KOOCANUSA SAMPLING PROGRAM OVERVIEW 2019-2020

Sample medium/ constituent(s)	Sampling frequency/ number of sites	**Preparation of QAPPs/SAPs	Collection/ processing of samples	Sample shipping	Laboratory analysis	***QA review and upload of data to WQX Portal	Comments
Nutrients	Monthly; 3 sites	**ACOE**	**ACOE**	**ACOE**	**ACOE**	**ACOE**	Frequency rationale: established baseline monitoring
Water chemistry (anions, cations, total metals)	Monthly; 3 sites	**ACOE**	**ACOE**	**ACOE**	**ACOE**	**ACOE**	Frequency rationale: established baseline monitoring
Particulate Se	4x/yr (based on hydrograph- e.g. Apr; May; late June-early July; Aug/Sept); 2 sites (Border, Forebay), 2 depths	**ACOE**	**ACOE**	**Teck**[1]	**Teck**[2]	**ACOE**	Should be collected at the same time as dissolved Se. Frequency rationale: recommended baseline sampling until Se waste stream stabilizes, then frequency could be reduced.
Dissolved Se	Monthly; 3 sites, 2 depths	**ACOE**	**ACOE**	**ACOE**	**ACOE**	**ACOE**	Same time as particulates. Frequency rationale: established baseline monitoring.
Continuous depth profiles (1-meter intervals)	Monthly; 3 sites	**ACOE**	**ACOE**			**ACOE**	Same time as dissolved/ particulate. Rationale: consistent with USGS and data was valuable. Rationale for US border location – continue consistency with long-term data set; enable Clean Water Act assessment decisions by MDEQ. Frequency rationale: recommended baseline sampling until Se waste treatment stabilizes, then frequency could be reduced.
Zooplankton	Quarterly; 3 sites	**ACOE**	**ACOE**	**ACOE**	**ACOE**	**ACOE**	Frequency rationale: consistency with baseline for past 2 years. Could be altered to a frequency of 4x/year.
Surface and benthic macroinvertebrates	2x/year	**Teck**	**Teck**	**Teck**	**Teck**	**Teck**	Frequency rationale: Captures 2 seasons, spring and fall. Requesting surface tows – consistent with past sampling and shoreline sampling is not effective on US side due to steep sandy banks. Note: two different sampling methodologies will be used for two components of the Reservoir under this item.

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Fish	Annual at Rexford fish population gillnet site	**FWP/Teck**	**Teck** in coordination with FWP	**Teck**	**Teck**	**Teck**	Frequency rationale: 2x/yr (spring and fall) consistent with Teck sampling and consistent with FWP/DEQ past sampling efforts. Locations consistent with past efforts. Target species to be discussed annually by project team.

**It is expected that QAPPs/SAPs would be developed consistent with DQOs established by project team
***It is expected that project team would establish a time frame for data upload following receipt of lab results.

[1]Propose Teck cover shipping costs via direct payment to Fed Ex.
[2]Propose Teck reimburse analytical costs directly to Laboratories. Estimated cost= $3000 to GA State for sample processing and shipping to Brooks Analytical; $3000 to Brooks Analytical for analysis