Nominees

Jen Schofield (USFWS Sacramento Fish and Wildlife Office) and Partners of the State Route 180 Resource Agency Group (Trais Norris – California Department of Transportation, Som Phongsavanh – California Department of Transportation, Leah Fisher – U.S. Army Corps of Engineers, Laura Peterson-Diaz – California Department of Fish and Wildlife, Clifton Meek – U.S. Environmental Protection Agency) Nominated by: Clifton Meek, U.S. Environmental Protection Agency

State Route 180 Westside Expressway Route Adoption Study

The State Route 180 Westside Expressway project (SR 180) in the Central Valley of California is a proposed 50 mile expressway corridor that would run east-west through some of the valley's most sensitive and rare habitats. The existing roadway traverses an area adjacent to the Kerman Ecological Reserve, Alkali Sink Ecological Reserve, proposed Alkali Sink Conservation Bank, Mendota Wildlife Area, Fresno Slough, and San Joaquin River. Together these areas represent a valuable patchwork of open water, riparian, alkali scrub, and vernal pool habitats that have become increasingly rare due to conversion to agriculture and residential development. In March of 2011, the California Department of Transportation (Caltrans) released a Draft Tier 1 Environmental Impact Statement analyzing 3 proposed alternatives; Alternative 1 would extend and improve the existing SR 180 facility, while Alternatives 2 and 3 would create entirely new roadway corridors to the north. While Alternative 1 had the greatest potential for impacts to existing reserve areas, Alternatives 2 and 3 would have resulted in direct and indirect impacts to unprotected habitat areas and would create an additional barrier to wildlife movement between existing reserves and the San Joaquin River riparian corridor. During circulation of the draft environmental document, it became clear that all of the proposed alternatives raised serious environmental concerns among Caltrans' resource agency partners.

In coming together to collaborate on an environmentally preferable project, the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, U.S. Environmental Protection Agency (State Route 180 Resource Agency Group), and Caltrans were able to reach consensus on an expressway project that allows for greater stewardship on a landscape level. A number of design variations were developed to address the concerns of Caltrans and the resource agencies regarding which alternative was environmentally preferable: expansion of the existing route or construction of a new facility.

The Preferred Alternative resulting from extensive interagency coordination proved to be transformative for the project, changing the focus from project impacts to potential environmental benefits that could result from the project. This agreed upon preferred alternative addresses infrastructure impacts of the past by reconnecting historic sloughs, waterways and sensitive habitat areas that have been bisected by the current roadway. With the addition of a viaduct structure traversing areas adjacent to reserves, among other improvements, the project is now proposing an alternative that addresses historic resource impacts from the original roadway construction, while allowing for expansion to address future facility needs. Elevating the expressway will 1) remove the existing roadway that

acts as a barrier between reserve lands on the north and south; 2) reconnect historic sloughs and seasonal waterways that have been disconnected for decades; 3) allow for improved sheet flow between north and south reserve areas; 4) enhance genetic exchange of vernal pool species; 5) improve connectivity between sides of the roadway to allow safe migration of species; and 6) reduce the incidence of wildlife/vehicle collision. This preferred alternative also ensures that conservation recovery strategies identified in the USFWS's Recovery Plan for Upland Species of the San Joaquin Valley are not impeded. One recovery strategy for the Fresno kangaroo rat includes protection of the proposed Alkali Sink Conservation Bank, which would have been greatly impacted through the creation on an entirely new expressway corridor to the north. The new preferred alternative allows that recovery strategy to move forward and provides connectivity between the proposed conservation bank and Alkali Sink Ecological Reserve to the South. In coming together to address shared concerns with the Draft Tier 1 EIS, the State Route 180 Resource Agency Group highlighted several opportunities to protect natural resources, while also expanding and improving upon the ecosystem services provided by existing reserve areas. In addition, the State Route 180 Resource Agency Group was able to coordinate on issues pertinent to NEPA, ESA Section 7, CWA Section 404, and Section 4(f) all at once.

Brooke Stansberry and John Cochnar (USFWS Nebraska Field Office) Nominated by: John Cochnar, USFWS Nebraska Field Office

Programmatic Agreement for Determination of Effects to Federal and State-listed Species from the Federal-Aid Highway Program in Nebraska

In January 2012, the Nebraska Field Office, Federal Highway Administration (FHWA), Nebraska Department of Roads (NDOR), and Nebraska Game and Parks Commission signed a Programmatic Agreement (PA) on a streamlined approach to regulatory compliance for fish and wildlife resources in Nebraska. The PA includes a standardized analysis process, documentation, and concurrence procedures for use by the signatory agencies for constructing and improving transportation delivery. Ms. Brooke Stansberry and Mr. John Cochnar of the Nebraska Field Office spend three years working with their agency partners to develop the PA. The PA and associated Endangered Species Act (ESA) Section 7 programmatic consultation enables all participating agencies to meet their individual agency missions efficiently and consistently while decreasing staff workloads and enhancing species conservation at a program level. Due to scheduling pressures, an increase in workloads, and a desire to integrate conservation into transportation planning more efficiently, the signatory agencies of the PA decided that developing a programmatic approach to consultation under the Endangered Species Act and Nebraska Nongame and Endangered Species Conservation Act was in the best interest of Nebraska's transportation industry and natural resources. Standardized effects determinations were agreed upon based on construction activity type, on-sight species records/habitat conditions, and the development of conservation conditions for all federal and State-listed species.

The PA contains a provision that requires the four signatory agencies to conduct an annual review of the process and assess its implementation. In September 2012, the four

agencies conducted a statistically valid review of the first year of projects reviewed under the PA. Results revealed that 100% of the projects were reviewed correctly. NDOR also determined that five weeks of review time had been reduced on each project for which the PA was applied. Minor improvements have been made to the PA to further improve the PA's effectiveness. The Nebraska PA is also being used by FHWA Headquarters as a model of environmental stewardship and streamlining methods through the FHWA Every Day Counts Initiative.

SR520 Program Consultation Team (USFWS Washington Fish and Wildlife Office) <u>Nominated by</u>: Bridget Moran, USFWS Washington Fish and Wildlife Office; Mike Grady, National Marine Fisheries Service; Julie Meredith, Washington State Department of Transportation

SR 520, I-5 to Medina: Bridge Replacement and HOV Project Agency Coordination Process

As part of the \$4.1 billion SR 520 Program, the I-5 to Medina: Bridge Replacement and HOV Project (I-5 to Medina Project) will rebuild 5.2 miles of limited-access highway in the cities of Seattle and Medina, Washington, bringing the facility up to current design standards and adding two high-occupancy vehicle (HOV) lanes to the four existing general-purpose lanes. The project's environmental process reflects the demands of a complex natural, built, and political environment. SR 520 passes through parks, neighborhoods, and historic districts; crosses water bodies bordered by wetlands and inhabited by endangered species; and serves a region in which transportation systems and their impacts are often fraught with controversy. In spring 2010, the Federal Highway Administration (FHWA) and the Washington State Department of Transportation (WSDOT), selected a Preferred Alternative for the I-5 to Medina Project that reflected input from all stakeholder groups and demonstrated the strength of the National Environmental Policy Act (NEPA) in informing the decision process.

Starting in 2007, a diverse suite of agency partners, regulatory agency staff, and stakeholder groups participated with WSDOT in a forum to collaborate on environmental compliance called the Regulatory Agency Coordination Process (RACp). Complementing the RACp, a variety of Technical Working Groups (TWG) were established to address specific technical subjects. Early in the planning process, the RACp and TWGs streamlined overall agency coordination by providing one forum in which all regulatory agencies and interested tribes could participate. However, once the I-5 to Medina Preferred Alternative was announced, the project shifted from primarily focusing on the NEPA process, to a more intense focus on ESA compliance and permit requirements. The United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Agency – National Marine Fisheries Service (NOAA-NMFS) (collectively, the Services) participated in the RACp and TWG process and played an important role in the project's successful consultation for Endangered Species Act (ESA) compliance.

Discussion topics within each TWG were tied to project environmental and design milestones, so that guidance from the group could be incorporated into the project design and included in the Final EIS, biological assessment, and permit applications. For

example, discussions with USFWS and NOAA-NMFS included long-range considerations for the new SR 520 floating bridge and led to a suite of stormwater treatment methods. The Services helped WSDOT identify potential species and habitats of concern, opportunities to avoid and minimize impacts to these resources, methods for quantifying potential effects to the resources, and mitigation for the anticipated effects. Many of the agencies had common interests and concerns in terms of resource protection, enhancing the collaborative approach to seeking avoidance, minimization and mitigation solutions. Agency participants recognized the importance of all salmonids as an iconic resource in the Pacific Northwest. The project environment, as a highly urbanized and regulated system, represents a unique circumstance for the intersection of a transportation project and these fisheries resources. This called for an innovative approach in addressing potential effects on the fishes and aquatic habitats.

The ESA Steering Group and Natural Resources TWG proved to be highly successful, and were integral components of the environmental and permitting elements of the I-5 to Medina project. The guidance the team received through this collaborative effort helped the project team better avoid and minimize impacts to natural resources, identify appropriate mitigation sites, and expedite the process for obtaining all necessary permits and approvals. By using this collaborative process, WSDOT, the Services, and other agencies were able to effectively communicate project issues, educate each other on issues of concern, and build trust, rapport and consensus. Without such an ambitious approach for collaboration and the committed engagement from agencies, the project would not have met such an aggressive schedule, nor would it have achieved an exemplary level of ecosystem protection and mitigation. In addition, the relationships established through this process have led to success in ongoing coordination on I-5 to Medina Project phases as well as serving as an example to other large WSDOT projects, such as the Columbia River Crossing Project

Dr. Karl Halupka (USFWS Central Washington Field Office)

Nominated by: Jason W. Smith, Washington State Department of Transportation

Washington State Department of Transportation I-90 Snoqualmie Pass East Project

Interstate 90 (I-90) is the major east-west transportation corridor in Washington State. The purpose of the 15-mile I-90 Snoqualmie Pass East Project is to meet projected traffic demands and improve public safety. The project needs are to address avalanche closures; stabilize slopes; correct structural deficiencies; add capacity; and reconnect plant, wildlife, and aquatic habitat (ecological connectivity) north and south of I-90. Due to its location in the Cascade Range, Snoqualmie Pass has been recognized as a critical connective link for the north-south movement of fish and wildlife, hydrology, and habitat. Protecting and linking these habitats and ecosystems is a regional and national priority. East to west, the I-90 corridor represents the narrowest width of public lands in the Cascade Mountains. Previous studies have identified this corridor as a critical area for connecting species populations in the Pacific Northwest; National Forest lands in this area are part of the Snoqualmie Pass Adaptive Management Area. Improving ecological connectivity also reduces risks to the traveling public from collisions between wildlife and vehicles.

The Washington State Department of Transportation (WSDOT) and Federal Highway Administration (FHWA) convened a 12-agency Inter-Disciplinary Team (IDT) to help determine the screening criteria that would be used to evaluate and select the alternatives for the I-90 Project. Dr. Karl Halupka has been a member of the IDT since April 2002; he has served on several specialty sub-committees convened by the IDT, such as the MDT (Mitigation Development Team), a multi-agency team of biologists and hydrologists that provided technical assistance in determining strategies, performance standards, and recommendations to guide WSDOT designers in developing preliminary ecological and hydrologic connectivity design options throughout the I-90 Project corridor. Dr. Halupka played a vital role in the development of the I-90 Project's NEPA Draft EIS (June 2005) and Final EIS (August 2008) by reviewing and commenting on internal drafts, including the supporting expertise reports. Dr. Halupka's early and on-going involvement with the I-90 Project, such as developing a Planning Aid Report, shortened the amount of time it took USFWS to develop and issue the ESA Biological Opinion for Phase 1 of the I-90 Project in 2008, and subsequent revisions to the Biological Opinion due to regulatory updates for Phase 1B in 2009 and Phase 1C in 2010. Dr. Halupka's continued involvement in the I-90 Project has been critical in keeping it on time and on or below budget. WSDOTs believe that Dr. Karl Halupka should be commended for his progressive and proactive work as part of an inter-agency, inter-disciplinary partnership.

Steve Kirkland (USFWS Ventura Fish and Wildlife Office)

Nominated by: Nancy Siepel, California Department of Transportation District 5

U.S. Highway 101 Wildlife Corridor Safety Project/Regional Wildlife Corridor and Habitat Connectivity Planning

From 2005 to 2012, Steve Kirkland with the Ventura Fish and Wildlife Office worked as the transportation liaison serving the California Department of Transportation (Caltrans) District 5 in San Luis Obispo, California. Mr. Kirkland routinely collaborated with the Environmental Stewardship Branch (ESB) to promote projects that address wildlife and habitat connectivity issues locally and at the regional level in District 5. In March 2009, Caltrans District 5 applied for and received funding through the Transportation Enhancement (TE) program for the State Route 101 Wildlife Corridor Safety Project. During the application process, Mr. Kirkland provided support as a representative of the Ventura Fish and Wildlife Office and was identified as a partner on the TE application. The purpose of the project was to address animal vehicle collisions along a 2.5 mile rural stretch of State Route 101 north of San Luis Obispo. The project, which was completed in April of 2012, replaced the existing 5-strand barbed wire fence with eight-foot-tall wire mesh fencing that keeps wildlife off of the highway. The new fence guides animals to undercrossings at existing bridges and culverts that provide safe passage, while maintaining habitat connectivity. The project designed to preserve natural resources, be visually compatible with the surrounding landscape, and improve safety for both motorists and wildlife received a 2012 Excellence in Transportation Award.

Also in March of 2009, ESB submitted a Special Study Proposal to Caltrans Headquarters State Planning and Research Program to develop a Regional Wildlife Corridor and Habitat Connectivity Plan (Plan). To strengthen the proposal, letters of support from various stakeholders were included in the application. Mr. Kirkland was instrumental in providing a letter of support from the Ventura Fish and Wildlife Office and participating in the stakeholder process. The purpose of the study is to develop a science-based Plan that will provide a valuable tool that both state and regional transportation agencies can use to identify important wildlife corridors early in the planning process. This will facilitate the integration of long-range transportation plans, land-use plans, and conservation plans at a regional scale that promote habitat level conservation and ensures wildlife continue to have the ability to move across the landscape in the long-term and in a manner that protects both wildlife and the traveling public. The study, which received funding in April 2011, is in progress and has funding through February 2014. As a USFWS employee, Mr. Steve Kirkland's participation in both of these projects has contributed to supporting the essential elements for environmental stewardship and streamlining of transportation under the Strategic Environmental Stewardship and Streamlining criteria.

Phillip DeGarmo (USFWS Kentucky Field Office) and Transportation Partners

(Jose Sepulveda – FHWA Kentucky Division, Anthony Goodman – FHWA Kentucky Division, David Waldner – Kentucky Transportation Cabinet, Andrew Logsdon – Kentucky Transportation Cabinet, Virgil Lee Andrews Jr. – USFWS Kentucky Field Office)

Nominated by: Virgil Lee Andrews, USFWS Kentucky Field Office

Programmatic Consultation and Conservation Memorandum of Agreement for Effects on the Indiana Bat Associated with Transportation Projects within Kentucky

In 2012, Phillip DeGarmo with the U.S. Fish and Wildlife Service Kentucky Field Office (KFO) led the completion of a new programmatic Endangerded Species Act (ESA) compliance process related to the Indiana bat (*Myotis sodalis*). Working with the Kentucky Transportation Cabinet (KYTC) and the Federal Highway Administration's Kentucky Division (FHWA), Mr. DeGarmo created a process that reduces the time and expense of ESA Section 7 consultations and contributes to the KFO's statewide conservation and recovery goals for the Indiana bat. With the development of a Programmatic Biological Assessment as well as a Programmatic Conservation Memorandum of Agreement (Programmatic CMOA) between KFO, KYTC, and FHWA, the environmental review process for transportation projects and their impacts to the Indiana bat is more consistent and efficient throughout the state of Kentucky and focuses valuable financial and personnel resources toward the species' conservation.

The new programmatic process ensures that ecosystem and Indiana bat habitat concerns are integrated into the transportation planning and project development processes. More specifically, the programmatic process actively promotes avoidance and minimization of impacts early in project development, and where avoidance is not possible, aggregates the effects of many small impacts to achieve conservation and recovery benefits that previously were not possible. Further, the programmatic process also provides recoverybased conservation benefits for the Indian bat in the form of habitat protection and/or voluntary contributions to the Indiana Bat Conservation Fund (IBCF), which funds habitat conservation, restoration, and priority monitoring and research projects for the Indiana bat. To date, funding in the IBCF has contributed to the purchase of protected Indiana bat habitat throughout Kentucky, as well as to the installation of gates to restrict human access at critical hibernation sites. These commitments contribute to the KFO's statewide conservation and recovery goals for the Indiana bat. The primary benefits of this programmatic approach include:

(a) The process contains numerous options for KYTC and FHWA to attain ESA compliance relative to the Indian bat. This allows KYTC to choose the option that best fits their needs with respect to schedule, funding, and other project development variables, which allows KYTC to better control the process.

(b) The process relies on a simple and consistent approach for conducting biological surveys, preparing biological assessments, and evaluating the potential for individual projects to impact the Indiana bat. This helps avoid confusion in the environmental review process and minimizes delays in project delivery.

(c) The process ensures that any required mitigation is directed to the KFO's conservation and recovery goals for the species and that specific conservation and recovery objectives will be achieved.

The KFO's Intraservice Programmatic Biological Opinion and the Programmatic CMOA establishes an ESA compliance process that other agencies can apply to their own programs/activities as well. This ensures that FHWA, KYTC, and other agencies' conservation actions are in line with and meaningful to statewide Indiana bat conservation and recovery efforts. By working collaboratively with his transportation partners, Mr. Phillip DeGarmo was able to create a process that minimized constraints and adverse impacts to the Indiana bat and maximized ecological benefit. As a result, potential conflicts have been reduced, relationships have improved, and new partnerships have become established.

Steve Robertson and Nicole Jimenez (USFWS Southwest Regional Office) <u>Nominated by</u>: Larry Voyles, Arizona Game and Fish Department

US 93, Hoover Dam to MP 17 Desert Bighorn Sheep Overpass Research Projects

The US 93 highway project is one of the first projects in the nation to use GPS movement data for the identification of wildlife passage structure locations. Understanding the potential for increased bighorn sheep-vehicle collisions and reduced habitat connectivity for desert bighorn sheep inhabiting the Black Mountain Ecosystem, the US 93 Technical Advisory Committee, consisting of members from Arizona Department of Transportation (ADOT), Arizona Game and Fish Department (AGFD), National Park Service, Bureau of Land Management, and Federal Highway Administration, employed researchers from AGFD to begin the evaluation of sheep movements to determine areas to focus mitigation efforts. This research, funded through the United States Fish and Wildlife Service Wildlife Restoration Program combined with funding from the ADOT Research Center and Federal Highway Administration involved the aerial capture and collaring of 36 sheep distributed throughout the study area, and ultimately resulted in 73,496 GPS locations. Analysis of sheep movements, provided by this joint research project,

identified five regularly traveled ridges and the Technical Advisory Committee applied adaptive management to determine wildlife overpasses would be a preferable option to underpasses, which were simultaneously proving relatively ineffective along State Route 68. ADOT constructed three overpasses at focal areas traveled by desert bighorn sheep (accounting for 82% of GPS recorded desert bighorn sheep crossings) to complement two other large highway bridges. On February 1, 2011 nearing completion of the overpasses and funnel fencing, designed to guide sheep to the crossings, researchers documented the first ever crossing of a wildlife overpass by desert bighorn sheep.

AGFD researchers continue to monitor sheep adaptation to the newly divided highway through GPS movement data, video and still camera surveillance and sheep-vehicle collision rates. To date, AGFD has documented nearly 2000 sheep using the overpasses and post-construction evaluation will continue through 2015 with funding provided by the US Fish and Wildlife Service Wildlife Restoration Program, ADOT, AGFD and Arizona Desert Bighorn Sheep Society. Recommendations from these research projects not only benefit sheep, but provide safe crossing opportunities for all wildlife in the area, promoting habitat connectivity and in turn a healthier ecosystem. This project is one of many high profile wildlife-highway interaction projects in Arizona funded through the Wildlife Restoration Program. The collaboration and support of Mr. Steve Robertson and Ms. Nicole Jimenez of the USFWS Sport Fish and Wildlife Program, has been essential in making this research and its benefits available.