Forest Carbon Offset Protocol Vulnerability Review

Prepared for the UBC Sustainability Hub event Negotiation Innovation: Advancing Climate Action through Research and Learning, this document highlights where each protocol may be susceptible to misuse or unintended outcomes, organised by the same KPI framework used for the workshop summaries. The points flag areas that facilitators can use to spark critical discussion; they are not exhaustive audits. *Status*: DRAFT for workshop circulation; collaborators are actively reviewing and refining these notes.

Carbon Accounting Protocols

B.C. FCOP (2024)

- Director under GGIRCA is responsible for accepting project plans and issuing offset units (e.g., BC FCOP §3.4; §8.4.3), and the protocol does not mandate public reporting of enforcement actions, leaving third parties reliant on ministry discretion.
- Project plans must assert that prescribed First Nations engagement steps were completed and describe how feedback was handled (BC FCOP §3.1.6), but the protocol relies on proponent attestations and does not require publication of consultation records.
- The project-specific baseline pathway lets proponents model candidate scenarios using project data and professional judgment (BC FCOP §5.2), putting pressure on validators to interrogate optimistic assumptions.
- Financial additionality is demonstrated through project-plan assertions that offset revenue is required, supported by proponent-supplied analysis (BC FCOP §3.1; §3.8), so the review depends on the quality of project evidence.

Verra VCS (v4.7)

- Projects may keep using a retiring methodology version during Verra's grace periods if they complete validation before the deadline (VCS Standard §3.22.3), enabling proponents to lock in earlier rules when timelines allow.
- Project proponents contract and pay validation/verification bodies directly (Program Guide §2.5.3), so the independence of repeat engagements hinges on accreditation oversight and Verra's sanctioning process.
- Activity-method "positive lists" deem projects additional without project-level investment analysis (VCS Standard §3.14.2), which can favour mature technologies that appear on those lists.

Gold Standard (v2.1 suite)

- Stakeholder consultation outcomes and responses are documented by the project developer and submitted to the validator (Stakeholder Consultation

Requirements §3.6–§3.10), so external observers see only developer-supplied records.
- Suppressed-demand baselines may be applied for eligible small-scale activities (Principles & Requirements §4.1.10), amplifying credit volumes if default assumptions are optimistic.
- Projects demonstrate additionality using UNFCCC or Gold Standard tools (Principles & Requirements §4.1.48), meaning investment barriers are evaluated with developer-provided assumptions and parameters.

Climate Action Reserve FPP (v5.1)

- The Reserve administers the project review process and buffer pool through the Project Implementation Agreement and verification workflow (Forest Protocol §§3.6; 8.1), keeping oversight within the registry rather than an external regulator.
- Validation and verification teams must include Registered Professional Foresters (Forest Protocol §8.1.1), but those experts are retained by project-hired validators, not a public enforcement body.
- The default baseline for private IFM projects benchmarks carbon stocks against peer averages (Forest Protocol §6.2.1), allowing landowners already above the mean to claim storage without new interventions.
- Avoided Conversion projects rely on developer-commissioned real estate appraisals to evidence conversion risk and quantify alternative land uses (Forest Protocol §6.3), so results hinge on appraisal assumptions.

Certificates

B.C. FCOP (2024)

- Director discretion to withhold issuance is rarely exercised publicly, signalling low risk of sanction for aggressive claims.
- Contingency account percentages fixed by risk tool even if project adds insurance, potentially underfunding coverage when threats evolve.
- Limited project types may encourage proponents to stretch definitions to access favourable pathways.

Verra VCS (v4.7)

- Verra Registry allows label stacking (e.g., CCB) without preventing double marketing across voluntary compliance claims.
- Broad global eligibility and numerous methodologies invite mismatched baselines across socio-ecological contexts.
- Exclusion list for grid-connected renewables in non-LDCs can be circumvented via nested programmes or host-country designations.

Gold Standard (v2.1 suite)

- Planned Emission Reductions monetise future sequestration ex-ante, incentivising optimistic forecasts.
- Article 6 authorisations depend on host country Letters of Authorisation and subsequent reporting to the UNFCCC Article 6 database, which can introduce lags before status updates appear (GHG Product Requirements Annex A §§1.2–1.4).
- Positive list updates can lag emerging practices; contentious activities may remain eligible if framed as sustainable development.

Climate Action Reserve FPP (v5.1)

- CRT issuance can continue during ownership transitions until paperwork finalised, creating accountability gaps.
- Buffer contributions are static percentages; climate-driven disturbance trends may render historical risk tables obsolete.
- HUC-based project area rules can be gamed by transferring marginal tracts to affiliated entities before project start.

Carbon Reduction Confidence

B.C. FCOP (2024)

- Project reports can cover up to five years at a time (BC FCOP §3.7), so disturbance disclosures may wait until the next reporting cycle even though offset issuance is paused until reporting is complete.
- ISO-aligned monitoring plans reviewed only at validation/revalidation, allowing procedural drift.
- Regional risk defaults (18/27/37 %) may lag evolving disturbance regimes, leaving contingency accounts undercapitalised.
- 100-year monitoring obligation depends on project viability post-crediting; enforcement mechanisms unclear.
- Optional leakage adjustments can rely on developer studies to justify lower deductions.

Verra VCS (v4.7)

- Materiality thresholds of 5% (1% for large projects) and risk-based deferral of site visits allow some monitoring periods to be verified remotely until a mandatory visit comes due (VCS Standard §§4.1.10–4.1.14).
- Projects can lower risk ratings with aspirational mitigation plans; buffer withdrawals for reversals are opaque.
- Uncertainty deductions often use project-supplied statistics with limited auditor replication.
- Activity and market leakage analysis frequently proprietary, limiting verification.

Gold Standard (v2.1 suite)

- Optional ex-ante PER issuance exposes buyers to reversal risk if projects default before conversion to GSVERs.
- Projects self-select SDG indicators, enabling focus on easily achieved metrics while ignoring harder-to-measure externalities.
- Remote-sensing accuracy requirement lacks independent auditing; cherry-picked imagery may inflate results.
- Many SDG indicators lack quantitative baselines, enabling qualitative claims without third-party verification.
- Leakage deductions only applied in year 1; market shifts later in crediting period may be missed.

Climate Action Reserve FPP (v5.1)

- Annual monitoring data remain internal until verification; missed reporting deadlines can be reset rather than penalised.
- Buffer risk ratings reviewed only during site visits; projects can avoid updates by delaying verification.
- Reversal reporting within six months assumes rapid detection; slow-moving pests/disease could go unnoticed.
- Avoidable reversal penalties rely on CRT surrender; financially distressed operators might default.
- Inventory confidence deductions derived from project sampling; stratifications chosen by paid foresters can bias uncertainty estimates.
- Leakage decision tree simplifies complex market dynamics; 0.2 market factor may be too low for certain timber markets.

Non-Carbon Metrics

B.C. FCOP (2024)

- Ongoing First Nations engagement is tracked through project-plan and reporting assertions (BC FCOP §3.1.6), and the protocol does not establish a public registry to independently confirm those statements.

Verra VCS (v4.7)

- Stakeholder engagement documentation is compiled by the project and submitted to validators and Verra (VCS Standard §3.18; Program Guide §2.5), so external audiences rely on developer and VVB reporting.

Gold Standard (v2.1 suite)

- Safeguarding compliance is demonstrated through questionnaire responses and narrative evidence (Safeguarding Principles & Requirements §§4–5), which can default to qualitative reporting if reviewers do not request corroborating data.

Climate Action Reserve FPP (v5.1)

- Natural Forest Management criteria emphasise native species composition, structural elements, and age-class balance (Forest Protocol §3.9), with comparatively little guidance on broader biodiversity monitoring.

Notable Cross-Cutting Issues

- Reliance on project-reported data is common across all standards; detailed monitoring datasets are typically shared with validators and registries rather than published in full.
- Buffer pools and contingency accounts manage reversals based on prescribed risk tools (e.g., BC FCOP §8.4; VCS Standard §2.4; Forest Protocol §7.2), so adjustments may lag emerging climate risks unless programs refresh inputs.
- Methodology grace periods and version transitions (e.g., VCS Standard §3.22.3; Gold Standard Rule Updates) create timing windows that attentive developers may use to retain favourable rules.