Restorative Landscapes: Advancing Visitor Wellbeing Metrics in Regenerative Destination Planning

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Session Overview

National parks and protected areas are increasingly recognized not only as biodiversity strongholds but as essential therapeutic landscapes that support human health and wellbeing. The concept of restorative effects, the psychological and physiological benefits people derive from immersive nature experiences, has emerged as a critical yet underexplored dimension of regenerative destination planning. While regenerative tourism literature has advanced frameworks for ecological restoration, the parallel imperative of human restoration within natural settings remains theoretically underdeveloped and methodologically fragmented.

This session addresses this gap by centering visitor wellbeing as a core metric for regenerative destination success. Drawing upon attention restoration theory (Kaplan & Kaplan, 1989), stress reduction theory (Ulrich et al., 1991), and emerging positive tourism paradigms, we conceptualize national parks and protected areas as co-creative spaces where ecosystem health and human flourishing mutually reinforce one another. A restored ecosystem enables restorative experiences; conversely, visitors who experience profound restoration develop stronger place attachment, pro-environmental commitments, and stewardship behaviors, creating good cycles that underpin genuine destination regeneration.

The session advances regenerative destination planning through three conceptual contributions:
• From carrying capacity to restorative capacity: Moving beyond visitor number thresholds to assess the potential of natural settings to deliver psychological and physiological wellbeing benefits without degradation of the experiential or ecological quality
• From extractive metrics to wellbeing indicators: Operationalizing restorative effects as measurable destination assets, integrating psychometric scales (Perceived Restorativeness Scale), physiological measures (heart rate variability, skin conductance), and behavioral analytics into destination monitoring frameworks
• From passive consumption to active restoration: Reconceptualizing visitor experiences as reciprocal exchanges where tourists receive wellbeing benefits while contributing to conservation through enhanced stewardship mindsets and behaviors

Aligned with TTRA 2027's Human-Centered Futures in Smart and Regenerative Ecosystems, this session positions restorative landscapes as both a research frontier and a practical planning imperative for national parks and protected areas worldwide.

Key Themes and Topics

1: Theoretical Foundations
• Integrating restoration theory with regenerative tourism paradigms
• Conceptual models linking ecosystem health to human wellbeing
• Critical examinations of "therapeutic landscapes" in national parks

2: Measuring Restorative Effects
• Psychometric approaches: Perceived Restorativeness Scale (PRS), Restoration Outcome Scale (ROS)
• Physiological methods: heart rate variability, electrodermal activity, cortisol measures
• Mixed-method designs combining subjective and objective wellbeing indicators
• Longitudinal tracking of restoration outcomes and behavioural change

3: Restorative Experiences in National Parks
• Comparative studies across ecosystem types (forests, mountains, wetlands, coastal)
• Visitor segmentation: who benefits, how, and under what conditions?
• The role of interpretation, infrastructure, and site design in facilitating restoration
• Cultural variations in restorative perceptions and preferences

4: Planning and Design Implications
• Integrating restorative capacity into national park management plans
• Trail and facility design for optimal restorative experiences
• Balancing visitor access with ecological sensitivity
• Temporal planning: seasonal and diurnal variations in restorative potential

5: From Restoration to Stewardship
• How restorative experiences shape pro-environmental attitudes and behaviours
• Visitor donation and citizen science participation as restoration outcomes
• Building long-term conservation commitment through transformative nature experiences

6: Methodological Innovations
• Mobile EEG and real-time restoration tracking
• Eye-tracking and visual attention in natural settings
• Digital twins for simulating restorative landscape design
• Big data approaches to visitor wellbeing analytics