The Blue Range Mexican Wolf Reintroduction Project:
Adaptive Management in a Collaborative Conservation Context

Note: This is an adaptation of the International Association of Fish and Wildlife Agencies' approach to developing and implementing State Conservation Agreements.

Definition

Collaborative conservation is a conservation enterprise among a variety of entities that share an interest, or perhaps a stake, in a given species, ecosystem, or issue. Collaborative conservation is flexible, and can be applied at different levels, ranging from individual species to suites or groups of species and their habitats, or to an entire ecological system or ecological community. It uses an inclusive process to seek conservation solutions that are mutually beneficial to stakeholders, to the greatest extent possible. For purposes of a collaborative conservation effort, "stakeholder" means any individual or organization with a vested or other interest in the issue at hand.

Adaptive management is a science-based public participation process for evaluating and adjusting a conservation effort to better achieve its objectives, as experience and knowledge are gained through implementation, study, and discussion. Adaptive management is thus "learning by doing," and using objective analysis and informed opinion to determine the need for, and direction of, changes in relevant policies, procedures, plans, and actions.

Purpose – Why adaptive management and collaborative conservation?

- To foster proactive, voluntary stewardship of species and ecological systems based on the best available knowledge and science.
- To enable conservation of ecological communities that ensures the long-term survival of species and larger systems.
- To create the cross-jurisdictional mechanisms necessary to enable regional management of wide-ranging or migratory species, habitats, and ecological communities.
- To provide opportunities for all stakeholders to engage in collaborative, constructive dialogue.
- To encourage incentive-based landowner participation and local conservation efforts.
- To use management resources when and where they can be most efficient and effective, and early enough to prevent the need for more intensive protection through federal listing under the ESA.
- To complement other conservation efforts, including those focused on federally-listed species.

Guiding Principles – Some keys to success

Success depends on many things, including:

- Effective leadership. State wildlife and fisheries departments are responsible for recognizing the need for management intervention for species under their jurisdiction. Thus, a state agency will generally be the convening and coordinating entity for a collaborative conservation effort, although others may assume or assist with this role where appropriate for them to do so.

  Leadership in developing and implementing various aspects of a collaborative conservation effort may be flexible. However, regardless of who provides it, the leadership must be committed and sustained. Development of the collaborative conservation effort is understood to be a shared effort among states, federal agencies, and private stakeholders, enabling leveraging of resources and information.

  Leadership must be committed to convening and sustaining the participation of appropriate stakeholders, and willing to share with them responsibility for developing and implementing a collaborative conservation effort.

- Engagement of partners. Typically, many government agencies, tribes, and private parties will have an interest in the issue at hand. An effective process for convening potential partners is the first step in developing trust among, and securing participation by, stakeholders and other interested parties. Key aspects of a decision to convene parties to develop a collaborative conservation effort include the following:
    - A listing of compelling reasons why the species or ecological system needs to be conserved, including a thorough assessment of time, cost, and value of developing a collaborative conservation effort.
    - A definition of the minimal data needed to convene the process.
    - An initial "best guess" about the geographic scale on which parties need to work in order to achieve a functional population or system response.
    - A review of existing programs that could be modified to address the issue, instead of developing a collaborative conservation effort.
    - Access to the resources necessary to develop the collaborative conservation effort successfully.
    - A commitment to allocating the necessary resources for implementation, including funding and staff time.
    - An ability to provide the process management necessary for success in developing and implementing the collaborative conservation effort.
    - Identification of all stakeholders and interested parties, and a willingness to invite them to participate, and a commitment to finding ways to engage them productively in all aspects of developing and implementing the collaborative conservation effort.
    - Skilled negotiators as participants; use of a neutral facilitator is advisable.
    - All parties critical to success of the collaborative conservation effort need to be committed to the process and to making it work; that is, "buy-in" must be secured from the highest leadership of the participating agencies and organizations.
    - An estimated timeframe for developing the collaborative conservation effort that is acceptable to the convener and to the potential partners.

- Agreement on process and structure. The collaborative conservation effort process should provide a collaborative forum in which the partners agree on the:
    - Problem to be addressed.
    - Conservation goal(s) and objective(s).
    - Science to be used in refining and addressing the problem and achieving the goal(s) and objective(s), including how participants will resolve disagreements and uncertainties over science.
    - Legal requirements and procedures that will be followed by participating federal agencies, such as whether development or adoption of their contribution to a collaborative conservation effort will entail the use of National Environmental Policy Act (NEPA) process and/or other requirements specific to the individual agency or agencies.
    - Leadership and management needed for success.
    - Desired adaptive management strategy, with protocols for managing process and progress when implementing the collaborative conservation effort.

- A solid foundation of information and funding. The partners must strive to:
    - Identify and assemble all pertinent biological and social data, including existing agreements, the regulatory structure and climate, relevant programs and plans, jurisdictional boundaries, habitat assessments, biological cycles, population levels and distribution, and historical data.
    - Review funding sources early and proactively, and develop a funding strategy.

- Productive engagement. The partners must engage productively in collaborative ways that:
  - Focus on actions that are under the partners' control.
  - Strive for a "win-win," not a "lose-less," approach to developing and implementing the collaborative conservation effort, with effective conservation as the goal.
  - Develop an effective media and outreach strategy from the beginning of the process, for political officials, the potentially-impacted parties, and the public, so that everyone is both provided and providing accurate information. In the beginning, outreach focuses on urgency and potential. Later, it focuses on accomplishments.
  - Establish regular participation and a well-run, efficient process.
  - Identify tangible products to be worked on during development of the collaborative conservation effort, as well as after signing.
  - Assess the potential to integrate the collaborative conservation effort with other efforts.
  - Celebrate the successes achieved along the way toward accomplishing the goal(s) and objective(s).

- Effective linkages to other conservation efforts. Patterns of ecological risk for species can be plotted on a continuum from abundant to endangered. Conservation tools have been developed and targeted on species falling at different points on this continuum, but generally on the more imperiled species. Collaborative conservation efforts will generally focus on (a) species that are not yet declining, (b) species that are at the earliest stages of decline but which are not yet in the federal listing process, and/or (c) conservation of ecological systems (i.e. landscape-level conservation).

  The collaborative conservation effort is intended to be flexible, and can link to or incorporate, other conservation efforts. This could include identification of other conservation tools that could be used by the stakeholder to address his or her individual circumstances. Such tools include State Conservation Agreements and ESA-based approaches that have already been developed for more highly imperiled species (i.e. "at risk" species), including Candidate Conservation Agreements, Habitat Conservation Plans, and Safe Harbor Agreements. For example, if a collaborative conservation effort stakeholder owns habitat occupied by a listed species within the geographic area covered by the collaborative conservation effort, the applicable ESA-based management considerations for that species could be integrated into the collaborative conservation effort.

  Collaborative conservation efforts cannot abrogate or violate requirements established in law, rules, policy, etc. For example, federal agencies involved in a collaborative conservation effort might need to develop and adopt their contribution through procedures set forth under NEPA, ESA (e.g. Section 7 consultation process), the National Forest Management Act, or various formal federal laws or planning processes.

- Contingency planning. When developing a collaborative conservation effort, signatories should address management issues such as:
  - New information.
  - Unpredictable fluctuations, such as disease or drought.
  - Movement of a federally-listed species onto a property that is participating in a collaborative conservation effort.
  - Failure of signatories or partners to meet their collaborative conservation effort commitments.
  - Failure of the conservation effort, resulting in changes in species status that could warrant consideration of federal listing.

Incentives to participate – What's in it for me?

Conveners and stakeholders may have a variety of incentives and motivations for participating in a collaborative conservation effort. Participants will want to clarify for themselves their motivations and the incentives they will need in order to participate. Different levels of incentives might be needed just to get people "to the table" vs. for implementing the signed collaborative conservation effort. The following list is not exhaustive, but provides a general outline and examples in each category.

- *Securing tangible benefits*, such as technical assistance, services, or priority points in applications for funding mechanisms, such as the Farm Bill or Partners for Wildlife programs.
- *Securing economic and financial benefits*, such as compensation, access to federal or state funding, tax breaks, entrepreneurial opportunities, or efficient leveraging of resources.
- *Securing recognition and social benefits*, such as stewardship certification, credit and increased credibility, and/or opportunities for building relationships.
- *Securing political benefits*, such as an ability to influence decisions, meeting legal requirements, local control, or more effective planning.
- *Securing management and ecological benefits*, such as information sharing; achieving a better understanding of, and agreement on, the biology of species and systems; the flexibility to manage, maintenance of open space; and limiting habitat degradation by minimizing or mitigating the effects of urban/suburban sprawl.
- *Making life easier and more rewarding*, with certainty, clear and simple participation requirements, one-stop-shopping and process streamlining, less regulation, opportunities to enjoy the effort, reduced risk, and enhanced recreation opportunities.
- *Avoiding the need to use more prescriptive regulatory mechanisms*, such as federal listing under the ESA; other federal, state, or local government regulations; or the potential for third-party legal actions to force regulatory conservation. These same mechanisms also provide a safety net that can be used in the event that implementation of the collaborative conservation effort does not adequately meet the conservation needs of the target species, habitats, or ecological systems.

The Written Agreement – It's all in the details

The written collaborative conservation effort and/or its supporting documents should include:

- Identification of, and agreement on, conservation needs and factors affecting species status (or factors relevant to a suite of species or ecological communities, depending on the focus of the collaborative conservation effort).
- Quantified goals and objectives that are measurable.
- A description of the adaptive management, monitoring, and evaluation protocols for the collaborative conservation effort, based on the best available knowledge and science.
- Delineation of the expectations of all partners, and commitments from each, including, but not limited to, the following:
    - Funding and staffing, including a review of all possible funding sources.
    - Implementation—the actions to be taken and who does what, when, and the method of accountability for these.
- A description of how the public will be involved in implementing the collaborative conservation effort.
- A description of the method for resolving conflicts.
- An entry and withdrawal process for participants in the collaborative conservation effort.
- A description of how the collaborative conservation effort will be considered in the planning processes of the individual partners, and linkages between the collaborative conservation effort and other plans and planning processes.

- A description of any assurances desired by signatories, and the degree to which those assurances can be provided.
- A statement of what will constitute success for the signatories, including thresholds based on biological targets and decision points within the adaptive management protocols. At the same time, stakeholders will recognize that ecological systems and species need ongoing, evolving, adaptive stewardship. Achievement of the defined success will result in transition to a maintenance plan, including an offloading of management imperatives into land management plans and/or a plan for institutionalizing the collaborative conservation effort in the long term. Further commitments for additional conservation efforts are not expected to be necessary when success thresholds for the collaborative conservation effort have been met.
- A description of roles and functions, defining any differences between those of signatories to the collaborative conservation effort and those of participants in the process. Not all stakeholders or interested parties must be signatories, and non-signatories may participate in implementation.

Criteria for evaluating a collaborative conservation effort before signing it – Testing for adequacy

- Is there sufficient certainty that the collaborative conservation effort can and will be implemented?
    - Do the participants recognize the time required to accomplish the goals and objectives, and have they assessed the long-term feasibility of the management approach?
    - Does the collaborative conservation effort provide enough flexibility for landowners to manage their lands?
    - Can other stakeholders interested in implementation participate easily and effectively?
    - Does the collaborative conservation effort address the fact that some of the stakeholders involved will inevitably change in the long-term, as new partners emerge and others are replaced?
    - Is the collaborative conservation effort operationally and economically practical?
    - Does the collaborative conservation effort meet/comply with existing laws and regulations?
    - Do the signatories have the legal and/or decision-making authority necessary to implement the collaborative conservation effort?

- Is there sufficient certainty that the collaborative conservation effort will be effective in conserving the target species and/or ecological systems?
    - Is the collaborative conservation effort reasonably likely to meet the conservation goals and objectives for the species and/or ecological systems?
    - Is the collaborative conservation effort based on the best available science?
    - Does the collaborative conservation effort sufficiently describe adaptive-management strategies that are reasonable, logical, and straightforward, and which can be implemented without undue confusion or controversy? At a minimum, the adaptive management framework should include appropriate protocols for administrative and management processes, and for monitoring and measuring (evaluating) progress through objective (preferably quantitative) standards or benchmarks.
    - Do the collaborative conservation effort and its adaptive management protocols adequately address how conflicts among signatories and/or partners will be discussed and resolved?