IDENTIFICATION AND EVALUATION

OF INDICATORS TO MONITOR

WILDERNESS CONDITIONS

QUESTIONNAIRE THREE

Instructions

This study has revealed that there are numerous indicators which have the potential to monitor wilderness conditions. Of the indicators selected in the preceding questionnaire, only those which were chosen by twelve or more scientists are included in this stage of the evaluation.

On the following pages, please score whether or not each of these 32 indicators meets the specific criteria by circling the appropriate response.

Wilderness Research Center
Dept. of Wildland Recreation Management
University of Idaho
Moscow, Idaho 83843

Progress

| Steps in Delphi study | Nominations are requested for experts who can serve on Delphi panel | Panel suggests indicators that meet some pre-defined criteria | Panel selects indicators that best meet the criteria from the comprehensive list | Panel evaluates which of the criteria are met by each indicator |

Indicator 1: Number of visitors per area per day

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 2: Population trend of selected wildlife/fish spp. sensitive to human presence

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────────▶ Please skip to indicator on the next page.

YES

──── Circle One ────

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 3: Fecal coliform/fecal streptococci ratio

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

⟶ Circle One ⟵

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 4: Quantity and distribution of litter (human garbage)

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ————————————————————▶ Please skip to indicator on the next page.

——— YES

Circle One

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 5:   Number of encounters with other groups per day

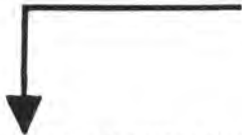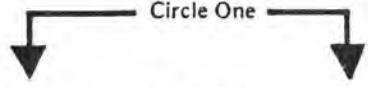Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ─────────────────▶ Please skip to indicator on the next page.

─── YES

─────── Circle One ───────

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?   YES   UNSURE   NO

Can the indicator detect a change in conditions which occurs within one season?   YES   UNSURE   NO

Can the indicator detect a change in conditions which is potentially responsive to management control?   YES   UNSURE   NO

Can the indicator detect the amount of change in conditions?   YES   UNSURE   NO

Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?   YES   UNSURE   NO

Can the indicator be measured by field personnel using simple equipment and sampling techniques?   YES   UNSURE   NO

With training, will different observers collect the same information using this indicator?   YES   UNSURE   NO

Can the indicator detect a change in conditions which can be correlated with a specific type of human use?   YES   UNSURE   NO

Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?   YES   UNSURE   NO

Indicator 6: Vegetation ground cover loss in trail corridors

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 7: Number and distribution of campsites per area

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────────▶ Please skip to indicator on the next page.

└─── YES

──── Circle One ────

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 8:   Percent or area of exposed mineral soil on campsites

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ─────────────────────▶ Please skip to
                                            indicator on
                                            the next page.

└─── YES

─── Circle One ───

Can the indicator detect a change in conditions
which cannot be reversed in five seasons with reason-
able management effort?   YES   UNSURE   NO

Can the indicator detect a change in conditions
which occurs within one season?   YES   UNSURE   NO

Can the indicator detect a change in conditions
which is potentially responsive to management
control?   YES   UNSURE   NO

Can the indicator detect the amount of change
in conditions?   YES   UNSURE   NO

Can the indicator detect a reduction in the
area's ability to provide a wilderness experience
(defined as a primitive and unconfined type of
recreation or having outstanding opportunities
for solitude)?   YES   UNSURE   NO

Can the indicator be measured by field personnel
using simple equipment and sampling techniques?   YES   UNSURE   NO

With training, will different observers collect
the same information using this indicator?   YES   UNSURE   NO

Can the indicator detect a change in conditions
which can be correlated with a specific type of
human use?   YES   UNSURE   NO

Can the indicator produce information of
acceptable accuracy which is worth the expense
of measurement?   YES   UNSURE   NO

Indicator 9: Firering density

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 10: Visitor perception of being in an environment untrammeled by man

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?   YES   UNSURE   NO

Can the indicator detect a change in conditions which occurs within one season?   YES   UNSURE   NO

Can the indicator detect a change in conditions which is potentially responsive to management control?   YES   UNSURE   NO

Can the indicator detect the amount of change in conditions?   YES   UNSURE   NO

Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?   YES   UNSURE   NO

Can the indicator be measured by field personnel using simple equipment and sampling techniques?   YES   UNSURE   NO

With training, will different observers collect the same information using this indicator?   YES   UNSURE   NO

Can the indicator detect a change in conditions which can be correlated with a specific type of human use?   YES   UNSURE   NO

Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?   YES   UNSURE   NO

Indicator 11: Ambient concentration of selected chemicals in air (e.g., SO_2, NO_2, O_3)

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────▶ Please skip to indicator on the next page.

───── YES

────── Circle One ──────

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 12: Distribution of selected wildlife/fish spp. sensitive to human presence

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────────► Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 13: Range condition and trend in grazed meadows

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ━━━━━━━━━━━━▶ Please skip to indicator on the next page.

YES

──────────── Circle One ────────────

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?

| | YES | UNSURE | NO |

Can the indicator detect a change in conditions which occurs within one season?

| | YES | UNSURE | NO |

Can the indicator detect a change in conditions which is potentially responsive to management control?

| | YES | UNSURE | NO |

Can the indicator detect the amount of change in conditions?

| | YES | UNSURE | NO |

Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?

| | YES | UNSURE | NO |

Can the indicator be measured by field personnel using simple equipment and sampling techniques?

| | YES | UNSURE | NO |

With training, will different observers collect the same information using this indicator?

| | YES | UNSURE | NO |

Can the indicator detect a change in conditions which can be correlated with a specific type of human use?

| | YES | UNSURE | NO |

Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?

| | YES | UNSURE | NO |

Indicator 14:   Percent of total area disturbed by campsites

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ——————————————▶ Please skip to
indicator on
the next page.

YES

——————— Circle One ———————

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 15: Number of pack animals per trail per day

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort? — YES UNSURE NO

Can the indicator detect a change in conditions which occurs within one season? — YES UNSURE NO

Can the indicator detect a change in conditions which is potentially responsive to management control? — YES UNSURE NO

Can the indicator detect the amount of change in conditions? — YES UNSURE NO

Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)? — YES UNSURE NO

Can the indicator be measured by field personnel using simple equipment and sampling techniques? — YES UNSURE NO

With training, will different observers collect the same information using this indicator? — YES UNSURE NO

Can the indicator detect a change in conditions which can be correlated with a specific type of human use? — YES UNSURE NO

Can the indicator produce information of acceptable accuracy which is worth the expense of measurement? — YES UNSURE NO

Indicator 16: Air visibility

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────────▶ Please skip to indicator on the next page.

───── YES

─────── Circle One ───────

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 17:   Percent of ground cover loss on campsites

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ————————————————▶ Please skip to indicator on the next page.

——— YES

——— Circle One ———

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?   YES   UNSURE   NO

Can the indicator detect a change in conditions which occurs within one season?   YES   UNSURE   NO

Can the indicator detect a change in conditions which is potentially responsive to management control?   YES   UNSURE   NO

Can the indicator detect the amount of change in conditions?   YES   UNSURE   NO

Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?   YES   UNSURE   NO

Can the indicator be measured by field personnel using simple equipment and sampling techniques?   YES   UNSURE   NO

With training, will different observers collect the same information using this indicator?   YES   UNSURE   NO

Can the indicator detect a change in conditions which can be correlated with a specific type of human use?   YES   UNSURE   NO

Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?   YES   UNSURE   NO

Indicator 18:   Number of groups per area, trail or river per day

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 19: Number of other groups encountered on trails or rivers per day

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

Please skip to
indicator on
the next page.

NO ⟶

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 20: Number of other groups encountered while at campsite

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────────────▶ Please skip to indicator on the next page.

YES

─────── Circle One ───────

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 21: Cross-sectional area of net soil loss on trails

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ——————————————————▶ Please skip to indicator on the next page.

—— YES

		Circle One	
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 22: Percent of total area which is trailless

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────▶ Please skip to indicator on the next page.

YES

─── Circle One ───

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort? YES UNSURE NO

Can the indicator detect a change in conditions which occurs within one season? YES UNSURE NO

Can the indicator detect a change in conditions which is potentially responsive to management control? YES UNSURE NO

Can the indicator detect the amount of change in conditions? YES UNSURE NO

Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)? YES UNSURE NO

Can the indicator be measured by field personnel using simple equipment and sampling techniques? YES UNSURE NO

With training, will different observers collect the same information using this indicator? YES UNSURE NO

Can the indicator detect a change in conditions which can be correlated with a specific type of human use? YES UNSURE NO

Can the indicator produce information of acceptable accuracy which is worth the expense of measurement? YES UNSURE NO

Indicator 23: Mean concentration of selected nutrients in water (e.g., nitrates, sulfates, phosphates)

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 24: Fecal coliform count

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ——————————————→ Please skip to indicator on the next page.

———— YES

———— Circle One ————

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 25: Length of human trails per unit area

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 26: Abundance of selected wildlife/fish spp. sensitive to human presence

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 27: Exotic plant spp. distribution and density over entire area

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ⟶ Please skip to indicator on the next page.

YES

Circle One

Question	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 28: Concentration of groups per area

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ─────────────────────────► Please skip to indicator on the next page.

YES

	Circle One	
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES UNSURE	NO

Indicator 29: Distribution of visitor use over week or season

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ————————————————→ Please skip to indicator on the next page.

┌——— YES

↓

┌——— Circle One ———┐

↓ ↓

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 30:   Number of social trails (visitor-created) associated with campsites

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ──────────────────────▶ Please skip to
indicator on
the next page.

YES

─── Circle One ───

	YES	UNSURE	NO
Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 31: Number of multiple trails in meadows or wet areas

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ————————————————➤ Please skip to indicator on the next page.

YES

————————————————————————— Circle One —————————

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Indicator 32: Presence of herbicides/pesticides in water

Do you feel you have enough knowledge to evaluate this indicator?

Circle One

NO ───────────────────────────────▶ Please skip to
indicator on
the next page.

YES

─── Circle One ───

Can the indicator detect a change in conditions which cannot be reversed in five seasons with reasonable management effort?	YES	UNSURE	NO
Can the indicator detect a change in conditions which occurs within one season?	YES	UNSURE	NO
Can the indicator detect a change in conditions which is potentially responsive to management control?	YES	UNSURE	NO
Can the indicator detect the amount of change in conditions?	YES	UNSURE	NO
Can the indicator detect a reduction in the area's ability to provide a wilderness experience (defined as a primitive and unconfined type of recreation or having outstanding opportunities for solitude)?	YES	UNSURE	NO
Can the indicator be measured by field personnel using simple equipment and sampling techniques?	YES	UNSURE	NO
With training, will different observers collect the same information using this indicator?	YES	UNSURE	NO
Can the indicator detect a change in conditions which can be correlated with a specific type of human use?	YES	UNSURE	NO
Can the indicator produce information of acceptable accuracy which is worth the expense of measurement?	YES	UNSURE	NO

Thank you for the time and effort you have put into these questionnaires. Our goal in this process has not been to oversimplify a very complex topic. Rather, with your help, we hope to focus attention on those indicators which offer a high potential to monitor wilderness conditions. You will receive a report this fall which will include the rank order of all suggested indicators as well as the evaluation of these top 32 indicators.