

Clarifying the role of the resist–accept–direct framework in supporting resource management planning processes

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Article impact statement: The resist–accept–direct framework is designed to enhance, rather than supplant, existing resource management planning processes.

KEY WORDS

Adaptive management, climate change adaptation, communication, conservation, ecological transformation, planning

INTRODUCTION

The resist–accept–direct (RAD) framework was developed by and for conservationists, resource managers, and climate change adaptation practitioners and scientists to foster strategic and collaborative thinking about responses to anthropogenic ecological change (Lynch et al., 2021; Schuurman et al., 2020, 2022; Thompson et al., 2021). Prevailing management approaches, which emphasize managing for ecosystem stationarity and maintaining historical ecological conditions or dynamics (e.g., Landres et al., 1999), are increasingly inadequate in this time of rapid, directional change (Jackson, 2021; Schuurman et al., 2022). Resisting anthropogenic environmental change has been the traditional approach in the resource management community. However, thinking beyond persistence alone is critical, given that preservation of all ecological components and processes in any given place will not be possible as the environment in which they developed transforms. This change in thinking constitutes a paradigm shift that calls for new tools and approaches, and the RAD framework is gaining traction in conservation and resource management agencies (e.g., the United States Department of the Interior [USDOI, 2021], the National Park Service [NPS, 2021, 2024], Australia's Parks Victoria Board [PVB, 2022], and South African National Parks [van Wilgen-Bredenkamp et al., 2024]).

The RAD framework helps managers navigate transformative ecological change by defining a broad decision space that encompasses managing for persistence to managing for change and includes resisting (R) ecological trajectories moving away from historical or natural conditions; consciously accepting (A) such change; and directing (D) ecological trajectories toward preferred new conditions. By fostering deliberative thinking about options that include accepting and directing change, RAD is intended to help managers expand their thinking beyond traditional resistance approaches. By providing a structured way to consider a wide, even novel, set of options, RAD supports a necessary shift in perspective, helping managers respond to often-rapid ecological transformations.

The RAD framework is also designed to promote collaboration and communication among diverse partners, stakeholders, and rights holders in planning and decision-making processes. The framework's simple, 3-part framing focuses on manager action and establishes a common, policy-neutral vocabulary that can foster joint or complementary actions across landscapes and jurisdictions and coherency in climate-informed goals (Magness et al., 2022; Schuurman et al., 2022; Ward et al., 2023). In sum, RAD is intended to be a simple framework that promotes exploration of a wider decision space while providing straightforward, intuitive concepts and vocabulary

that foster interdisciplinary collaboration and communication in adaptation planning processes.

RAD FRAMEWORK'S RELATIONSHIP WITH CONSERVATION AND RESOURCE MANAGEMENT PLANNING PROCESSES

Although intended to be a modest framework for expanding the management decision space, RAD is sometimes conflated with a stand-alone planning and decision-making process. However, by itself, RAD is not a complete planning process. Instead, the framework—developed by multiple U.S. federal agencies and partners in recognition that each organization has its own mission, policies, and planning approaches—was intentionally designed for integration into a broad range of planning and decision-making processes (Figure 1). The NPS, for example, uses Planning for a Changing Climate (NPS, 2021), a 6-step climate change adaptation process, whereas the U.S. Forest Service uses a 5-step process in their *Adaptation Workbook* (Swanson & Janowiak, 2012; Swanson et al., 2016) for site-level planning. Other organizations use similar guidance and processes, such as Climate-Smart Conservation (Stein et al., 2014), the PrOACT decision model (Hammond et al., 1998), the ACT framework (Cross et al., 2012), the European Adaptation Support Tool (Pringle et al., 2015), and Open Standards for the Practice of Conservation (CMP, 2020). All are consistent with the theory and practice of adaptive management (Williams, 2011), a “special case of structured decision-making, applicable when the decision is iterated over time or space” (Lyons et al., 2008, p. 1684). Lynch et al. (2022) describe 3 case studies that highlight RAD application in a generic adaptive management context.

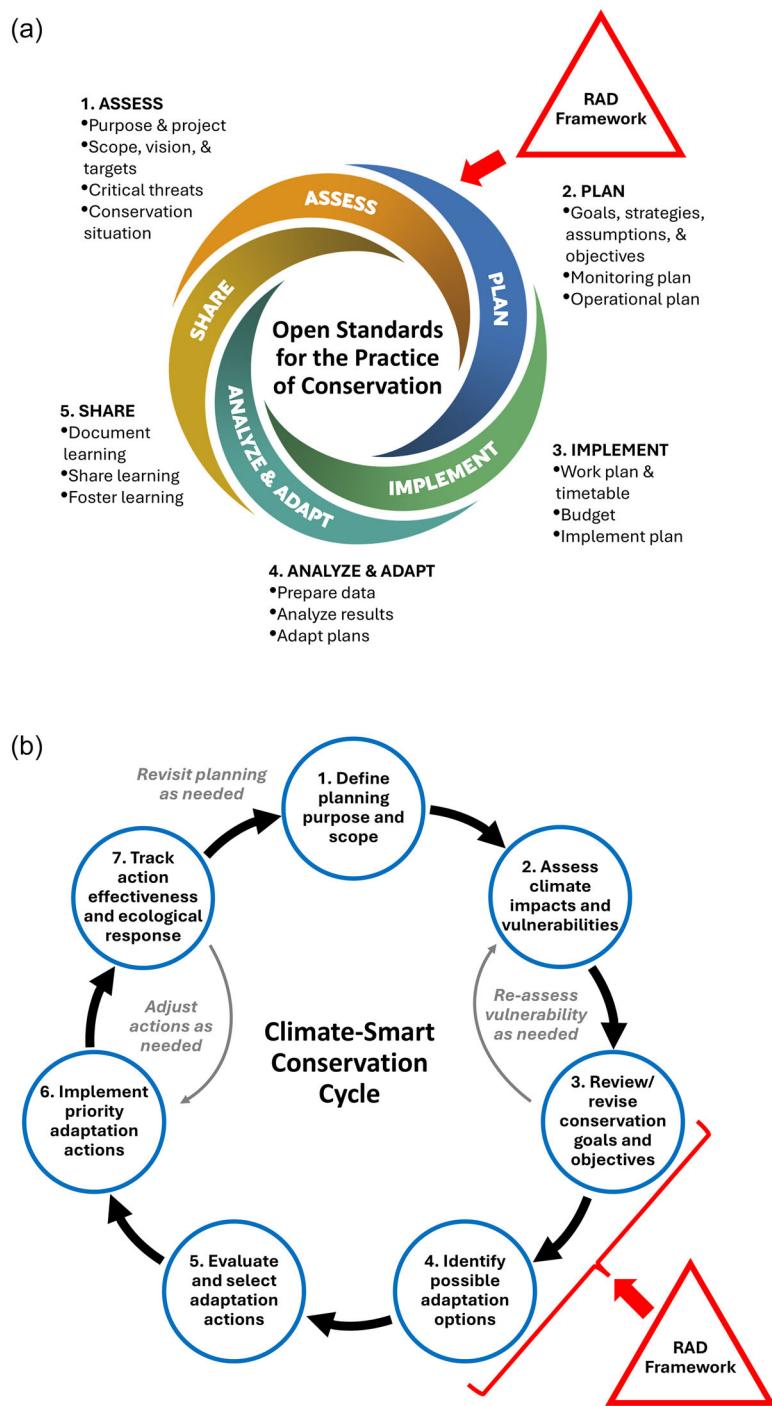
The key to effective RAD-based resource management is understanding that the RAD framework is designed to fit within—rather than to supplant—an adaptive management process (e.g., Schuurman et al., 2024). Thus, downstream stages in cyclical planning and decision-making processes (e.g., considering trade-offs, selecting options, implementing actions) occur after the RAD framework has been used to develop adaptation options (Figure 1).

CONCLUSION

The RAD framework supports a fundamental shift in how managers clarify intent and generate options for resource stewardship in a changing, warming world. As a straightforward and intuitive tool, the framework can be readily integrated in existing planning processes to explore the full spectrum of management



FIGURE 1 The resist–accept–direct (RAD) framework, which supports existing adaptive-management-based planning and decision-making processes, principally during the design step, as illustrated for (a) Open Standards for the Practice of Conservation (CMP, 2020) and (b) the Climate-Smart Conservation Cycle (Stein et al., 2014). Figures adapted from CMP (2020) and Stein et al. (2014).



options. Further, by providing a “common language” (Schurman et al., 2022, p. 26), the intentional simplicity of RAD promotes collaboration and clear communication among organizations with different mandates, policies, and planning and decision-making processes, thus promoting adaptation from local to landscape scales.

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