

AG BMP IMPLEMENTATION VERIFICATION INDEX

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REVISED 12/12/2012

OBJECTIVES

- To generate qualitative assessments of relative confidence in BMP verification procedures for planning purposes.
- To provide a framework for assessing the relative strengths and weaknesses of alternative verification procedures for documenting BMP implementation by jurisdictions and partners.
- To provide consistency in the planning assessment of verification protocols across BMPs, sectors, and jurisdictions.

OBJECTIVES

Index can be used for internal planning development rating by jurisdictional agencies and partners.

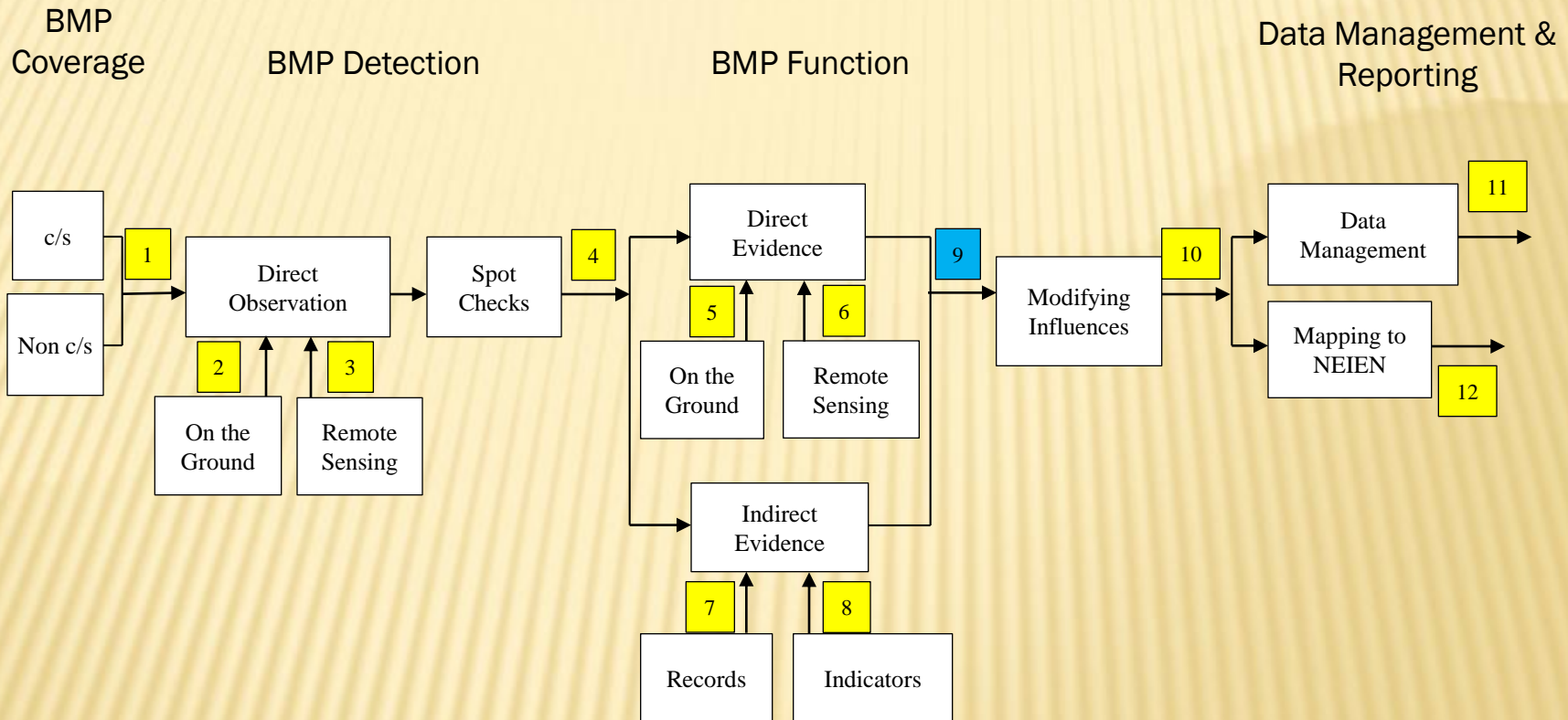
Index can also be used for independent rating by non-jurisdictional agencies and partners.

Index ratings are intended to inform decisions, not make decisions.

LIMITATIONS

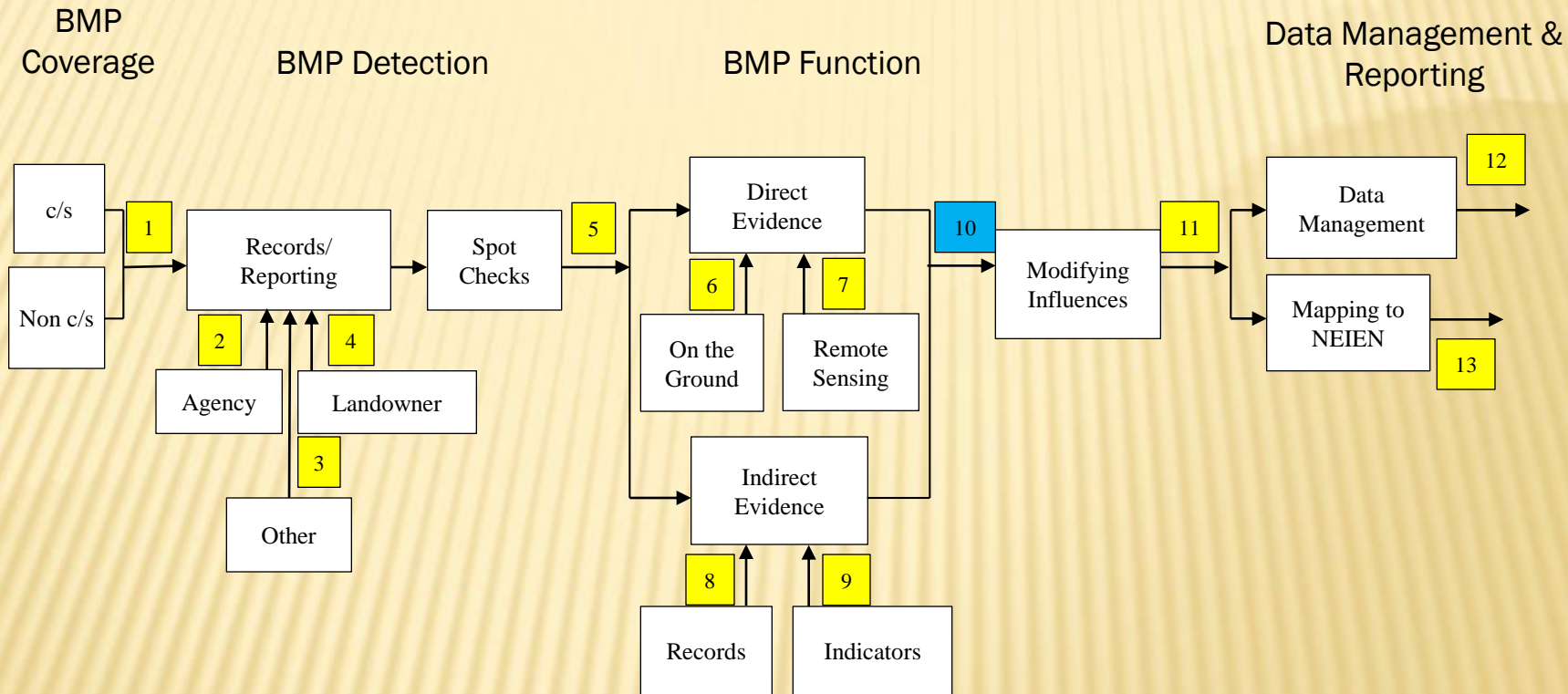
- ✖ Index scoring is largely based on best professional judgment, but could include quantitative basis as available.
- ✖ Testing of index has been limited.
- ✖ Scores do not translate directly into specific confidence levels.
- ✖ Value of ratings depends very much on the process used to develop scores.

ERROR/UNCERTAINTY- DIRECT OBSERVATION



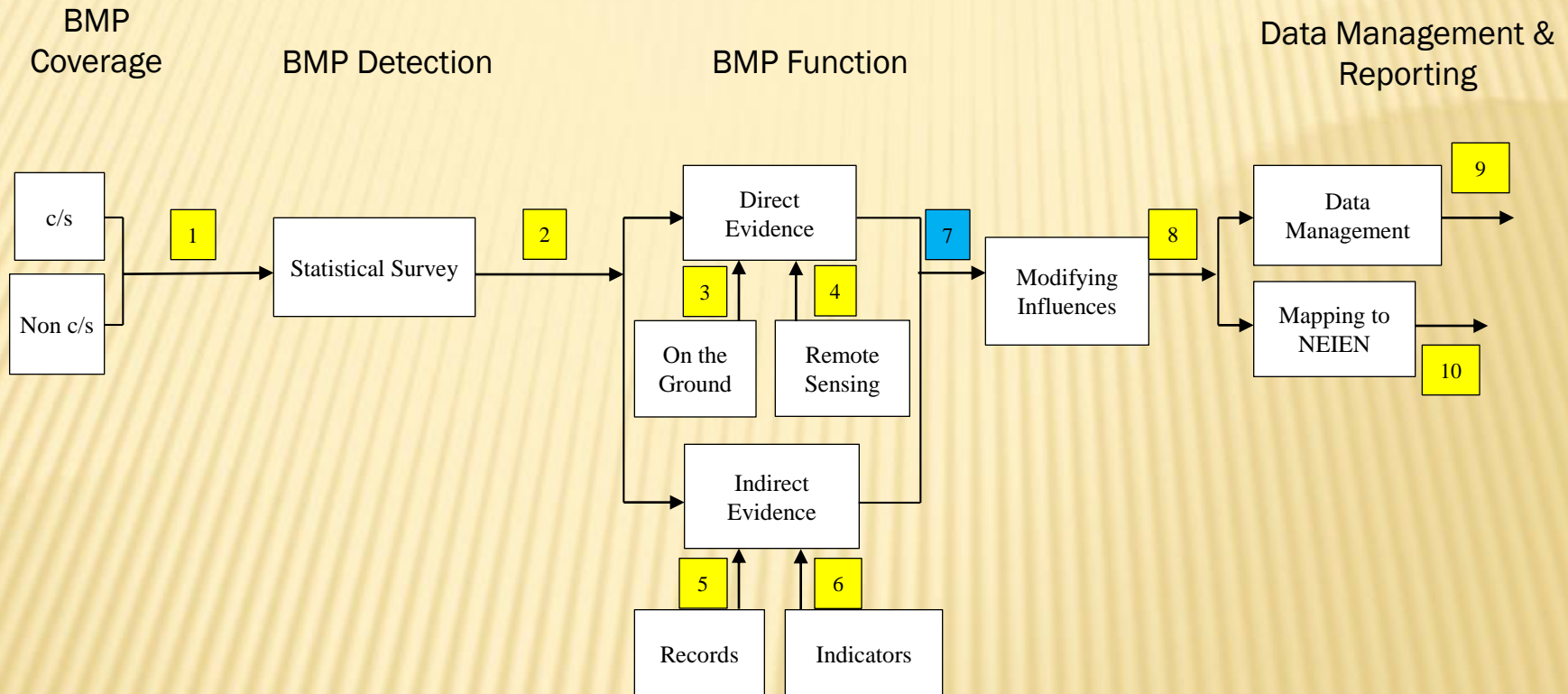
Term 9 is the overall error/uncertainty for BMP Function, integrating the errors/uncertainties of terms 5-8. For this reason it is not included in the Index.

ERROR/UNCERTAINTY- RECORDS/REPORTING



Term 10 is the overall error/uncertainty for BMP Function, integrating the errors/uncertainties of terms 6-9. For this reason it is not included in the Index.

ERROR/UNCERTAINTY- STATISTICAL SURVEYS



Term 7 is the overall error/uncertainty for BMP Function, integrating the errors/uncertainties of terms 3-6. For this reason it is not included in the Index.

INDEX SCORING

Confidence in the step identified with each* error term is rated on a scale of 1 (lowest) to 5 (highest), then multiplied by a weighting factor.

| CATEGORY | WEIGHTING |
|-----------------------------|-----------|
| BMP COVERAGE (c/s, non-c/s) | 30 |
| BMP DETECTION | 45 |
| BMP FUNCTION | 45 |
| DATA MANAGEMENT & REPORTING | 30 |
| TOTAL (Maximum) | 150 |

*Note: BMP Function terms 9, 10, and 7 for Direct Observation, Records/Reporting, and Statistical Surveys, respectively, are not included in the Index. See previous three slides.

INDEX SCORING

| SCORE* | RATING |
|---------|-----------|
| >125 | Very High |
| 101-125 | High |
| 76-100 | Moderate |
| <76 | Low |

*Possible Range is 30-150.

PROCESS

- ✖ State does internal assessment.
 - + Inclusive process encouraged
 - + Ratings/findings included in verification plan submittal package
- ✖ Independent review is next
 - + Perhaps by non-jurisdictional agencies and partners.
 - + Other jurisdictions may also use index for own scoring/rating
 - + Part of the verification plans and recommendations provided to Principals' Staff Committee

PROCESS

- ✖ Index should be applied to each verification protocol used for each BMP in each state.
- ✖ Six or more individuals should score each protocol-BMP combination.
 - + Agree on how to reconcile differences.
 - + Transparency and inclusiveness will enhance process.
- ✖ Scorers need to seek consistency in how they score protocol features across sectors, practices, and verification protocols.
 - + Note why specific ratings were given and seek consistency.

PROCESS

- ✘ Use sub-scores to identify areas of strengths and weaknesses for each protocol-BMP combination.
- ✘ Can use findings as part of evaluation of relative of confidence levels for the protocol-BMP combinations.
- ✘ Ratings only intended to inform decisions.

ILLUSTRATION OF POTENTIAL RATINGS

| Reviewer (affiliation) | Protocol 1 Score | Protocol 2 Score | Protocol 3 Score |
|---------------------------|----------------------------|---------------------------|---------------------------|
| A (state 1) | 78 (Medium) | 135 (Very High) | 115 (High) |
| B (state 2) | 82 (Medium) | 75 (Low) | 129 (Very High) |
| C (federal) | 76 (Medium) | 112 (High) | 44 (Low) |
| D (industry) | 77 (Medium) | 88 (Medium) | 65 (Low) |
| E (NGO) | 79 (Medium) | 127 (Very High) | 37 (Low) |
| F (landowner) | 85 (Medium) | 82 (Medium) | 60 (Low) |
| G (other) | 92 (Medium) | 65 (Low) | 52 (Low) |
| Score Range | 76 – 92 (Medium-Medium) | 65-135 (Low-Very High) | 37-125 (Low-Very High) |
| Score Mean | 81 (Medium) | 98 (Medium) | 72 (Low) |
| Comment | Good Agreement | Wide Disagreement | Two Different Views |
| Final Rating | Medium | ? | ? |

CAVEATS

- ✘ Need to develop consistent rules on which scoring scheme to apply, especially for hybrid verification protocols
- ✘ Document assumptions and basis for best professional judgment
- ✘ Need to agree on procedures for achieving consensus among raters
- ✘ Cross-checks between jurisdictions may be desirable to ensure comparability of ratings

Questions?