

Guidance Document: LCD and the iCASS Platform

Background

The essential attributes, norms, and tenets of LCD, as identified in the iCASS Platform and described in this guidance document, are products of research conducted by an interagency/organization authorship that is currently drafting a manuscript for publication in *Landscape and Urban Planning*. The authorship consists of representatives from two Landscape Conservation Cooperatives, three federal land management agencies, one state fish and wildlife agency, and one non-profit organization. The manuscript uses international and national policies to articulate a vision, goal, and objectives for LCD – a transformational adaptation approach to achieve environmental sustainability – and introduces the iCASS Platform.

Manuscript Summary

Working Title: *Landscape Conservation Design and the iCASS Platform: a transformational adaptation approach to environmental sustainability*¹

- *Landscape conservation* is a transformational adaptation strategy that stems from self-organized, communities of practice and non-conventional “actors” taking an integrated governance approach to protect landscapes – mosaics of interacting social-ecological systems – from loss or harm during change (Campellone et al., *in development*).
- *Landscape conservation design (LCD)* is a collaborative, transdisciplinary adaptation process that integrates societal values and multi-sector interests with the best-available science to assess spatial and temporal patterns, vulnerabilities, risks, and opportunities; and develops spatially-explicit products and coordinated strategies that reduce biodiversity and ecosystem service vulnerabilities, maintains ecosystem resilience, and increases social-ecological systems' sustainability for future generations (Campellone et al., *in development*).
- *iCASS* is an innovative systems platform for implementing landscape conservation design (Campellone et al., *in development*).

iCASS: An Innovation Systems Platform for Implementing LCD

- **i**: Integrated + Interdisciplinary + Informative + Inclusive + Iterative = **Innovation** (Innovation: the engine that drives transformational adaptation)
- **C** = Convening Stakeholders
- **A** = Assessing Conditions
- **S** = Spatial Design
- **S** = Strategy Design

¹ Campellone, R., Chouinard, T., Fisichelli, N., Gallo, J., Lujan, J., McCormick, R., Miewald, T., Murry, B., Pierce, D.J.

Essential Attribute²: C = Convening Stakeholders

Goal: Integrated governance – fostered through multi-jurisdiction/multi-sector stakeholder communication, learning, and decision-making – facilitates development of landscape conservation designs that safeguard resilient and sustainable social-ecological systems for future generations.

Essential Attribute: A = Assessing Conditions

Goal: *Integrated assessments – developed by interdisciplinary research teams – facilitates stakeholder communication and understanding of social-ecological systems and their patterns, vulnerabilities, risks, and opportunities spatially and temporally.*

Essential Attribute: S = Spatial Design

Goal: *Spatial designs (i.e., technical blueprints) – developed by teams using the best-available technology – demonstrate the geographical form and socio-biophysical properties of the landscape required to achieve stakeholders' interests over time and space, expedite social learning, facilitate identification of stakeholders' priorities, and reduce vulnerability.*

Essential Attribute: S = Strategy Design

Goal: *Strategy designs (i.e., strategic frameworks) – developed through the collaborative efforts of multi-jurisdiction/multi-sector decision makers – reflect a coordinated approach towards implementation of a spatial design that reduces biodiversity and ecosystem service vulnerabilities, maintains ecosystem resilience, and increases social-ecological systems' sustainability for future generations.*

² An inherent characteristic that is critical to success.