

Responses to ISRP Preliminary Comments and Recommendations

Program: Conservation Enforcement

Project ID: #35051

Title: Evaluate Feasibility of a System-wide Multi-Agency Fish, Wildlife & Habitat Conservation Enforcement Web-Based Data Center

Sponsor: Steven Vigg & Company

FY03 Request: \$41,347

5YR Estimate: \$41,347

Short Description: Develop a Columbia Basin web-based data center - within a GIS framework - to facilitate conservation law enforcement data compilation & analysis and information sharing for enforcement programs, resource managers, and public information & education.

Response Needed? Yes

General Comments on Conservation Enforcement Proposals:

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| The proposals should also describe the potential for matching effort. |
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In the proposal we specified a match of \$5,220 – or an additional effort corresponding to about 12.6 percent of total costs of the feasibility study. The matching costs would include Web Hosting for the prototype site and data transfer from the ongoing M&E studies to the prototype site. In the future, if the system-wide data center is implemented, it is likely that CRITFE could facilitate matching funds (perhaps 50%) via the “COPS” grants (Chief Johnson, personal communication). To date, CRITFE has obtained close to \$1 million in funding from DOJ grants to implement mobile data terminals and computer system hardware to automate data collection and retrieval using “state-of-the-art” software designed specifically for police applications.

ISRP Preliminary Comments:

We agree that a web-based data center would probably increase the efficiency of system-wide interagency enforcement coordination and would most certainly improve the monitoring and evaluation within and across all enforcement programs. During the ISRP presentations (July 18, 2002), the use of the proposed web site to facilitate communication links – among enforcement projects (secure) and with the public (open access) was discussed in detail; one reviewer suggested an email alerting system. We think these are good ideas and plan to incorporate the communication functions into the feasibility study. We concur that the enforcement data center offers potential benefits to fish and wildlife at a relatively low cost.

However, it is not clear from the proposal what the web-based data center would provide over what is provided by the existing Eco-Law site. Could the Eco-Law website be expanded to meet enforcement coordination needs? How does this proposal relate to the tribal enforcement proposals in terms of the www-based tasks?

The following table compares the existing M&E web site www.Eco-Law.net designed for two ongoing CE projects (2000-55 and 2000-56) to the proposed system-wide CE Data Center.

| Attribute | www.Eco-Law.net | System-wide CE Data Center |
|--|---|--|
| Web-based | yes | yes |
| GIS-framework | no | yes |
| Systemwide | no | yes |
| Project Specific | yes | no |
| Documents BPA Project Deliverables/ Accountability | yes | no |
| M&E Results of NPT-CE Project 2000-055 | yes | no |
| M&E Results of CRITFE Project 2000-056 | yes | no |
| Will document M&E results of Colville and Umatilla Tribes M&E (if CE projects are funded) | yes | no |
| Posts M&E Project Reports | yes | no |
| Sophisticated Data Base | no | yes |
| Includes Enforcement Statistics from other Tribal LE Entities | no | yes |
| Includes Enforcement Statistics from State LE Entities | no | yes |
| Includes Enforcement Statistics from Federal LE Entities | no | yes |
| Includes Ability to use layers of biological and environmental data incorporated into enforcement evaluations | no | yes |
| Increases effectiveness and coordination of CE efforts | yes (limited to participants) | Yes (system-wide) |
| Has a secure site for sole use of enforcement professionals | no | yes |
| Has Public Outreach Component | yes (limited) | yes (would be used as a means to conduct surveys and analyze time-series data) |
| Cost (design & maintain) | minimal | moderate |

- No, the Eco-Law.net website cannot be expanded within its present design, level of sophistication and scope to meet system-wide multi-agency enforcement coordination and M&E needs (refer to table above).
- The scope of the CE Data Center is beyond that of the individual tribal enforcement proposals; Eco-Law.net can, however, be expanded to meet the basic “open & accountable” reporting functions of information transfer and accountability of deliverables to BPA for the two new CE projects at a minimal additional cost.

Perspective on specific comments (below):

During the ISRP presentations (July 18, 2002), John Pizzamente (peer reviewer) made many comments and statements that we consider argumentative rather than constructive criticisms; his statements dealt more with his disagreement with the overall M&E approach of the Conservation Enforcement Projects than specifics on Proposal 35051 – that is intended to conduct a **feasibility study** for a system-wide Web-Based Data Center. Pizzamente was one of the principal investigators of the Peters et al. (1997) evaluation of the previous (1992-1997) Law Enforcement Program¹ which was terminated by the NPPC in the fall of 1997. The approach and results of the Peters et al. (1997) study were not endorsed by the NPPC nor implemented by participating law enforcement entities. In fact, one of the major recommendations of the Peters et al. (1997) study was that the system-wide Law Enforcement Program (BPA Project 92-024) was generally successful at meeting its goals and objectives and funding should be continued. Shortly after this study was completed and published by BPA, the NPPC decided to terminate the funding for Project 92-024 as of FY1998. Many of the specific comments below mirror those made by John Pizzamente at the July 18th ISRP review. We don’t agree with many of his statements that promote the Peters et al. (1997) study and downgrade the M&E approach and data interpretations of the new Nez Perce CE (2000-055-00) and CRITFE (2000-056-00) Projects – **but** we don’t think that the review of this new proposal regarding a potential web-based data center is the appropriate forum to debate old conflicts. With this perspective, we will attempt to extract any constructive comments or questions specific to Proposal 35051 from the following comments (note the reviewers comments are in boxes).

The proposal lacks specifics about the data to be collected and its purpose. The effort seems primarily to place existing data and databases in a web accessible format. Large sums of money were expended during the 1990’s for a law enforcement database. Much of that effort is no longer funded. Two projects remain related to tribal efforts on mainstem and tributaries. Peters et al. (1997) analyzed the previous databases and were generally supportive that law enforcement was a valuable tool in ESA recovery efforts. However, that report suggested significant inadequacies of the database to determine whether the efforts of law enforcement were being efficient and effective. That was because there was no direct link between cause and effect variables being collected. For example, if large numbers of hours of law enforcement resulted in high numbers of enforcement actions (positive correlation) then justification for the effort was deduced in high citation rates. If the opposite occurred with high enforcement hours and low citation rate (negative correlation) then law enforcement could take credit for lower numbers of violations because there was the “deterrent” factor. Such data make it impossible to “objectively” evaluate and manage law enforcement effort via statistics.

¹ The previous Law Enforcement Program (#92-024) that ended in 1997 was much different in scope and structure than the two new Conservation Enforcement Projects that were funded starting in year 2000.

The data to be collected are a time-series of standardized law enforcement input, output and outcome statistics. The enforcement statistics would include: (1) those collected by the two Conservation enforcement projects currently funded by BPA-funded (NPT-CE and CRITFE); (2) similar statistics planned for collection by the two newly proposed CE Projects (CCT and CTUIR) – including compliance rates of water diversions; and (3) similar standardized enforcement statistics routinely collected by other tribal, state and federal law enforcement entities in the Columbia basin (e.g., OSP, WDFW, IDFG, MFWP, USFWS, and NMFS). {Note: including point 3 above goes far beyond the scope of the data currently being collected in the two tribal projects and is necessary to conduct system-wide evaluations of allocation of enforcement effort and resultant outcomes.}

In addition, the enforcement data would be coded with GPS coordinates to facilitate basin-wide GIS analyses. Another major enhancement of the proposed data center would be (the feasibility) of layering environmental and biological data (stream characteristics, species presence/absence, survival rates, harvest rates, run sizes by stock, spawning escapement, etc.) – over the enforcement input-output-outcome data. Compilation and illustration of enforcement and biological data within a hydrologic unit-stream-subbasin-Province (GIS) framework will greatly enhance our ability to evaluate the performance of conservation enforcement efforts within a Columbia Basin ecosystem perspective.

We would also look at the feasibility of presenting, collecting and storing a third category of data – conservation information for public education and public survey data to assess changes in public awareness. The general approach would be to: develop a Public Outreach Web Page on the Data Center → develop a data base of interested publics (sport fishing, commercial fishing, non-consumptive recreational users, etc.) → develop issue statements relevant to conservation enforcement → use e-mail as a tool to distribute questionnaires/polls → publish results on the web site to complete the cycle of public awareness → conduct M&E on resultant public opinion data over time. This is the area that would be facilitated by the web-based format – effective and efficient exchange of information.

We would also evaluate the feasibility of a fourth potential function of the Data Center. That is, a secure site that would be used solely by Conservation Enforcement professionals to facilitate system-wide coordination of classified information and inter-agency operations. We would solicit the input of the Columbia Basin Law Enforcement Council (CBLEC) in designing this portion of the Data Center and determining the specific functions that could be incorporated to enhance Columbia Basin enforcement efforts.

There is no doubt that law enforcement is needed and has both deterrence and a punitive effect. Logic tells us that without law enforcement (or the threat of it), poaching and illegal harvest commercial or sport, would likely get worse. “Community Policing” was offered as an alternative means to involve the public and fishers (Peters et al., op.cit.). The proposal suggests such data would be useful and valuable to educating the public. The proposal should clarify how the data would be used in public education. How will outreach be conducted to ensure that the existence of the web-based data center achieves greater public awareness?

“Community Policing” is not really an “alternative means” to involve the public and fishers, but another approach that has always been used by the traditional “Game Wardens” who were an integral part of rural communities – and include the Public Outreach efforts routinely conducted by Oregon State Troopers (and other state and tribal entities) at the local level. The CRITFE

project has been very successful in obtaining funds from the DOJ “COPS” grants specifically for the purpose of promoting Community Policing in Zone 6 – including public safety at the Tribal in lieu fishing sites.

See the response above and the responses of the individual project sponsors for more detail regarding public education, outreach and awareness.

The proposal suggests coordination with radio-tag efforts of University of Idaho. Unfortunately, unless specific hypotheses about illegal harvest, and experiments are designed to test those hypotheses, determining the loss rate of salmon as they migrate mixes all of the causes of mortality because the fate of missing salmon are generally unaccounted. Until a specific set of hypotheses outlining exactly what data should be collected, how it will test or evaluate law enforcement effectiveness, this effort proposed herein will be simply an extension of a old database that tracked effort, tracked crime rate, number of fish lost to poaching in illegal nets, expenditures, and total violations rates. But it will not tell us whether we need more, less or different forms of law enforcement actions.

We have spoken with the Project Leader of the UI adult radio-tracking study, and confirmed that the research project has compiled and are continuing to collect data on individual fish that (a) are not accounted for by any known fate, and (b) are specifically accounted for as an illegal take (e.g., as they ride up I-84 in a vehicle during closed season). These data will probably be very valuable in the future to help evaluate the efficacy of enforcement efforts. The unaccounted/illegal take data are stored as a small sub-set of a huge data base being maintained by NMFS; however, the UI project is behind on annual reports and is unwilling to release any of this data prior to project completion. One concern of the project leader is that if the specific data -- indicating the levels of unaccounted loss and illegal take -- were released at this time, the Project would loose the cooperation of fishermen in returning tags and their study would be compromised.

We have developed a (long-standing) null hypothesis that: previously unaccounted losses of adult salmon migrating through the Columbia River system are not due to illegal take.

We have also developed a (long-standing) null hypothesis that: increased levels of conservation law enforcement effort do not change the level of illegal take of adult salmon during the upstream spawning migration in the Columbia River system.

Other concerns include the following: The level of future effort to populate, analyze and report on the database collection will be far greater than designing the pot in which to put the data. Thus, implied in this web database effort are large future investment costs. Those investments, to be worthwhile, must have a better handle on exactly why specific data will be collected, how it will be used. There is a high degree of value in law enforcement data if we design the proper framework for that data. Thus the key question for the researchers focuses on the findings of Peters et al. A future proposal should carefully weigh those recommendations and incorporate them into the “new” law enforcement database.

The proposed project is intended to study the **feasibility** for a system-wide Web-Based Data Center with a GIS framework. As part of this initial evaluation we will identify various

approaches, and attempt to obtain preliminary estimates of the cost of implementing different approaches.

Implementing a full scale CE Data Center, populating it with multi-agency data, conducting geographic-based data analyses, and completing a system-wide evaluation is far beyond the scope of this feasibility study. Any future project designed to conduct that work would be subject to regional review at the time the detailed proposal is made.