Pilot Soil Monitoring Incentives Program: Information for participants

June 2022

Soil sampling

Each site is composed of a cluster of 7 cores - one is used for bulk density at 0 to 10 cm, 10 to 20 cm and 20 to 30 cm layers. Six are aggregated at 0 to10 cm, 10 to 20 cm and 20 to 30 cm layers and used for soil analysis, with a minimum of 4 sites per business to be sampled and analysed.

Soil testing

The Environmental Analysis Laboratory (EAL), an Australasian Soil and Plant Analysis Council (ASPAC) accredited laboratory, will conduct the soil chemical and physical analysis. Biological testing (microbial biomass, 0 to 10cm) is optional and may be outsourced through other laboratories. Soil will be analysed at three layers (0 to 10 cm, 10 to 20 cm and 20 to 30 cm) for bulk density, texture, total organic carbon (TOC), electrical conductivity (EC), pH, ammonium nitrogen, nitrate, and available phosphorus (0 to 10 cm only) and soil microbial biomass (0 to 10 cm only).

How much will it cost?

The Australian Government will contribute $275.00 + GST per site to offset the costs of soil sample collection and analysis. EAL analysis costs for each sampled site is $262.00 + GST for the 16 tests required. Additional soil analysis can be provided as a commercial arrangement between EAL and the land manager. The optional soil microbiologocial testing starts from $110.00 + GST depending on the level of testing desired, and you can include microbiological testing on as many or as few samples as desired. Soil sampling costs will vary between location, provider and the quantity of sites sampled, as will freight. Freight will vary between $10 to $40 per site, depending on the need for keeping the soil sample cool (i.e. esky & cool bricks), and if the sample is coming from remote locations. SCU will source the best value from soil samplers and the final cost will be confirmed prior to soil sampling.

Table 1. For each of the three layers the costs for the tests are:

Test	**Price each**	**Total (ex GST)**
Bulk density	$6 x 3 layers	$18
Texture	$20 x 3 layers	$60
Total organic carbon (TOC)	$24 x 3 layers	$72
Electrical conductivity (EC) and pH	$15 x 3 layers	$45
Ammonia and nitrate	$17 x 3 layers	$51
Available phosphorus (Colwell)	$16 x 1 layer	$16
Total chemical analysis	-	$262
Microbial testing (PLFA) - ***optional***	$110 x 1 layer	$110
Total chemical & microbial analysis	-	$372

Table 2 illustrates example costs less Australian Government contribution.

Table 2. Example fee schedules (note: SMIP requires minimum 4 sites per location) (all prices are ex GST)

Line item	4 sites (min. required)	20 sites	4 sites + microbiology	20 sites + microbiology
EAL Administration Charge (per batch)	$30	$30	$30	$30
EAL analysis only*	($262 x 4)	($262 x 20)	($262 x 4)	($262 x 20)
Microbiology	-	-	($110 x 4)	($110 x 20)
Freight & consumables	$40^	$100^	$80^	$200^
Soil sampling	$660^	$2,000^	$660^	$2,000^
Australian Government contribution	($275 x 4)	($275 x 20)	($275 x 4)	($275 x 20)
Total (out of pocket)	$1,778 - $1,100 = $678	$7,370 - $5,500 = $1,870	$2,258 - $1,100 = $1,158	$9,670 - $5,500 = $4,170
Per site	$170^	$94^	$290^	$209^

^ Example cost only and may vary between locations and individual businesses

* A total of 16 tests across 3 layers are conducted on samples collected from each site

You may require additional soil chemical analysis above the minimum requirements, with optional analysis recommendations for surface 0–10 cm including:

(i) exchangeable cations (calcium, magnesium, potassium & sodium; ECEC, %ESP), add $20 + GST per sample,
(ii) micronutrients (available iron, manganese, copper & zinc), add $15 + GST per sample, or
(iii) any other requirements.

Talk with EAL to get a quote.

Emission Reduction Fund

EAL analysis costs for three cores to 100 cm deep (TOC at 0 to 30cm and 30 to 100cm) are $360 + GST per site, and three cores to 30cm deep are $144 + GST. A site is defined as a stratum within the ERF program. Table 3 provides more information on carbon farming initiative (CFI) pricing and inclusions for sampling for both 0 to 30 cm and 30 cm plus. Soil sampling costs vary with depth, location and quantity, as does freight. These will be confirmed prior to commencement of soil sampling. Table 4 illustrates indicative costs less Commonwealth contribution for participation in the Program.

Table 3. Fees and inclusions for ERF sampling (note: minimum 3 cores per site/strata)

SMIP-15	**Total Organic Carbon (TOC) on Topsoils under 2021 CFI Methodology** In CFI methodology topsoil refers to the 0 - 30 cm layer, however this should be selected on individual depth layers up to 30cm in total. Includes Total Organic Carbon by LECO, gravel content, air-dry mass and gravimetric water content on the air-dry soil.	$48.00 + GST
SMIP-16	**Total Organic Carbon (TOC) on Subsoils under 2021 CFI Methodology** In CFI methodology subsoil refers to the 30+cm layer however this should be selected on a depth layer of 30-100cm only. Includes Total Organic Carbon by LECO, gravel content, air-dry mass and gravimetric water content on the air-dry soil.	$72.00 + GST

Table 4. Example fee schedules (note: ERF requires minimum 3 cores per strata) (all prices are ex GST)

Line item	3 strata (min. required)	20 strata	3 strata (min. required)	20 strata
EAL Administration Charge (per batch)	$30	$30	$30	$30
EAL analysis – 3 cores to 1m	($360 x 3)	($360 x 20)	-	-
EAL analysis – 3 cores to 0.3m	-	-	($144 x 3)	($144 x 20)
Freight & consumables	$40^	$250^	$30^	$150^
Soil sampling	$1,500^	$8,000^	$800^	$3,000^
Commonwealth contribution	($275 x 3)	($275 x 20)	($275 x 3)	($275 x 20)
Total	$2,650 - $825 = $1,825	$15,480 - $5,500 = $9,980	$1,292 - $825 = $467	$6,060 - $5,500 = $560
Per site	$608^	$499^	$156^	$28^
^ Indicative cost only and may vary between locations				

More information

Direct program enquiries and communication to:

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