikai na moni bilong ol manmeri, stop bilong wok bilong main, na hevi long helt bilong ol manmeri na ol komyuniti bilong ples. Ol i bin skelim ol hevi long ol komyuniti, infrastraksa na envaironmen daunbilo. Ol model i soim olsem Kungembit na Birimkamba bai i no kisim wara i karamapim ol stret long ol senario ol i bin skelim. Tasol tupela haus i stap longwe liklik na ITCS rot inap long kisim hevi long tailings, wara i go antap moa, na bagarap long infrastraksa long sampela senario.

Long olgeta, ol i ting bagarap na lus bai bikipela tru sapos TSF i bruk. Dispela em bikos wara na tailings bai karamapim Ok Yep na kamapim ol hevi i go daun long Ok Tedi tu, maski Ok Tedi i bin kisim planti impek pinis. Em inap tu long pasim ITCS rot na kamapim hevi long bisnis na wok bilong main. Sapos TSF i bruk, dispela inap long bagarapim nem bilong OTML na mekim wok bilong main i stop inap long sampela taim. Dispela inap long kamapim hevi long wok bilong ol manmeri tu.

Klaimet senis

Klaimet senis tu inap long mekim sampela hevi bilong neicha i kamap planti moa o kamap strong moa long taim projek i stap na bihain long taim projek i pas. Dispela inap long kamap long senis bilong pasin bilong ren, ol tait wara, na ol bikipela klaimet event, na dispela inap long mekim hevi long infrastraksa, ol komuniti long ples na envaironmen. Projek i stap long wanpela tropikal ren bus klaimet. Long bihain, ol i ting klaimet senis bai mekim ples i hot moa na bai i gat moa bikipela ren taim em i pundaun. Ol i bin skelim TSF na painimaut olsem disain bilong en i strong tru long sanap long taim bilong ol dispela kain hevi, bikos ol i bin yusim strongpela mak bilong disain long lukautim em long bikipela ren na tait wara. Long dispela as, sans bilong wanpela bikipela bagarap long TSF long bihain em i tamblo stret. Tasol ol narapela infrastraksa olsem paiplain na rot inap long kisim moa hevi long ol liklik tait wara, erosion, moa wok bilong stretim na lukautim, na sampela taim wok bilong operesen inap long stop bikos ren bai kamap strong moa na ples bai hot moa. Hotpela klaimet inap tu long senisim sampela kemikol proses insait long TSF na dispela inap long mekim senis long kwaliti bilong wara. Long dispela as, bai i gat nid long wok long skelim na bosim ol dispela samting oltaim. Ol dispela risk inap long bosim gut sapos ol i wok long monitaring, senisim ol rot bilong bosim taim ol samting i senis, na bihainim ol gutpela kontrol bilong operesen.

Ol plen bilong bosim envaironmen na sindaun bilong ol manmeri (Environmental and Social Management Plans – ESMPs) i makim ol samting projek i laik mekim bilong lukautim envaironmen na ol manmeri, na ol rot bai ol i yusim long daunim o bosim ol hevi we inap long kamap long taim bilong projek.



7. Lukautim, skelim na Ripotim ol environmen na sosol wok

7.1 lukautim na bosim wok

OTML i gat wampela sistem bilong bosim na lukautim gut ol wok bilong en. Dispela sistem i helpim kampani long lukautim helt na sefti bilong ol wokmanmeri, environmen, na sindaun bilong ol manmeri we ol wok bilong kampani inap long mekim senis long ol. Ol intanesenel stended i tok kampani i mas gat ol polisi, rot bilong painim na bosim ol hevi na risk, bihainim ol lo na narapela rul, na wok long mekim ol samting i go gut moa long sait bilong helt, sefti na environmen. Nau OTML i wok long stretim na kamapim gut moa dispela sistem bilong putim tu ol samting bilong sindaun na welbing bilong ol manmeri insait long en. Dispela bai helpim sistem bilong OTML long bihainim ol gutpela intanesenel stended na pasin bilong wok

Ol kain dokumen insait long dispela sistem em:

- **Polisi.** Ol bikipela tok na tingting bilong kampani long wanem pasin na rul ol bai bihainim.
- **Stended.** Ol dokumen we i makim wanem mak OTML i mas bihainim bilong inapim ol as tingting na ol mak bilong en.
- **Manuel, plen na gaidlain.** Ol dokumen we i givim moa save long olsem wanem bai ol i bosim ol bikipela samting bilong wok.
- **Prosedia, seif wok plen na wok instraksen.** Ol dokumen we i tokaut stret long ol wok na pasin ol manmeri i mas bihainim bilong inapim ol mak na as tingting bilong kampani.

OTML i yusim ol risk na ol lo bilong makim wanem ol stended na plen em i mas kamapim. Wampela risk rivi ol i mekim long Mas 2026 i bin helpim OTML long painim ol rot bilong strongim sistem bilong en na long painim na bosim gut ol environmen na sosol risk.

OTML i gat wampela Environmen Menesmen Plen (EMP) bilong tokaut long olsem wanem kampani bai inapim ol promis na wok bilong en long lukautim environmen long PNG. Dispela plen i bihainim ol mak na ol tok bilong Environment Permit na ol lo bilong Ok Tedi Environment Management Act.

EMP i soim olsem wanem OTML i makim ol wok bilong en, putim ol as tingting na mak, kamapim ol plen na prosedua, bihainim ol lo na ol wok em i gat wok long mekim, na wok long mekim ol samting i go gut moa long bihain. Dispela plen i karamapim olgeta wok na proses bilong OTML long PNG, wantaim ol kontrakta, saplaia na ol sevis provaida.

Long sait bilong sosol wok, OTML i gat ol program bilong Komyuniti Rilesens na Sastenebiliti, wantaim ol ekonomi program we Ok Tedi Development Foundation na CMCA i bosim. Tasol dispela i no kamap wampela sistem olgeta yet. Nau OTML i wok long kamapim ol sosol plen na stenda bilong putim insait long sistem bilong en. Ol dispela plen bai bihainim wankain format olsem ol narapela operesen dokumen bilong kampani.

As tingting bilong ol sosol plen em long daunim ol hevi we wok bilong OTML inap long mekim long ol manmeri na long mekim sua ol manmeri na ol steikholda i kisim ol gutpela samting long ol wok bilong kampani.

Projek i gat ol spesel Environmen na Sosol Menesmen Plen (ESMP) bilong tokaut long ol as tingting na ol pasin bilong bosim ol hevi bilong environmen na sosol samting we inap long kamap long projek.

Wanpela konstraksen ESMP (CESMP) i stap wantaim ESIA, na em i gat ol liklik plen bilong bosim ol dispela samting, plen bilong:

- Bosim erosi na sediment
- Bosim wara long antap bilong graun
- Bosim wara insait long graun
- Biodaivesiti
- Kwaliti bilong win na ol ges we i save mekim senis long klaimet
- Nois na pairap
- Kastom na kalja heritej
- Trafik na transport
- Bosim ol pipia bilong olgeta kain
- Bosim ol bikpela aksiden na narapela bikpela hevi

Pastaim long konstraksen bilong projek i kirap, OTML bai kamapim sampela moa sosol plen. Ol dispela plen bai helpim long daunim ol hevi bilong konstraksen na operesen long ol manmeri, na long mekim sua ol steikholda i kisim ol gupela samting bilong projek. Ol plen bai lukluk long ol dispela samting:

- Developmen bilong komuniti
- Helt na sefti bilong komuniti
- Akses long graun na risetelmen
- Ol manmeri i kam sindaun long ol lokal na rijonal komuniti bikos long projek
- Sosol monitoring na skelim ol senis.

7.2 Monitaring

Ol wok bilong lukluk na skelim projek long taim em i wok bai stap insait long ESMP bilong projek. As bilong dispela wok em long painimaut sapos ol impek ol i bin tok bai kamap long dispela ESIA i kamap tru, sapos ol pasin bilong lukautim envaironmen na sindaun bilong ol manmeri i wok gut, na sapos projek i bihainim ol tok orait, lo na laisens bilong gavman. Sapos ol dispela wok bilong skelim i soim olsem ol pasin bilong bosim na daunim ol hevi i no wok gut, bai ol i mekim ol senis na stretim dispela hevi.

Ol program bilong lukluk na skelim projek bai ol i wokim moa na stretim moa taim projek i go insait long detail disain. Ol bai luksave tu long olgeta samting ol tok bilong nuipela envaironmen permit i askim long en. Ol dispela program bai karamapim ol samting bilong envaironmen na sindaun bilong ol manmeri em wan wan projek wok inap long mekim impek long en. Ol bai makim wanem ol samting bai ol i skelim, hamas taim bai ol i mekim dispela wok, na as bilong dispela wok. Dispela bai karim tu ol wok bilong lukluk na skelim long olgeta taim, na sampela spesel sevei bilong painimaut sapos ol impek ol i bin tok bai kamap long taim bilong operesen i kamap tru. Sapos ol dispela sevei i soim olsem ol save i stret, bihain bai ol i daunim hamas taim ol i mekim monitoring.

Ol samting bai ol i skelim na makim bai ol i lukluk gen long ol na putim moa sapos i gat nid. Dispela bai karim ol bikpela mak bilong skelim wok bilong projek, ol hap bai ol i mekim monitoring long en, na hamas taim bai ol i mekim dispela wok insait long ol nupela vesen bilong ESMP.

Ol manmeri husat i gat save na gupela trening long dispela kain wok bai mekim monitoring. Ol ripot bilong ol samting ol i painim bai kamap long ol regular ripot bilong projek. Bai ol i wokim tu ol sotpela ripot bilong givim long ol gavman ejensi husat i lukautim dispela wok, olsem ol lo, permit na laikens i tok long en.

7.3 Ripotim

Aninit long Kondisen 53 bilong Environment Permit EP-L3(636), OTML i mas putim wanpela yia ripot bilong olgeta envaironmen insiden ol i bin rekodim insait long Environmental Management System bilong kampani. Dispela ripot bai stap insait long Annual Environmental Report. Ol bai ripotim ol insiden bihain long mak bilong hamas bikpela o liklik dispela insiden em, olsem Environmental Management System i makim.

Aninit long Kondisen 54 bilong Environment Permit EP-L3(636), OTML i mas toksave long Dairekta insait long 24 aua sapos wanpela bikpela envaironmen insiden (olsem EMP i tok) i kamap long taim bilong wok o long taim ol pipia o ol narapela waste i go aut long envaironmen long sait bilong projek.

Long EMP na Environment Permit EP-L3(636), wanpela insiden bai kisim nem bilong bikpela insiden sapos ol i skelim em na painimaut olsem em i kamapim Level 3 hevi long envaironmen, nem na gupela nem bilong kampani, o long bihainim lo na permit, olsem OTML IMS Consequence Table i makim.

Sapos OTML i no bihainim ol kondisen bilong permit, dispela tu bai ol i lukim olsem wanpela envaironmen insiden. Ol bai bosim na stretim dispela bihain long OTML IMS Standard OTML-IMS-STD-1.19 bilong ripotim na investigetim ol insiden.



Mipela i laik harim tingting bilong yu long dispela projek na ESIA. Yu ken givim tingting bilong yu long CEPA.



8. Sampela moa toksave na ol sabmisen

Ol had kopi bilong dispela ESIA bai i stap long ol pablik ples long ol dispela hap:

- Ofis bilong Conservation na Environment Protection Authority (CEPA), Pot Mosbi
- Ofis bilong Mineral Resources Authority (MRA), Pot Mosbi
- Western Provinsel Gavman, Kiunga

Wanpela hap bilong skelim dispela ESIA, em Gavman bilong PNG bai i askim ol pablik long raitim ol tingting bilong ol long dispela ESIA na salim i kam long CEPA.

Bilong kisim save moa long wanem samting long mekim, ol manmeri i ken kisim moa halivim long:

Managing Director

Conservation and Environment Project Authority
Stratos Avenue, Savannah Heights
PO Box 6601
Waigani, National Capital District
Papua New Guinea

Sapos CEPA i givim tok orait na apruvim dispela ESIA, OTML i kem mekim ESIA i kam ples kliia bai olgeta lain i ken lukim long:

- Ol had kopi bilong ol pablik long lukim we bai i ken stap long ofis bilong OTML long Tabubil na Pot Mosbi.
- Long intanet na kisim long websait bilong OTML <http://www.oktedi.com>.

Sapos yu laik kisim sampela save moa long dispela projek long OTML yu ken toktok long:

Alan Bong

General Manager Strategy, Business Development and Optimisation / Acting General Manager Operations
Ok Tedi Mining Limited

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Jesse Pile

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Iga Augerea

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OTML na Tetra Tech Coffey, wantaim CEPA na MRA, bai go het long toksave long pablik long ESIA bilong dispela projek. Ol bai go het tu long bung na toktok wantaim ol komyuniti na ol narapela stekholda. Dispela bai bihainim pasin bilong givim olgeta save long ol manmeri pastaim, bai ol i save gut long projek na ol i ken mekim disisen bilong ol yet long laik bilong ol.





