May 24, 2013

State of Nevada, Sagebrush Ecosystem Program
Tim Rublad, Program Manager
201 S. Roop Street, Suite 101
Carson City, Nevada 89701

Dear Mr. Rubald, Sagebrush Ecosystem Council, and Other Stakeholders:

It is now possible to implement a statewide mitigation strategy for a candidate or listed species in less than one year. Our team has developed multiple iterations of the three primary components necessary to align the incentives of industry, agriculture and candidate species that can be either tailored or completely re-designed through cost effective and defined processes. The three components of a conservation credit system are:

Metric - A metric assesses the quality and quantity of habitat that is protected, restored or degraded, using the same quantification approach to consistently define both credits and debits.

Policy - Supporting policies, agreements and contracts that create accountability and provide assurances for industry and agriculture in pre-listing, post-listing and non-listed contexts.

Protocols & Registry - An operations manual that clearly defines roles and procedures for agencies and private entities to efficiently and consistently produce and acquire credits listed on an online registry.

Developing a conservation credit system that uses the best practical science and inspires trust requires a robust stakeholder engagement process. The primary stakeholder processes include:

Science – Engaging sagebrush and sage grouse experts in the creation of the metric ensures the underlying hypotheses are supported by available data relevant to the local ecosystem. A panel of scientists can also advise policymakers on issues that require science informed policy decisions.

Policy & Operations – Agency management as well as industry, agricultural and environmental interests must understand and support the conservation credit system for it to succeed. A panel of engaged local leaders familiar with the local issues can inform organizational design and specific policy decisions.

Stakeholder Outreach – Future participants in the conservation credit system, such as private landowners, public land managers, credit purchasers from industry and technical service providers must adopt and implement the conservation credit system. Coordinated communications and outreach is necessary to efficiently engage these future participants.

Our team consists of the leaders developing conservation credit systems throughout the West with credit systems being pilot tested in seven states for multiple species and habitat types. The greater sage grouse is the focus of the conservation credit systems we are developing in

Colorado and Wyoming, and has the potential to become a consistent approach used throughout the 11-state range.

Environmental Incentives is leading the development of more conservation credit systems than any other company in the United States, is based at Lake Tahoe, and has assisted the Department of Natural Resources in addressing some of the most complex environmental and multi-agency issues in the Lake Tahoe Basin since 2006.

RESOLVE is a world renowned facilitator assisting industry, governments and communities to meet environmental challenges and is actively involved in addressing greater sage grouse concerns in Nevada.

Parametrix and Ecometrix Solutions Group develop metrics used as currencies to track and mitigate habitat impacts for multiple species and habitat types, including the greater sage grouse.

Environmental Defense Fund specializes in creating market-based solutions to environmental challenges, including leading the development of habitat exchanges as an emerging standard for addressing the needs of industry, agriculture and species.

Our team is excited to assist the Sagebrush Ecosystem Council with efficiently defining, developing and implementing a successful conservation credit system that will prevent the need for listing of the greater sage grouse and will ensure industry and agriculture can continue to operate profitably even if listed.

Sincerely,

Jeremy Sokulsky
President

Environmental Incentives

Steven Courtney
Principal

RESOLVE

RESPONSE TO REQUEST FOR INFORMATION

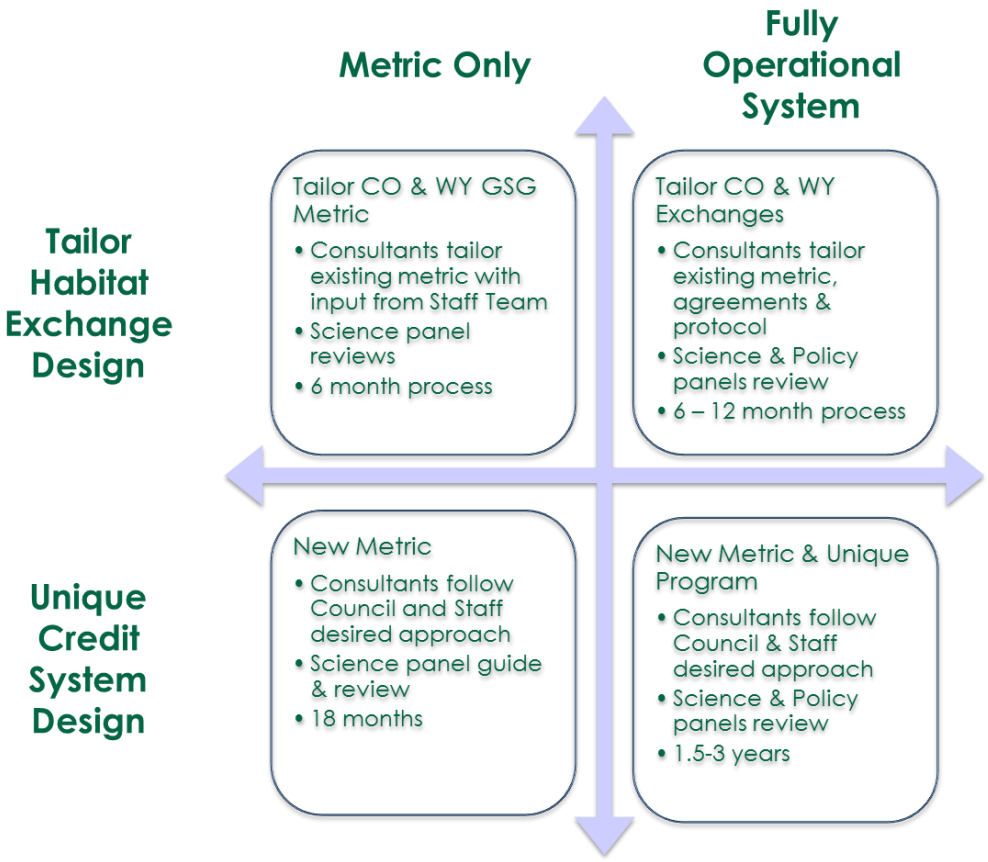
for State of Nevada Conservation Credit System for Sage Grouse Habitat

Conservation and mitigation credit systems are rapidly evolving to meet the needs created by the 376 species being reviewed for listing as a result of the Center for Biological Diversity's settlement agreement with the US Fish and Wildlife Service (USFWS). The greater sage grouse is at the forefront of this innovation. Greater sage-grouse populations have declined drastically across their 11-state range; today's numbers are less than 10 percent of historic populations. By 2015, the USFWS must decide whether the greater sage-grouse should be listed under the Endangered Species Act. No other species in the Western U.S. may have a greater economic impact if listed.

Our team has developed a conservation credit system to address the needs for industry, agriculture and the greater sage grouse that is being implemented in Colorado and Wyoming. By bringing private dollars to the table, conservation credit system can leverage federal dollars to make a significant positive impact on the species and potentially preclude listing of the greater sage-grouse. Conservation credit systems enable credits to be generated by a wide-range of conservation investments which create a broad opportunity set for enhancing habitat on both private and public lands. Conservation credits create a new revenue stream for working land owners who are stewards of valuable habitat and can integrate public and private lands management across landscapes. Recognizing the economic implications of listing on the energy, mining and agricultural industries, this conservation credit system seeks to realign incentives to improve habitat for species, and show that development and conservation activities can coexist.

Conservation credit systems are part of a coordinated effort to create a new approach to wildlife habitat mitigation for both candidate and listed species with the potential to serve as the national template to align development, agricultural, and environmental needs, and show how private and federal dollars can work together toward common species recovery goals. Greater sage-grouse and mule deer are the focus of the Colorado Habitat Exchange and the Wyoming Upper Green River Conservation Exchange, which use the same standard market infrastructure that is tailored to meet the needs of each unique region. Other conservation credit systems under development, including the Lesser Prairie Chicken Habitat Exchange and the Mokelumne Watershed Environmental Benefits Program serves as models for how to effectively conserve a wide variety of species and other natural resources such as clean water, by focusing on incentives for generating quantifiable conservation outcomes.

Our team has developed an understanding of the needs for the conservation credit system in the State of Nevada through recent presentations to the Governor's Advisory Committee and the Sagebrush Ecosystem Council, and our long-standing work with Nevada's Department of Conservation and Natural Resources on ecosystem management issues. Recognizing the unique needs of Nevada industry and unique threats to Nevada greater sage grouse populations, we see 4 potential paths for the upcoming effort (see figure) depending on 1) the Sagebrush Ecosystem Council's desires to focus solely on developing a metric versus the creation of a fully operational credit system, and 2) the desire to tailor the existing conservation credit system approach, called habitat exchanges, currently being piloted in Colorado and Wyoming versus creating a new approach.



The USFWS listing decision will be influenced by the operability of any conservation plan when making its listing decision. Tailoring the existing habitat exchange design, and launching a fully operational conservation credit system will enable the Sagebrush Ecosystem Council to cost-effectively put a conservation credit system in place, and will provide industry and agriculture the needed assurances to unlock economic opportunities. Hence we have crafted our response to create a fully operational system tailored from the habitat exchange framework. However, if a different approach is desired by the Sagebrush Ecosystem Council, our team has the depth of technical, program design, policy and facilitation experience to develop a unique approach from whole cloth. Such an approach would be more fine-tuned, but would also involve more consultation and scientific work, and presumably more negotiation with USFWS and other federal agencies.

This response to the State of Nevada's Request for Information provides a description of the:

- **Conservation Credit System Overview** that introduces the primary components and benefits of a fully operational conservation credit system.
- **Conservation Credit System Components** that defines each primary component of a conservation credit system.
- **Stakeholder Engagement Approach** that ensures the conservation credit system addresses local conditions, integrates the best available science and engenders broad support from stakeholders.
- **Conservation Credit System Development Process** that outlines the path for designing, piloting and efficiently operating a the system.

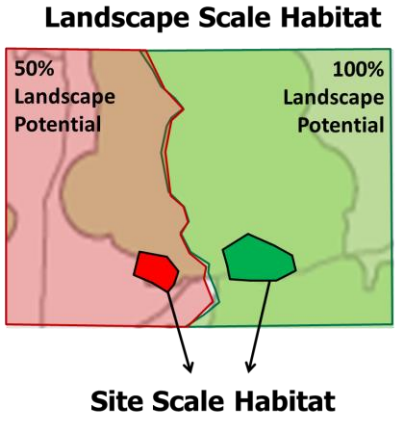
- **Team Qualifications and Project Example** that provide background on the expertise of our team and references to other conservation credit systems.

CONSERVATION CREDIT SYSTEM OVERVIEW

A conservation credit system is a collaborative, market-based solution designed to create net-positive, landscape level outcomes for wildlife that are currently being impacted by energy, mining and other development across the West. Conservation credit systems provide a new source of private funding that can be leveraged with public sources to improve sagebrush ecosystems. Conservation credit systems can be used to mitigate private sector development impacts and better target public sector conservation investments on both private and public lands. By emphasizing quantifiable conservation outcomes, conservation credit systems ensure effectiveness of mitigation and public sector investments, and results in meaningful and long-lasting benefits.

QUANTIFYING FUNCTIONAL HABITAT BENEFITS AND IMPACTS

A conservation credit system provides a performance-based mechanism for environmental impact mitigation and investment in conservation. A conservation credit system uses metrics to calculate credits and debits from projects, factoring in considerations for suitability for species at the overall landscape scale, and also accounts for the site scale, which is the specific location and area of the impact or project. "Debits" quantify impacts to a resource of interest and "credits" quantify conservation benefits. Establishing standardized credits enables an understanding of environmental return on investment while reducing transaction costs and increasing certainty for credit buyers and sellers.

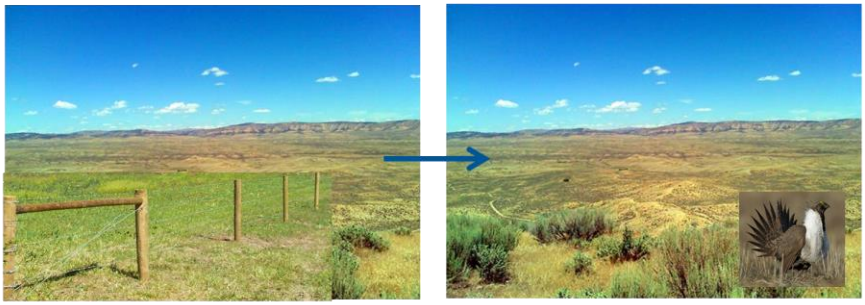


The map to the right shows a hypothetical landscape of greater sage grouse habitat. The green part of the landscape is prime habitat, while the red portion is less valuable to greater sage grouse, so it only has a 50% overall potential as habitat. The opaque green and red shapes on the map represent both an impact site and a restoration site.

The picture below illustrates a restoration projection that produces credits. The project is in an area of the landscape that is very valuable for greater sage grouse (100% landscape potential or the green side of the overall landscape map). The landowner implementing the project decides to take a site that is currently degraded and threatened by fences (so 20 acres is functioning at 0% and 80 acres are functioning at 50% for sage grouse), and removes the fences to improve conditions for sage grouse. Before restoration, the site was only partially functioning for sage grouse (40 functional acres). After removing the fences, the site starts functioning at 100% for sage grouse. When multiplied by 100% landscape potential, this creates 60 new functional acres of habitat.

FUNCTIONAL ACRES: CREDITS

Management Practices to Improve Habitat



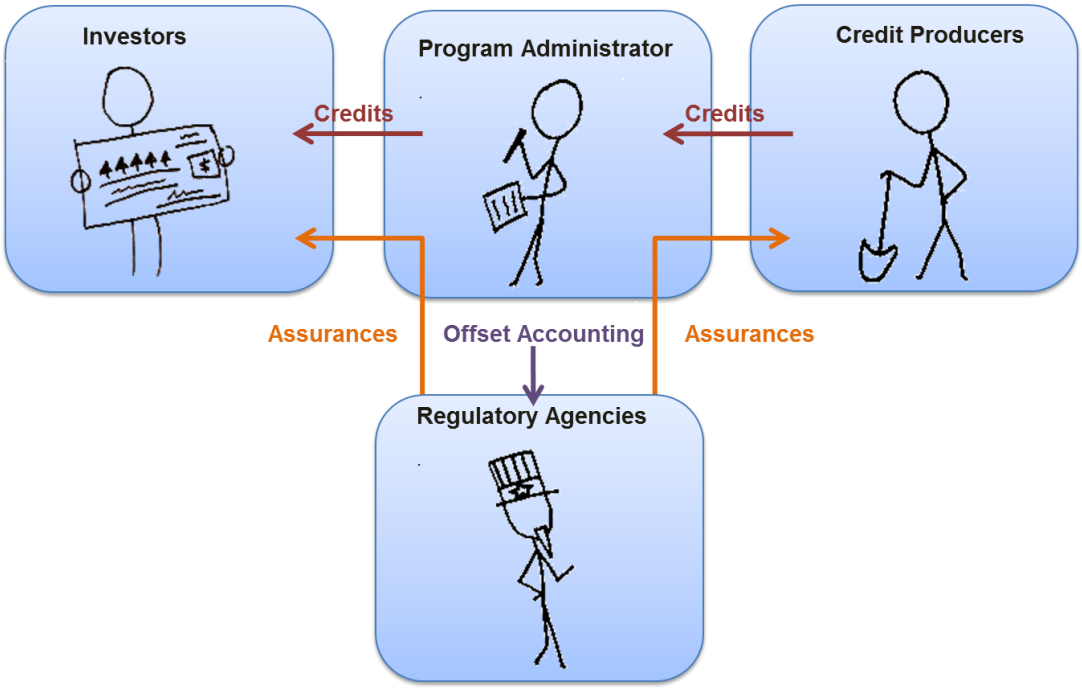
20 acres x 0% function
80 acres x 50% function
= **40 function-acres**

100 acres x 100% function =
100 function-acres

Total Credit: 60 function-acres

CREDIT PRODUCTION, ACQUISITION & EXCHANGE

A conservation credit system operationalizes the processes to produce, acquire and exchange credits. Landowners produce conservation credits that can be purchased by energy companies or other buyers to generate net environmental benefits. In return, the buyers and sellers of credits receive regulatory assurances to protect their investment in the program. The assurances increase regulatory certainty and accelerate timelines for project development.



CONSERVATION CREDIT SYSTEM COMPONENTS

Three sets of products establish a practical and robust conservation credit system.

1) Habitat Quantification Metric

Conservation credit systems use metrics to consistently quantify the quality, quantity and resiliency of habitat, as well as the impacts of anthropogenic disturbances. By integrating landscape-scale factors with site-scale assessments the metric relates immediately measurable attributes to anticipated population outcomes based on rigorous, documented and testable scientific understanding. Metrics are integrated into the conservation credit system so that participants can efficiently and consistently quantify benefits and impacts from different conservation and development actions, and the program achieves net increases in functional greater sage grouse habitat. The same metrics are applied consistently to determine the number of debits generated from habitat impacts and the number of credits generated from protection and enhancement of high quality habitat.

Credits can be generated by conservation practices that increase functional habitat – such practices include decommissioning mining roads, removing fences and removal of invasive species – and mechanisms that secure the long-term protection of existing high quality habitat – such as reducing threats from wildfire and ensuring sagebrush habitat is not degraded by development.

The metrics use currently available science. The habitat suitability modeling currently being led by Dr. Peter Coates of the U.S. Geological Survey will be included in the development of a metric for a Nevada conservation credit system. The framework for quantifying habitat value for the greater sage grouse will also serve as a basis to determine integrated sagebrush ecosystem value.

2) Policies, Contracts and Agreements

Conservation credit systems require policies, agreements and contracts to create accountability, provide assurances and increase regulatory and time certainty for credit producers and buyers. A conservation credit system agreement enables the conservation credit system administrator to efficiently register conservation sites and issue credits. The agreement reflects USFWS guidance for the development of conservation banks defines the financial standards and assurances that are integral to the success of credit generating sites. This agreement includes the definition of a reserve account that provides a level of conservation assurance that is above and beyond the current standard for conservation banks, and as such it serves to insure that positive gains will be consistent and sustained into the future.

Contract templates for credit and debit sites define performance standards that ensure credits are generated for the duration of term contracts or permanently maintained. A Candidate Conservation Agreement for credits generated on public lands and a Candidate Conservation Agreement with Assurances on private lands can be developed in a manner that convert to Habitat Conservation Plans if a species is listed and provides certainty that future listing decisions will not create additional requirements for credit developers.

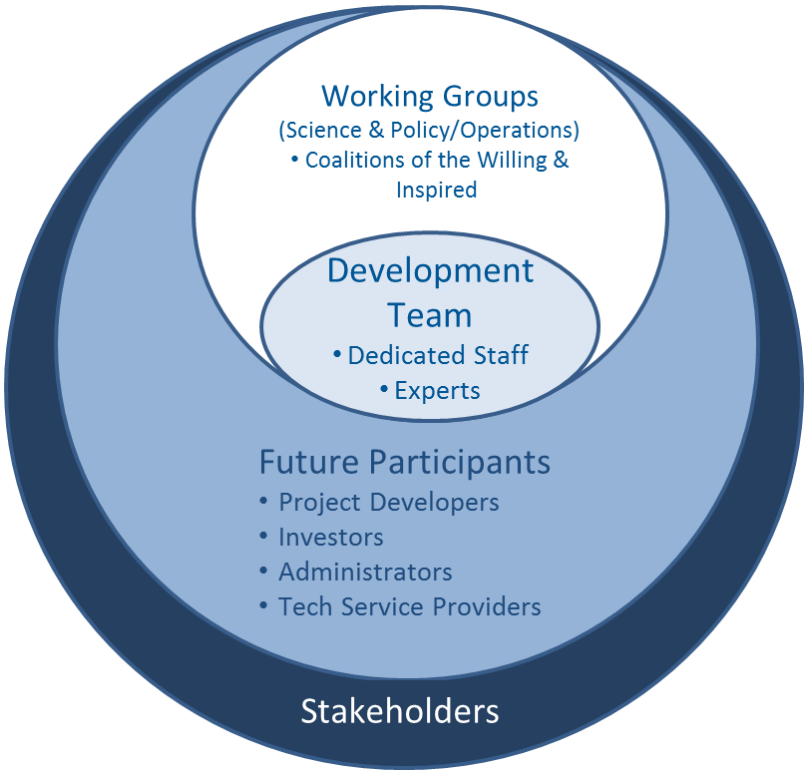
3) Operational Manual & Registry

Conservation credit systems also require clearly defined roles and procedures to efficiently, consistently and accurately generate and acquire credits. The Ecosystem Accounting Protocol[1] provides an operations manual and defines the steps outlined in the below diagram.

This Protocol clearly defines and integrates the metrics into each operational process step necessary to produce a credit, acquire a credit and administer the program. Guidance is provided for operational processes ranging from the use of the quantification tool and verification of conservation practices outcomes to documentation necessary to define habitat impacts and improvements and the schedule for releasing credits over time as projects mature. Roles are defined for each process step to determine responsibilities and templates are provided to set expectations and streamline information collection and review. Program administration processes are also defined to ensure the program is sustainable and improves over time. In addition, an online registry is used to help credit producers and buyers to find each other, and track credit production, acquisition and exchanges.

STAKEHOLDER ENGAGEMENT APPROACH

The stakeholder groups that are engaged to develop an effective, trusted and functioning conservation credit system are described below. The relationship between each stakeholder group and the development team, which would include the Nevada Sagebrush Ecosystem Team and non-staff experts, are illustrated in the diagram to the right.



Science Working Group

The science working group is convened to ensure the latest and best science available is used in the development of the metrics as well as to inform policy decisions related to the conservation credit system. The development of the metrics includes some technical components (e.g. functionality as GSG habitat) and other parts that will require policy discussions and decisions (e.g. must mitigation

[1] Environmental Incentives, LLC, Willamette Partnership, and Environmental Defense Fund. 2013. Ecosystem Accounting Protocol v0.9. Available at http://enviroincentives.com/resources/documents

result in GSG short-term occupancy?). The complex interplay of such scientific and management issues in the design of metrics require that there be extensive consultation throughout the development process. Neither scientists nor managers can work in isolation to develop solutions that are scientifically supported, operational and easily adopted. There needs to be a structured and regular exchange of information and ideas, including consultation with decision-makers and stakeholders who will ultimately be charged with implementing the plan.

The Nevada Sagebrush Ecosystem Team is expected to play a major role in the development of the metrics, including the compilation of existing information on habitat quality and distribution characteristics. However, leveraging the science community with deep understanding of the greater sage grouse species and sagebrush landscape, such as Dr. Coates, will provide insight into alternative metric designs to consider and integrate into the design of the metrics.

As the process develops, there will be a refinement of questions that will be addressed at each meeting. To begin with, some of the questions will be large in scope (e.g. can conservation credits be applied state-wide, or should they be applied only within a particular GSG population? Does increasing the risk of invasion by cheat grass constitute a total or partial impact? How is fire-risk to be quantified? Can conservation credits for e.g. invasive removal be earned multiple times on the same patch of land?). However, the scale of questions should become more and more focused on building an operational system in order to facilitate transactions.

The science working group should meet as an advisory group for the process, on a monthly basis. RESOLVE has extensive experience with management of such processes and a substantial network of potential science advisors. These monthly meetings should match a similar schedule for engagement with managers and stakeholders.

Policy/Operations Working Group

The policy/operations working group, which will be made up of local leaders, will inform the development of operational procedures and policies of the conservation credit system. The operational procedures include steps for land owners and program administers to generate credits through conservation practices, acquire credits for mitigation or public investments into habitat improvement, and improve the tools, procedures and policies as new science becomes available and the policy setting changes. The policy/operations working group also communicates progress to relevant stakeholder groups, and conducts outreach to potential pilot participants. The policy/operations working group meets monthly, and typically consists of diverse representatives from the environmental, agricultural, and energy development sectors. Throughout market development, the policy/operations working group will engage additional regulatory agencies, non-profits, local municipalities, scientific research organizations, energy interests and the agricultural community to ensure concerns and issues are directly reflected in market design. Additional input and perspectives are welcomed to ensure the conservation credit system addresses the needs of all potential market participants.

Science will evolve during the implementation of the conservation credit system. A key issue for any functional mitigation system is the degree to which it should be stable, or change as new information is developed. From an operations standpoint, there is a strong incentive for stability, and lack of change; however there is a strong regulatory requirement to use currently

best available science. Thus, engagement of the policy/operations and science working groups is important to develop an operational manual that has functionality from a business management perspective, but which would allow metrics to be altered through a defined decision-making processes as new data and priorities emerge.

Stakeholder Outreach

Stakeholder outreach is important for design purposes – however it is absolutely essential for a plan is to be accepted, adopted, and seen by USFWS as a functional and operational system. Three primary venues for stakeholder outreach include:

1. Conservation credit system governing/advisory meetings (e.g. Nevada Sagebrush Council meetings).
2. Workshops targeted at future system participants and other stakeholders, which seek guidance on key issues such as operability and cost.
3. Science working group workshops that focus on management issues and encourage attendance by stakeholders.

CONSERVATION CREDIT SYSTEM DEVELOPMENT PROCESS

The team's proven process for building a conservation credit system follows four stages of system development, as shown in the figure below. Since the Situation Analysis & Feasibility step has already been completed and is well documented in the Strategic Plan for Conservation of Greater Sage-Grouse in Nevada, July 31, 2012, our team is focused on System Design as the next step for the State of Nevada.

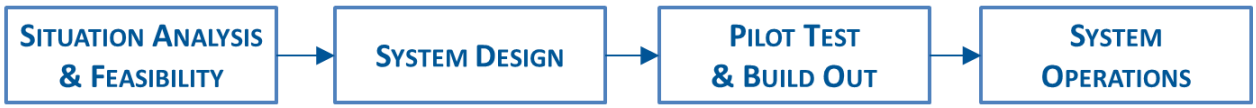


Figure 1: Development stages of a conservation credit system

1) **Situation Analysis & Feasibility:** A small set of interested and motivated stakeholders identify the type of habitat credits, the demand for credits, the necessary tools, the related policies and programs, and the primary participants needed to successfully implement a conservation credit system.

2) **System Design:** A larger set of interested stakeholders is engaged to develop specific tools and protocols used to 1) estimate habitat improvement from projects and relate the results across broad geographies, 2) verify, track and report results from implemented projects, and 3) support multi-entity collaboration on projects to fulfill multiple restoration program needs. This is the current need for the Sagebrush Ecosystem program. The process can be completed in 6 to 24 months depending on the availability of key personnel, need for lengthy debate among participants, and the desire to create unique metrics and operations versus tailoring existing products.

3) **Pilot Test & Build Out:** Stakeholders support exchange participants using the tools and protocols developed during conservation credit system design. The system design team is highly involved in facilitating the initial transactions and uses direct experience to build out the tools and processes to efficiently 1) evaluate habitat loss and improvements, 2)

document and track credit transfers, and 3) report overall performance on an annual basis. This period can last from less than 1 year up to 3 years.

4) **System Operations:** The long-term administrator of the conservation credit system with support from local service providers takes over to efficiently administer the system at the lowest possible cost.

TEAM QUALITIFICATIONS AND PROJECT EXAMPLE

Environmental Incentives and RESOLVE submitted this RFI response and are the primary partners of the proposed team.

Environmental Incentives (EI) was created to inspire conservation, innovation and investment by unlocking opportunities to improve the environment and develop ecosystem services. EI has extensive experience developing performance measures and environmental markets, including the water quality Lake Clarity Crediting Program for Lake Tahoe, the Lesser Prairie Chicken Habitat Exchange in the Western U.S., and the Mokelumne Watershed Environmental Benefits Program in California. EI worked closely with EDF and the Willamette Partnership to develop the Ecosystem Accounting Protocol[2] used by several conservation credit systems currently being implemented. EI will lead development of the overall program to ensure procedures are effective and consistently implemented. Jeremy Sokulsky, the President and founder of EI, previously presented to the Governor's Advisory Committee and is a recognized expert on the development of conservation cred systems for habitat and water quality.

RESOLVE was founded to promote the effective use of consensus building in public decisions on natural resource and public health issues to help diverse interests engage in dialogue, collaborative decision making, and action. RESOLVE has extensive experience building collaborations and resolving conflicts, including multi-stakeholder processes related to a range of candidate species for the Endangered Species Act. RESOLVE will lead the facilitation of policy and science-focused stakeholder groups in the development of policy and science required by the program. RESOLVE has a long-standing scientific program focused on ESA issues, including GSG in Nevada, Spotted Owls in the west, and operations of large-scale management systems (Everglades, Missouri, Rio Grande, etc.). We are a trusted science partner of many agencies, particularly USFWS. Dr. Courtney, who has previously presented to the Council, will lead the scientific workshops. However he will not participate in negotiation or stake-holder work, as he is presently acting in this capacity for a NV company. This will avoid any actual or perceived conflicts of interest.

EI and RESOLVE have preferred partners with deep expertise that may be important to this project depending on the scope. Examples of these partners include

[2] Environmental Incentives, LLC, Willamette Partnership, and Environmental Defense Fund. 2013. Ecosystem Accounting Protocol v0.9. Available at http://enviroincentives.com/resources/documents

Environmental Defense Fund's mission is to preserve the natural systems on which all life depends. Guided by science and economics, EDF finds practical and lasting solutions to the most serious environmental problems. EDF lead the development of catch shares program which have made significant impacts to the conservation of global fish stocks, and is currently working with EI in the development of six habitat exchanges. EDF would have a role in engagement with the U.S. Fish & Wildlife Service to leverage their relationships in the west and D.C., and in the development of the metric.

EcoMetrix Solutions Group, LLC (ESG)/Parametrix work in partnership to design quantification approaches for assessing habitat outcomes and have previously developed the metrics and methodology used to evaluate changes in habitat quality and quantity for multiple species, including the lesser prairie chicken, greater sage-grouse, mule deer, golden-cheeked warbler and various water birds. ESG and Parametrix will participate in development of the metric and related user guidance, and help design the monitoring and verification requirements.

Alan Glen and Steven Quarles are leading environmental attorneys in Texas and Washington DC respectively, with extensive experience in negotiating and codifying ESA agreements. Mr. Quarles has negotiated innovative conservation agreements including the recent programmatic state-wide HCP for solar and wind developments in California. Mr Glen helped to establish the Hickory Park and Clearwater Ranch (21,000 acres) Conservation Banks and is currently developing a 80,000 acre, five-state bank for prairie-chickens, as well as several other banks.

The Colorado Habitat Exchange provides a potential starting point to efficiently tailor to the needs for greater sage grouse in the State of Nevada. The Colorado Habitat Exchange was collaboratively developed by agricultural, energy, and environmental interests and policymakers in Colorado. The Colorado Habitat Exchange Overview attached to the email that transmitted this response describes the goals and objectives of the Colorado Habitat Exchange for greater sage-grouse and mule deer. This 2-page overview is used to introduce potential participants to the Exchange and build political and financial support for the Exchange. In addition, the Colorado Habitat Exchange Context and Scope defines the role of the Colorado Habitat Exchange related to environmental and community needs. This product can be found on the EI website at http://enviroincentives.com/resources/documents.