



Healthy Landscapes Program Quicknote #51

July, 2020 By: David Andison

What is EBM - to the HLP?

Ecosystem-Based-Management (EBM) is an alternative, and for many a more sustainable management paradigm for natural resource management. Debates over definitions of EBM continue to this day within and beyond the literature (see HLP Quicknote #50). Thus it is more important to *clearly* define EBM, as opposed to *correctly* so.

To remain as objective as possible, the HLP adopted a definition of EBM that draws on the seminal (i.e., pre 2000) literature from well recognized experts (e.g., Ed Grumbine, Reed Noss, Jerry Franklin, etc.). Despite several modest differences, the thinking from the original EBM experts can be summarized into 12 key elements of EBM, gathered into four main pillars (see adjacent Figure).

Types and scales of NRV Better Standard Components Components

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The first EBM pillar captures three *Strategy* elements. For example, EBM shifts the management focus from individual activities to shared outcomes, and from managing ecosystem pieces to wholes. More importantly, EBM shifts the way in which NRV know ledge are used - from decision-making filters to the very foundation of planning.

Addressing answers to the *Strategy* pillar dictates the nature of many of the other EBM elements. Case in point is the importance of the *Partners* pillar. If we are managing whole ecosystems for shared outcomes, then that requires significant and new partnerships. It also means shifting from individual, value-based management plans to communal landscape management plans for specific geographic areas.

EBM changes to strategy and partnerships also require a new set of tactical tools, captured here by the **Process** EBM pillar. In other words, how can we make this paradigm shift a reality within a management framework? In this case, EBM involves gathering and coordinating all possible operational tools as necessary (e.g., harvesting, prescribed fire, restoration) in a single coordinated "disturbance plan", taking full advantage of opportunities to address unanswered questions by integrating monitoring with management and research, and investing in and accepting a range of knowledge acquisition vectors, including classic "western" research and Traditional Ecological Knowledge (TEK).

The fourth and final EBM pillar is (NRV) *Benchmarks*. There is little debate that one of the cornerstones of EBM is the use of NRV knowledge/data is to help guide management activities. Most, if not all forest management (FM) jurisdictions in Canada, and many provincial and National parks, now include some level of coarse-filter requirement for forest management planning. Note that the HLPL version of NRV not only includes the number and scale of new metrics, but how variation is accounted for, and how and by whom NRV targets are defined.

The HLP version of EBM represents a relatively high standard for forest management. For example, most, if not all FM agencies in Canada currently focus only on the *Benchmark* elements. However, the seminal literature, combined with experiences with EBM from other natural resource management agencies, suggests that EBM is a package deal. Moreover, although the 12 elements introduced here may seem daunting as a package, as with any new paradigm, they are not meant to be applied and evaluated as strict (i.e., yes or no) rules, but rather something to which we aspire. In other words, *doing EBM* is not defined by a universal set of standards, but rather a specific, shared journey. The 12 EBM elements proposed here offer objective and practical benchmarks for evaluating the details of that journey.