

DISCHARGE PERMIT

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Oceana Gold (New Zealand) Limited

Address: 22 MacLaggan Street, Dunedin

To discharge contaminants and water from silt ponds to unnamed tributaries of Maori Hen Creek, Trimbells Gully, Mare Burn and Coal Creek for the purpose of operating silt ponds for the Coronation North Waste Rock Stack

For a term expiring 1 October 2051

Location of consent activity: Macraes Gold Project, approximately 6.5 kilometres to the northwest of the intersection of Macraes Road and Red Bank Road, Macraes Flat.

Legal description of consent location: Pt Section 2 Blk V Highlay SD, Pt Section 2 Blk VII Highlay SD

Map Reference: Within a 1 kilometre radius of NZTM 2000: E1395457
N4978458

Conditions

Specific

1. This consent shall be exercised together with Land Use Consent RM16.138.01, Discharge Permit RM16.138.03, Discharge Permit RM16.138.05, Discharge Permit RM16.138.09, RM16.138.20 and any subsequent variations to these consents.

Performance Monitoring

2. This consent shall be exercised in accordance with and be subject to the Coronation North Waste Rock Stack Compliance and Monitoring Schedule attached, including the requirement to report to the Consent Authority quarterly the results of the sampling required.
3. (a) Prior to the exercise of this consent, the consent holder shall submit to the Consent Authority, a Water Quality Management Plan for the Coronation North project. The Water Quality Management Plan shall be in accordance with the conditions of this consent, and include but not be limited to:
 - i) Details of surface water and groundwater quality monitoring within the Mare Burn catchment, including location and frequency and parameters being measured;
 - ii) Identification of monitoring results that would trigger the requirement for a comprehensive review of water quality to determine whether additional mitigation measures should be adopted to ensure appropriate surface water and groundwater quality;
 - iii) A description of mitigation measures implemented or available during the

operational period of the Coronation North Project;

iv) A description of mitigation measures implemented or available post closure of the Coronation North Project; and

v) A timeline detailing when it is anticipated that mitigation measures may be required and providing an indication of implementation timeframes.

vi) Provision to monitor suspended particulates by way of the total suspended solids (TSS) and Nephelometric Turbidity Unit (NTU) parameters. Limits for both parameters shall be included in the Water Quality Management Plan no later than five years following exercise of the consent.

(b) The Water Quality Management Plan for this consent may be combined with any Water Quality Management Plan required by any other consent held by the consent holder for mining operations at Macraes Flat so long as all conditions of this consent are met.

(c) The consent holder shall exercise this consent in accordance with the Water Quality Management Plan.

(d) The consent holder shall review the Water Quality Management Plan annually and, if necessary, update it. Details of the review shall be included in the Project Overview and Annual Work and Rehabilitation Plan. The Consent Authority shall be provided with any updates of the plan within 1 month of any update occurring.

4. (a) Prior to exercise of this consent, the consent holder shall submit to the Consent Authority an Erosion and Sediment Control Plan for the Coronation Waste Rock Stack. The Erosion and Sediment Control Plan and plan requirements shall not be of a standard less than that required by the latest revision of the Environment Canterbury document "Erosion and Sediment Control Guideline", except that the catchment of sediment retention ponds shall not exceed 20 ha. The design, construction and operation of all sediment retention ponds shall ensure that no outflow to downstream receiving waters results from any sediment retention pond arising from a rainfall depth of 70 mm or less from a particular storm event. The Erosion and Sediment Control Plan shall include, but not be limited to:
 - i) General arrangement details of the design and location of all erosion and sediment control devices including final details of all catchments and sub-catchments of all works related to erosion and sediment control within the Coronation North Project area;
 - ii) Key responsibilities relating to implementation of the plan;
 - iii) Construction details and specifications of all proposed erosion and sediment control measures e.g. including but not limited to details of all drains and ponds associated with erosion and sediment control and surface water management;
 - iv) A construction timetable and details of necessary staging;
 - v) Maintenance, monitoring and reporting procedures (e.g. including but not limited to details of parameters to be measured, frequency of monitoring, monitoring locations and corrective actions to be implemented in the event that test results are inconsistent with monitoring requirements and/or cross reference to the Water Quality Management Plan and Compliance and Monitoring Schedule that otherwise provide for all such requirements);
 - vi) Emergency response procedures, including response procedures for flood events and silt pond dam failure scenarios; and
 - vii) Certification from a chartered professional engineer that the proposed erosion and sediment control measures comply with the conditions of the

consent.

(b) The consent holder shall exercise this consent in accordance with the Erosion and Sediment Control Plan.

(c) Not less than three weeks prior to the commencement of soil disturbance, the consent holder shall submit to Consent Authority for acceptance the Erosion and Sediment Control Plan. The works shall not proceed until the Erosion and Sediment Control Plan is accepted by the Consent Authority. If required by Consent Authority, the consent holder shall amend the Erosion and Sediment Control Plan prior to acceptance by the Consent Authority. The consent holder shall exercise this consent in accordance with the Erosion and Sediment Control Plan.

(d) The consent holder shall review the Erosion and Sediment Control Plan annually and if necessary, update it. Details of the review shall be included in the Project Overview and Annual Work and Rehabilitation Plan. The Consent Authority shall be provided with any updates of the plan within 1 month of any update occurring.

General

5. No lawful take of water is to be adversely affected as a result of any discharge.
6. The consent holder shall ensure that the discharge does not give rise to any significant adverse effect on aquatic life.
7. The exercise of this consent shall not give rise to the production of any conspicuous floatable or suspended materials or any conspicuous change in the colour or visual clarity in any receiving waters.
8. No chemicals or additives shall be used in the silt pond or shall be discharged from the silt pond without the prior written approval of the Consent Authority.
9. The Consent Authority may, within 6 months of receipt of the Coronaiton North Project Cultural Impact Assessment prepared by Kai Tahu Ki Otago on behalf of Te Runanga o Moeraki, Te Runanga o Otakou and Kati Hurapa Runanga ki Puketeraki, commissioned in 2016; serve notice of its intention to review the conditions of this consent for the purpose of amending or adding conditions to address mitigation of the effect(s) of the exercise of this consent on cultural values and associations. All costs associated with any such review shall be borne by the consent holder.
10. (a) The consent holder shall provide and maintain in favour of the Consent Authority one or more bonds to secure:
 - i) The performance and completion of rehabilitation in accordance with the conditions of this consent; and
 - ii) The carrying out of the monitoring required by the conditions of this consent; and
 - iii) The remediation of any adverse effect on the environment that may arise from the exercise of this consent.
 - iv) Compliance with Conditions 10(m) to 10(q) of this consent.(b) Before the first exercise of this consent, the consent holder shall provide to the Consent Authority one or more bonds required by Condition 10(a).
(c) Subject to the other provisions of this consent, any bond shall be in the form and on the terms and conditions approved by the Consent Authority.
(d) Any bond shall be given or guaranteed by a surety acceptable to the

Consent Authority.

(e) The surety shall bind itself to pay for the carrying out and completion of the conditions of consent which are the subject of the bond on default by the consent holder or the occurrence of any adverse environment effect requiring remedy; during or after the expiry of this consent.

(f) The amount of each bond shall be fixed annually by the Consent Authority which will take into account any calculations and other matters submitted by the consent holder relevant to the determination of the amount to be bonded in the Project Overview and Annual Work and Rehabilitation Plan required for by condition 15 of RM16.138.02, condition 6 of RM16.138.05, condition 8 of RM16.138.06, condition 10 of RM16.138.10, condition 8 of RM16.138.17 and RM16.138.18.

(g) The amount of the bond(s) shall include:

i) The estimated costs of complete rehabilitation in accordance with the conditions of consent on the completion of the mining operations proposed for the next year and described in the Project Overview and Annual Work and Rehabilitation Plan.

ii) The estimated costs of:

- Monitoring in accordance with the monitoring conditions of the consent;

- Monitoring for and of any adverse effect of the activity authorised by this consent which may become apparent during or after expiry of this consent;

- Monitoring any rehabilitation required by this consent.

iii) Any further sum which the Consent Authority considers necessary for monitoring and dealing with any adverse effect on the environment that may arise from the exercise of the consent whether during or after the expiry of this consent.

(h) The amount shall be calculated for the duration of this consent and for a period of 20 years after its expiry.

(i) If, on review, the total amount of bond to be provided by the consent holder is greater or less than the sum secured by the current bond(s), the consent holder, surety and the Consent Authority may, in writing, vary the amount of the bond(s).

(j) While the liability of the surety is limited to the amount of the bond(s), the liability of the consent holder is unlimited.

(k) Any bond may be varied, cancelled, or renewed at any time by written agreement between the consent holder, surety and Consent Authority.

(l) The costs (including the costs of the Consent Authority) of providing, maintaining, varying and reviewing any bond shall be paid by the consent holder.

(m) For a period of 20 years from the expiry or surrender of this consent the consent holder shall provide in favour of the Consent Authority one or more bonds.

(n) The amount of the bond to be provided under Condition 10(m) shall include the amount (if any) considered by the Consent Authority necessary for:

i) Completing rehabilitation in accordance with the conditions of this consent.

ii) Monitoring for and of any adverse effect on the environment that may arise from the exercise of the consent.

iii) Monitoring any measures taken to prevent, remedy or mitigate any

adverse effect on the environment that may arise from the exercise of this consent.

iv) Dealing with any adverse effect on the environment which may become apparent after the surrender or expiry of this consent.

v) Contingencies.

(o) Without limitation, the amount secured by the bond given under Condition 10(m) may include provision to deal with structural instability or failure, land and water contamination, and the failure of rehabilitation in terms of the rehabilitation objectives and conditions of this consent. Costs shall include costs of investigating, preventing, remedying or mitigating any adverse effect.

(p) The bond(s) required by Condition 10(m) must be provided on the earlier of:

i) 12 months before the expiry of this consent.

ii) Three months before the surrender of this consent.

(q) Conditions 10(c), (d), (e), (h), (i), (j) and (k) apply to the bond(s) required by Condition 10(m).

Review

11. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within three months of each anniversary of the commencement of this consent, for the purpose of:
 - (a) determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the consent; or
 - (b) ensuring the conditions of this consent are consistent with any National Environmental Standards; or
 - (c) requiring the consent holder to adopt the best practicable option, in order to remove or reduce any adverse effect on the environment arising as a result of the exercise of this consent.

CORONATION NORTH WASTE ROCK STACK

COMPLIANCE AND MONITORING SCHEDULE

GENERAL PROVISIONS

1. This schedule describes monitoring and sampling required pursuant to consent numbers RM16.138.04, RM16.138.05 and RM16.138.09 in addition to any monitoring specified in those consents.
2. The design of all monitoring and sampling programmes shall be to the satisfaction of the Consent Authority. Where the consent to which the monitoring programme relates, directs that an Operations and Management Plan shall be prepared then the monitoring programme shall be incorporated into that plan.
3. The parameters analysed, site locations and frequency of sampling shall be reviewed as part of the annual review of the management plan for the consent(s) to which this monitoring relates. New parameters, sites and frequencies may be approved by the Consent Authority under an application by the consent holder for a change of conditions for monitoring made pursuant to Section 127 of the Act.
4. All sampling procedures, including collection, transportation of samples and laboratory analyses undertaken in accordance with this consent must be performed to IANZ registered standards, or otherwise as specifically approved by the Consent Authority.
5. Reporting shall be quarterly unless specified otherwise. A quarterly consolidated report containing all sampling and monitoring results shall be submitted to the Consent Authority within one month of the end of the quarter being reported. This report shall highlight any particular features arising from monitoring and sampling and shall provide appropriate commentary on such features.
6. Where a monitoring location is destroyed, engulfed, made redundant or unusable for any other reason, the consent holder shall, in consultation with the Consent Authority:
 - a) discuss and determine whether an alternative monitoring location is required and if so where it should be located; and
 - b) assign a timeframe for establishment of the new monitoring location.

REPORTING OF NON-COMPLIANCE

Any non-compliance with any compliance criteria shall be reported to the Consent Authority within 24 hours of the non-compliance first being detected.

COMPLIANCE CRITERIA

This following describes the compliance criteria pursuant to consent numbers RM16.138.04, RM16.138.05 and RM16.138.09.

(a) Narrative Standard for Receiving Waters

The waters of the Mare Burn, shall at all times be free of contaminants attributable to mineral processing and associated activities in concentrations which adversely affect directly or indirectly water uses or which adversely affect humans, animals, plants and/or aquatic life.

(b) Numerical Compliance Criteria

(i) Mare Burn Compliance Point MB01

Surface water within the Mare Burn at the Mare Burn Compliance Point, MB01 (NZTM 2000 E1392955 N4980551) shall not exceed the following water quality compliance criteria (where

the metals standards are all soluble determinations), unless infallible evidence can be provided that the level of a parameter is either naturally occurring or unrelated to mining activities:

Constituent	Standard (g/m ³) unless stated otherwise
Arsenic	0.013, 0.024
Cyanide _{WAD}	0.007
Copper ^a	0.0014
Iron	1.0
Lead ^a	0.0034
Zinc ^a	0.008
Sulphate	128
pH (range)	6.5 - 9.0 pH units
Nickel	0.011
Silver	0.00005
Manganese	0.5
Dissolved oxygen	>7.0
Nitrate	<2.4
Ammonia	<0.24
Turbidity	30-50% change in clarity
Suspended solids	30-50% change in clarity

Notes:

All units g/m³ (i.e., mg/L) unless stated.

1. pH range from ANZECC. Aluminium becomes markedly more toxic at pH 6 so range should be limited. Ammonia toxicity increases at high pH.
2. Default metal guideline for a hardness of 30 g CaCO₃ m³.
3. Guideline dependent on arsenic speciation (AsIII or AsV)
4. Manganese floc precipitates like iron floc. Estimated guideline value for initial evaluation.
5. Guideline is hardness-dependent. Value is for 'very soft' waters and may be higher in high hardness waters.
6. Values for 7 day mean minimum (1 day minimum) in summer period for 'B' attribute waters.
7. Values for median (95th percentile bracketed) for 'B' attribute waters.
8. Values for median (maximum bracketed) for 'B' attribute waters for total ammoniacal-N at pH 8. Note that pH adjustment for other pH values.
9. Turbidity and SS change relative to background water clarity as aesthetic measure. No values available for ecological protection.
10. Guideline dependent on arsenic speciation (AsIII or AsV)

(iii) Waste Rock – ANC/MPA Ratio

The acid neutralising capacity to maximum potential acidity (ANC:MPA) ratio, as referred to in California Administrative Code Article 7, 1992, shall be greater than 3:1 in rock discharged into the Waste Rock Stack.

MONITORING

(i) Surface Waters

The consent holder shall collect monthly representative water samples from the following surface water sites (as shown on Figure 1):

- (i) Mare Burn Compliance Point MB01 (approximately NZTM 2000: E1394176 N4980401);
- (ii) Mare Burn Compliance Point MB02 (approximately NZTM 2000: E1392955 N4980551); and
- (iii) Coal Creek Monitoring Point CCMP01 immediately upstream of the confluence with the Mare Burn (approximately NZTM 2000: E1392985 N4980236)

All surface water sampling shall occur on the same day.

Samples shall be analysed for the following parameters:

Constituent	Monthly
Major cations:	
calcium	✓
magnesium	✓
potassium	✓
sodium	✓
Major anions:	
bicarbonate	✓
carbonate	✓
chloride	✓
sulphate	✓
nitrogen	✓
pH	✓
Conductivity	✓
Arsenic	✓
Copper	✓
Iron	✓
Lead	✓
Zn	✓
Cyanide (WAD)	✓
Turbidity	✓
Suspended solids	✓

With the prior written approval of the Consent Authority, the consent holder may reduce the frequency of monitoring or the number of contaminants being monitored in accordance with the table above where it is shown that maintenance of the original monitoring programme is not required. The Consent Authority may, by notice in writing at any time, require the consent holder to resume the monitoring programme as set out in the table above.

(ii) Waste Rock Stack Seepage

The consent holder shall obtain representative samples of groundwater seepage from the toe of the Coronation North Waste Rock Stack at the following points (as shown on figure 2):

- Trimbell's Gully (at the main waste rock stack seepage point);
- Maori Hen Gully;
- Coal Creek 1; and
- Coal Creek 2.

Samples shall be analysed for the following parameters at the following intervals:

Constituent	Quarterly	Annually
Major cations:		
calcium	✓	
magnesium	✓	
potassium	✓	
sodium	✓	
Major anions:		
bicarbonate	✓	
carbonate	✓	
chloride	✓	
sulphate	✓	
pH	✓	
Conductivity	✓	
Copper		✓
Iron		✓
Lead		✓
Total Inorganic Nitrogen		✓
Arsenic		✓

(iii) Waste Rock Stack Seepage Flow Monitoring

The consent holder shall install and operate a flow monitoring station at the main waste rock stack seepage discharge point in Trimbells Gully.

The flow monitoring system shall be capable of providing a continuous flow record in an electronic format.

The final location and method of flow monitoring shall be determined in consultation with the Consent Authority. If the Trimbells Gully site is deemed unsuitable, the location of the flow monitoring station shall be moved to another tow seepage point following consultation with the Consent Authority.

(iv) Waste Rock ANC/MPA Ratio

The consent holder shall, at monthly intervals collect representative samples of waste rock from the Coronation Waste Rock Stack.

(v) Aquatic Biological Monitoring

The consent holder shall engage a suitably qualified and experienced freshwater biologist to design and undertake an aquatic biological monitoring programme.

Biological monitoring shall be undertaken at the following sites as shown on Figure 3:

- Mare Burn at MB01 (approximately NZTM 2000: E1394176 N4980401); and
- Mare Burn at MB02 (approximately NZTM 2000: E1392955 N4980551);

Monitoring of macro-invertebrates and periphyton shall be carried out at each of the sites on one occasion during each of the following periods each year:

- December to February inclusive;
- March to May inclusive;
- June to August inclusive; and
- September to November inclusive

(unless there are insufficient flows to support any significant aquatic community). A flow reading shall be completed on each monitoring occasion.

Macroinvertebrate sampling shall include calculation and consideration of Macroinvertebrate Community Index (MCI) and its semi-quantitative variant (SQMCI).

An annual electric fishing survey shall be carried out at each of the sites (unless there are insufficient flows) during the period 1 February to 31 March inclusive. A flow reading shall be completed at each site. Within six months of the exercise of any of the consents to which this schedule is attached, a standard electric fish surveying method shall be developed in consultation with the Consent Authority and documented. This method shall be followed for every subsequent fish survey undertaken in accordance with this schedule.

All aquatic biology monitoring shall be undertaken during low or stable flows.

Components to be Monitored

1. Benthic macro-invertebrates - the taxonomic composition and abundances shall be monitored at all sites.
2. Fish - the taxonomic composition and abundances of fish shall be monitored by an electric-fishing survey at each of the sites.
3. Benthic Algae - a qualitative assessment of the height and percentage cover of dominant species of benthic algae shall be made at all sites.

OCEANAGOLD

**MACRAES GOLD PROJECT
CORONATION NORTH
SURFACE WATER
MONITORING**

● Surface water quality monitoring site
— Drainage

PROPOSED MINE ELEMENTS

- Open pit boundary
- Open pit extension boundary
- Waste rock stack
- Coal Creek dam

Map coordinates: 69,000 mE, 70,000 mE, 71,000 mE; 22,000 mN, 23,000 mN, 24,000 mN.

Map labels: COAL CREEK DAM, Coal Creek, Macraes Burn, MB02, CCMP01, MB01, Macraes Creek, Trimbels Gulch, CORONATION NORTH PIT, CORONATION NORTH WASTE ROCK STACK, CORONATION PIT EXTENSION.

Scale: 1:20,000 @ A4
Datum: MSP Local Grid
Aerial Survey Photography: 11 January 2018

Figure 2 – Coronation North Waste Rock Stack Seepage Monitoring Points

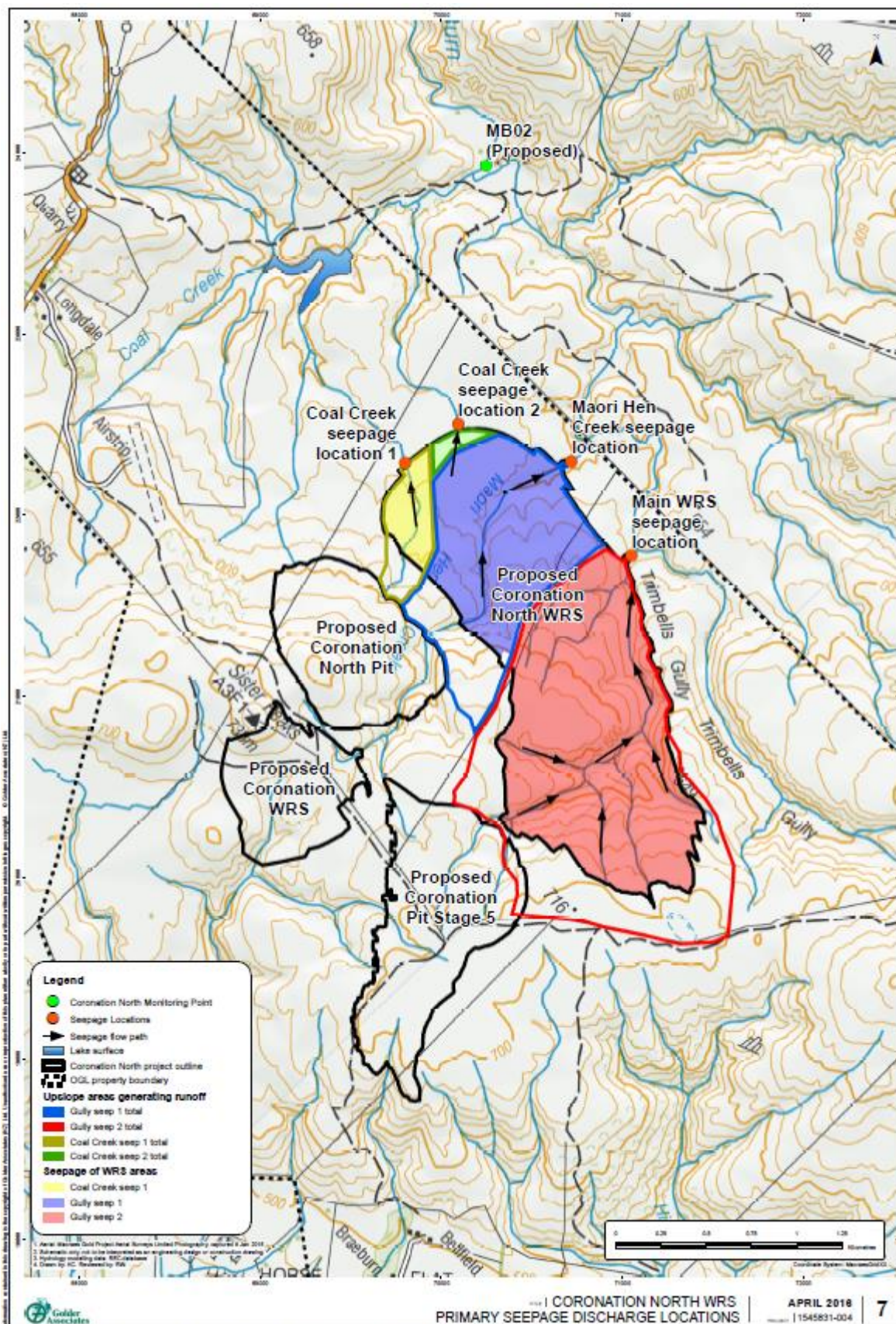


Figure 3: Aquatic Monitoring Sites

