

ERBA Species Committee Discussion Summaries

I. INTRODUCTION :

This document reflects the key concepts that emerged from a discussion series the ERBA Species Committee held over June 2021. The discussions built on a set of core principles that ERBA recommended to the Department of Interior (DOI) and U.S. Fish and Wildlife Service (FWS) to guide development of a mitigation rule. ERBA shares this document to offer insight into mitigation practitioner concerns and prompt discussion/reaction from policy makers on these fundamental elements of conservation mitigation policy.

In general, we believe that a rule on third party conservation mitigation mechanisms can complement USFWS efforts to recover species protected under the Endangered Species Act (ESA) in the following manners:

- *Provide a viable tool to offset any residual impacts to species after other approaches (e.g. avoidance, minimization) have been exhausted;*
- *Provide a strong incentive for habitat based mitigation;*
- *Provide a mechanism to implement landscape/range-wide scale mitigation;*
- *Implement mitigation actions that benefit species recovery in advance of project impacts; and*
- *Assist FWS establishment of mitigation standards for individual species to ensure that mitigation efforts consistently provide durable, additional and advanced species benefits*

II. BENEFITS OF STANDARDIZED MITIGATION FOR SPECIES CONSERVATION GOALS

A. Viable tool to offset¹ for residual impacts to species after other measures have been exhausted

Effective mitigation for imperiled species should be pursued once avoidance and minimization measures are exhausted. This is consistent with the commonly termed “mitigation hierarchy” and federal mitigation frameworks under NEPA and the CWA. As the last step in the hierarchy, mitigation should compensate for permittees’ residual, unavoidable impacts resulting in a “take” of an imperiled species by providing habitat-based conservation for the imperiled species. We support the following descriptions for the stages in the hierarchy:

A. *Avoidance* is a feature of project design – such as size, location, or activity – that prevents incidental take that would otherwise occur in an alternative design. Examples: a smaller project, a different site or layout for the project, or substitute activities within the project.

B. *Minimization* is a feature of project design that reduces the magnitude or risk of incidental take to a practical minimum for the purposes of the project. Examples: less risky

¹ Because “mitigation” is still the commonly accepted term used by our intended audience, we use it throughout this document; but, we recommend use of the term “offset” as a more precise and accurate description than “compensatory mitigation.” See the Terminology section below.

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technology (such as fish ladders or slower turbines); or, best management practices to postpone or suspend activities when doing so reduces the amount of take.

C. *Mitigation* is an action—often independent of project design and operation—to offset remaining incidental take (e.g., habitat preservation or improvement for, or repopulation of the species taken). Examples: a purchase of credits from a bank or in-lieu fee program, or completion of an approved mitigation project for the proposed project.

Partially capturing this understanding of mitigation, ERBA supports the 2016 Policies' definition of "compensation" as "replacing or providing substitute resources or environments (see 40 CFR 1508.20) through the restoration, establishment, enhancement, or preservation of resources and their values, services, and functions" and "after all appropriate and practicable avoidance and minimization measures have been applied."

B. Establish a Strong Incentive for Habitat-based Mitigation

Building on this compensation definition, ERBA recommends that FWS establish greater specificity around which activities qualify as compensatory mitigation and a preference for those activities most beneficial to the species. As with all mitigation, science should underpin the ecological requirements and preferences.

In the species context, habitat-based activities, like restoration of critical habitat, typically provide imperiled species the highest ecological benefit. When a species' recovery plan indicates that habitat loss is a threat to the species, then the FWS should implement a strong preference for habitat-based conservation. Endangered and threatened species need protected land/aquatic habitat to stabilize and thrive, but increasingly compete with development and climate change pressures for a vanishing land base. Generally, when used as a tool alongside avoidance, minimization, and other conservation strategies, habitat-based mitigation best serves the conservation goals of species.

To incentivize the dedication of more land towards conservation measures, the FWS should direct permittees to first pursue available habitat-based mitigation options as the preferred mitigation for an imperiled species' take. Non habitat-based mitigation measures like translocation of species and research should only be permitted in special circumstances, e.g. when translocation is essential to saving the species. Some actions that alone are not habitat based, like translocation or removal of connectivity barriers, should only qualify as habitat-based mitigation if the components of a real estate site protection instrument and endowment are added to the species' new habitat/corridor area.

The Service has previously used the term "other mitigation" to refer to captive rearing, reduction of mortality off-site, and research as "mitigation." These and other similar activities are forms of conservation, but not in-kind compensatory mitigation. Captive rearing is not mitigation unless individuals are released to the wild to establish repopulation credits. Reduction of mortality off-site is a form of minimization in the hierarchy that could be designed into a project, but is not qualifying compensatory mitigation. We support the perspective of some policy makers, shared in discussions, that research is not preferred mitigation because

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the impact to the species necessitates a direct tangible offset benefit for the species, which research alone does not provide.²

Based on the discussion above, ERBA recommends that non habitat-based mitigation options are pursued only in conjunction with and complementary to habitat-based mitigation measures, and that they should never supplant a habitat-based mitigation option that is available as an alternative. For example, research may be incorporated into habitat-based mitigation as a component of a project's long-term management plan, or research may be pursued to inform a project's siting to reduce performance risk. If advance mitigation credits from habitat-based mitigation are not available to a permittee, then the FWS should work through all mitigation mechanisms to best meet the permittees' needs, rather than allowing the permittee to move on to non habitat-based activities as sufficient mitigation.

To guide implementation, ERBA recommends that the FWS issue a publicly available record that documents their basis for decisions on certain mitigation measures. This practice would: ensure that FWS decision making on mitigation is transparent; guide FWS' decisions to adhere to the preference; and provide necessary justification when non habitat-based activities are pursued as a component of a permittee's mitigation.

C. Mechanism to Implement Landscape/Range-wide Scale Mitigation

Conservation mitigation banks and ILFs should be viewed by the FWS as tools to combat the pervasive problem of habitat fragmentation that results in a "death by a thousand cuts" scenario for many species. Mitigation standards and conservation strategies should account for where mitigation is most needed by the species. Accordingly, the service areas for banks and ILFs should reflect a range-wide analysis and scope. This landscape scale/range-wide approach may also allow out-of-kind mitigation for the type of impacted habitat, if the habitat protected under the mitigation project addresses the species' greatest need. Landscape scale approach does not mean disregarding the nexus between a species' take and offset, rather it is a concept that promotes an appropriately broader lens for more effective mitigation investments and decisions.

In-kind and out-of-kind mitigation for species.

In wetland mitigation, wetland-for-wetland offsets are in-kind and wetland-for-stream (or vice versa) offsets are out-of-kind. In species mitigation, species "take" is quantified in terms of individuals lost, and often calculated based on the amount of habitat affected. Compensatory mitigation for imperiled species – habitat preservation or improvement, or repopulation – must be in-kind, however this may entail out-of-kind mitigation of the type of impacted habitat. See approach in 2016 Policy Section 5.2.

D. Actions Benefit Species in Advance of Project Impacts

² See NCTC Conservation Bank Training Course, BLM PPT 2019 stating "[Research] does not replace impacted resources or compensate for adverse effects to species or habitat. Funding for research or education should be secured through other means."

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“Advance Mitigation” means a habitat-based mitigation project that has met key milestones, including achievement of conservation performance metrics, formal commitment of a conservation easement, financial assurances, and monitoring reports, , in advance of impacts to the imperiled species. There are multiple advantages to advance mitigation: 1) it addresses temporal loss, 2) it reduces risk, as the mitigation is demonstrably effective prior to permit decisions, 3) it provides the most efficient mitigation option for permittees and regulators (proven to cut the time to permit in half), and 4) it affords mitigation practitioners’ time for planning to maximize restoration work outcomes for the species.

The advance mitigation model gives practitioners great opportunity to optimize site selection and scale to best meet species conservation goals. This last point is often overlooked and should be emphasized, especially for species mitigation because species typically need time and optimal conditions to establish themselves in a new habitat location. For all these reasons, any regulations governing the use of compensatory mitigation under the ESA should prioritize and incentivize the use and establishment of advance mitigation for recovery and compliance purposes. Thinking of advance mitigation in terms of a mitigation project timeline will help inform regulators’ analysis of available mitigation options to understand which option is best when temporal loss of habitat is a primary concern for the impacted species. Read more under IV. A. below about the concept of the “Advance Mitigation Timeline” and how it would help implement an advance mitigation preference.

E. Assist USFWS in Establishing Mitigation Standards

Multiple mechanisms are used for delivery of compensatory mitigation, typically conservation banks, ILF programs, and permittee-responsible mitigation. These mechanisms are most successful in producing mitigation’s desired ecological outcomes when they are held to equivalent high standards in terms of project requirements (e.g. must have an easement) as well as meeting certain developed mitigation standards for the species. Regulators must hold all mechanisms under a mitigation program to equivalent compliance standards, otherwise market demand will shift to the lowest cost option permissible under the lowest enforced standard.

Mitigation Standard, defined: an official publication of the FWS that defines technical specifications for mitigation mechanisms for a species or community of species.

A. The purpose of the Standard is to design mitigation that offsets incidental take with the achievement of goals and objectives from a conservation plan or strategy in a manner likely to attract investment from the private sector.

B. A Standard applies to all mitigation mechanisms: banks, in-lieu fees, and permittee-responsible mitigation projects.

C. A Standard must be developed through an inclusive and transparent public process.

D. A Standard must remain in effect after publication or revision for a term sufficient for accomplishing mitigation under it.

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III. Recommended Terminology Changes

Codify Key Concepts and Definitions; Clarity in Terminology

Species and mitigation providers do not currently benefit from a consistent approach to conservation planning; a mix of “conservation plans,” “recovery plans,” “conservation strategies,” and “mitigation strategies,” at varying degrees of species specific analysis and under various processes for updates, if at all, collectively inform species mitigation needs. Practitioners, permittees and regulators would be aided in their work if we could bring more clarity and organization to these terms and their roles. Establishing a comprehensive framework would also support consistency in high standards for species’ conservation goals and corresponding mitigation projects. The state of current practice and confusion often enables the permittee applicant to dictate standards for species conservation, rather than the public agency.

ERBA recommends that the FWS establish a process for creating and updating species specific recovery action plans, and in the absence of such plans, establishing a hierarchy for how conservation planning tools and documents will be used to inform mitigation standards. ERBA also recommends that the FWS use a public notice process, or at a minimum engage the conservation and mitigation community, to seek comment on conservation plans and updates. These tools should be updated to reflect recent science and practice development and lessons learned from performing mitigation. We recognize that the periodic update period (e.g. 5-10 years) may vary depending on the species, their protected status, and baseline knowledge on the effectiveness of certain conservation practices to produce benefits for the species.

Such a process and organized hierarchy for updating and using conservation tools to inform mitigation will position FWS as the public authority setting mitigation standards, and deter the ability of applicants to dictate standards, which often has the unfortunate effect of producing a patchwork of ad hoc—and usually disparate—mitigation standards for a single species.

Use of the Term “offset” vs. “mitigation”

“Mitigation” has multiple meanings across environmental programs. In some instances mitigation is understood as the NEPA five step sequence, often condensed to avoidance, minimization, and compensation; this last step is sometimes referred to as “compensatory mitigation” or simply “mitigation.” This broad and variegated use of the term “mitigation” facilitates a blurred understanding and implementation of the mitigation sequence. Practitioners have seen some instances where actions that are best characterized as “minimization” are considered as “mitigation,” when really the impact warrants compensation or compensatory mitigation.

While “compensatory mitigation” or “compensation” is a defined term in the 2017 Interim Guidance, the overlap in the use of the term mitigation still results in confusion. To avoid confusion and bring clarity to requirements and implementation, ERBA recommends consistent use of “offset” as a defined term meaning habitat-based compensatory mitigation or compensation. ERBA also recommends more specific rather than interchangeable references to

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mitigation (versus the mitigation sequence and/or mitigation hierarchy) in future species mitigation glossaries and policy or rule text.

IV. RECOMMENDED STANDARDS

A. Advance

Case for a Habitat-based Advance Mitigation Preference

Habitat fragmentation is the most pervasive threat to imperiled species.³ The protection, expansion and management of suitable habitat is therefore the most appropriate means of providing species mitigation under the ESA. While many compensatory mitigation projects are designed to accomplish these goals, not all are successful. There are inherent risks with mitigation projects that may prevent them from meeting some or all performance standards, which ultimately hampers a species' recovery and raises compliance concerns for FWS and industry. The use of "Advance Mitigation" reduces these risks and further alleviates the effects of fragmentation, especially those associated with temporal loss.

Recommended Preference Structure

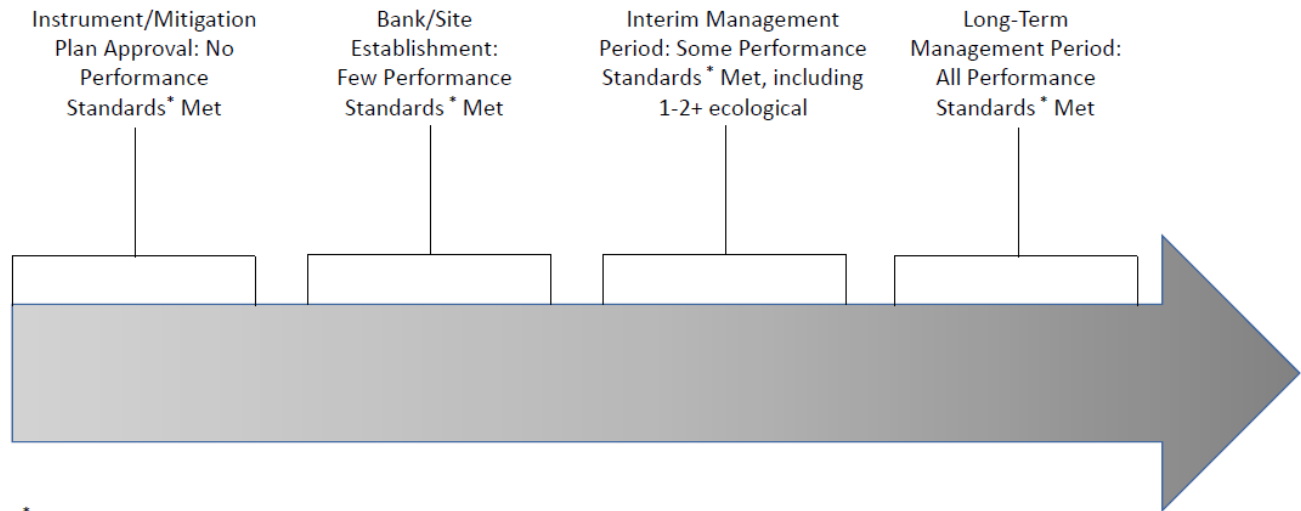
Mitigation project development is constrained by various operational and ecological factors, which affect the time and effort required to meet performance standards. In general, performance standards can be grouped into two categories: "ecological" and "administrative". Ecological standards are designed to ensure specific habitat needs are developed and maintained (e.g., vegetation composition and cover for foraging and brood-rearing). Administrative standards are structured to guarantee the resulting habitat conditions are protected from future development (e.g., conservation easements) and on-going management activities are appropriately performed (e.g., long-term management plans, non-wasting endowments, monitoring plans, etc.). Administrative and ecological performance standards, therefore, work "in concert" to meet and maintain species-specific habitat needs.

As performance standards are based on species-specific habitat needs, it's assumed that species' utilization of mitigation sites will improve with time—until an optimal, equilibrium condition is reached.⁴ As habitat conditions advance, performance standards will be met incrementally until all performance standards have been realized (achieving optimal conditions). Thus, a mitigation project's progress in meeting ecological and administrative milestones is a useful consideration in the context of Advance Mitigation. In other words, some mitigation projects are more "advanced" than others, meaning they have met more performance standards and are closer to, or have fully achieved, optimal conditions for a species' use. During permitting decisions, priority should therefore be given to the use of the most "advanced" offsets available.

³ See 2003 Conservation Banking Guidance definition of "conservation strategy," stating: "The main threat to a majority of the listed species is habitat loss and fragmentation of the remaining habitat."

⁴ Equilibrium conditions often require perpetual monitoring and management.

ADVANCE MITIGATION TIMELINE



The following figure ("Advance Mitigation Timeline") represents Advance Mitigation as a continuum or spectrum, with less "advanced" sites on the left and more "advanced" sites on the right. This highly generalized model illustrates four basic phases in a mitigation site's lifecycle: 1) Instrument/Mitigation Plan Approval; 2) Bank/Site Establishment; 3) Interim-Management Period; and 4) Long-Term Management Period. These phases are structured around the achievement of administrative and ecological performance standards as detailed in site-specific instruments. The approval of an instrument or mitigation plan (the model's first phase) represents limited accomplishments with respect to providing suitable mitigation for an imperiled species. At this point in the lifecycle, performance standards have only been agreed to, none have been met. It follows that an approved instrument or a mitigation plan by itself is clearly less "advanced" (i.e., useful for a species) than a site in the fourth and final phase (long-term management), which has met all performance standards.

ERBA is supportive of the 2016 ESA Compensatory Mitigation Policy's language granting a preference to advance mitigation options, especially Section 6.1.2, included at the bottom of this text. Particular strengths of this language are the i) clear articulation of advance mitigation's benefit in reducing risk and uncertainty, ii) acknowledgment that high mitigation ratios are not an effective substitute for advance mitigation, and iii) recognition that the concept of advance mitigation is inherent to conservation banks but can apply across mitigation mechanisms, and thus should be the deciding factor regardless of mechanism.

Building from this language, and the Advance Mitigation Timeline concept, ERBA recommends that the species mitigation rule codify a preference structure that directs permittees to the most advanced mitigation option available and suitable for the permittee's impact. For example: if two

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conservation projects, whether banks and/or ILF, for an imperiled species have credits available, but one has just recorded their conservation easement (Step 2 on the timeline) versus the other bank is in the interim management stage (Step 3), and all other considerations are more or less equal, then the FWS should direct the permittee to credits from the project in Step 3 versus the project in Step 2 because the project under interim management is providing the more useful, established and performing habitat site for the imperiled species. This preference structure and subsequent outcome rewards investment in advance mitigation models and results in the best mitigation option for the species.

2016 ESA Policy Language

Section 6.1.2 *Preference for Compensatory Mitigation in Advance of Impacts* “After following the principles and standards outlined in this policy and all other considerations being equal, preference will be given to compensatory mitigation projects implemented in advance of impacts to the species. Mitigation implemented in advance of impacts reduces risk and uncertainty. Demonstrating that mitigation is successfully implemented in advance of impacts provides ecological and regulatory certainty that is rarely matched by a proposal of mitigation to be accomplished concurrent with, or subsequent to, the impacts of the actions even when that proposal is supplemented with higher mitigation ratios. While conservation banking is by definition mitigation in advance of impacts, other third-party mitigation arrangements and permittee responsible mitigation may also satisfy this preference by implementing compensatory mitigation in advance of impacts. In-lieu fee programs can also satisfy this preference through a “jump start” that achieves and maintains a supply of credits that offer mitigation in advance of impacts.”

B. Durability

Qualifying mitigation must be durable, which necessitates requirements for perpetual site protection that prohibits incompatible uses for the species (e.g. conservation easement) and full funding of a long-term management endowment or similar sufficient to assure management, repair and monitoring expenses in perpetuity. Inherent to these durability requirements is that mitigation is habitat-based, meaning that mitigation provides a direct, quantifiable benefit for the species on specified areas of the species’ land or water habitat type. These mitigation measures on specific land or aquatic parcels must remain in place for at least as long as the associated take of that species or community. In most cases this means perpetuity, but could be shorter – and backed by sufficient legal and financial assurances.

Durability as a mitigation qualification excludes some actions currently accepted as mitigation and raises the bar on other practices. Measures that are not habitat based should not be accepted as mitigation, except for in rare, specific circumstances. Again, research of a species should not act as a qualifying mitigation substitute for actual on the ground habitat preservation or improvement. Research should only be a component of mitigation if pursued in conjunction with and complementary to habitat-based mitigation activities or in special, limited circumstances (e.g. white nose syndrome in bats).

Mitigation bankers are uniquely positioned and experienced to provide a set of services using private resources – both land and investment – and often deliver the greatest benefit to

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species using this suite of private-sector based services. The private land base is diminishing each year, shrinking the availability of private lands for conservation purposes, which increases the private land's value to a species' habitat needs once that land is dedicated under a conservation easement.

Many public lands are acquired for conservation purposes (e.g. State Wildlife Areas, Waterfowl Habitat Protection Areas, National Wildlife Refuges, National Parks) to specifically provide some conservation benefit. It is difficult to confidently demonstrate that mitigation measures on these public lands will meet the additionally principle, or provide the species an ecological benefit above the existing baseline.⁵ However, public lands specifically designated to generate revenue like State Trust Lands, Bureau of Land Management, and U.S. Forest Service System would be exceptions.

Generally: impacts to species on private lands should only be offset by mitigation on private lands; only public lands that are clearly available for development (e.g. state trust lands, BLM) should be eligible for mitigation.

The 2016 Policy and 2016 Service-Wide Policy both made a good effort to address some of our concerns. Specifically, ERBA generally supports the outlined criteria for permissible public lands mitigation for private land impacts, items (a)-(e) detailed in Section 5.7.2 of the Service-Wide Policy. However, item (e) of the criteria presented a concept that warrants development of an analysis standard, otherwise the concept is ripe for varying application: "when private lands suitable for compensatory mitigation are unavailable or are available but do not provide an equivalent or greater contribution towards offsetting the impacts to meet the mitigation planning goal for the evaluation species." ERBA welcomes further discussion with the FWS on a potential analysis standard.

ERBA also supports Section 6.2.2 of the 2016 Policy, stating: "the Service supports compensatory mitigation on public lands... only if additionality is clearly demonstrated and is legally attainable... Offsetting impacts to private lands by locating compensatory mitigation on public lands already designated for conservation purposes generally risks a long-term net loss in landscape capacity to sustain species (i.e., future reduction in the range of the species) by relying increasingly on public lands to serve conservation purposes."

Again, mitigation on public lands should be permissible in limited instances for species-based reasons: i) when used to offset an impact on public lands and the durability and additionality principles are sufficiently met, and ii) when specific identified tracts of public land offer a scientifically-verified unique habitat value to the subject species (e.g. a certain flyway habitat for migratory birds or a species' last remaining population is located on public lands). Even in these circumstances, durability concerns should prevail as a deciding factor; while a tract of public land may offer a species unique habitat, that value is diminished if the land cannot be adequately protected in perpetuity to satisfy the durability principle. Again, public

⁵ Doyle, M. et al. (Feb. 2020) *Compensatory Mitigation on Federal Lands*. Duke Nicholas Institute for Environmental Policy Solutions. <https://nicholasinstitute.duke.edu/publications/compensatory-mitigation-federal-lands> (see the "Key Findings" section on p.3).

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lands mitigation should be held to equivalent standards as private lands, and if this cannot be met then mitigation efforts should be focused on private lands.

C. Additionality

Mitigation must add a quantifiable conservation benefit beyond the identified baseline, i.e. a benefit that would not have been generated but for the mitigation measures. Additionality concerns are typically met when mitigation results in the placement of certain specific assurances on a high conservation value property: an easement prohibiting incompatible uses with the imperiled species' use, a management plan with established stewardship obligations, and a non-wasting endowment. When regulators approve a mitigation project that proposes to just preserve or minimally enhance habitat and the proposal lacks these assurance elements, investment is undercut in more expensive mitigation endeavors to restore, connect or create new habitat in high priority regions for the imperiled species. Consequently, preservation and minimal enhancement should be reserved for rare and unique mitigation circumstances. Incorporating an analysis on additionality into FWS policy and regulation will reward and incentivize mitigation in locations that offer imperiled species the greatest conservation benefit.

If public documentation (such as the FWS listing decision or Mitigation Standard) identifies habitat loss as a major threat, FWS should incentivize mitigation located on high conservation value lands that are threatened with development risk over mitigation proposed on land with a low development threat. A development threat analysis is an especially relevant analysis for projects that are largely preservation in their approach. This concept might be implemented through a policy preference for mitigation on private versus public lands (see discussion above), or a policy preference for mitigation in an imperiled species' last stronghold of habitat within a rapidly developing region versus a mitigation option in a more rural region not subject to development pressures.

Additionality questions illustrate the value of a Mitigation Standard; if a mitigation project demonstrably meets the published objectives of the specific-specific standard and is implemented with the required assurances, then these further analyses are not as necessary.

D. Equivalency

Equivalency is a principle essential to investment in an environmental market. Investment is hampered by inconsistent application of regulatory requirements and standards across mitigation mechanisms. Investors seek marketplace fairness where all restoration sponsors and project forms are treated with equal application of law and policy for predictable outcomes.