

Visitor Experience and Resource Protection Lessons

Volume 1

**Dealing with Subject Matter Experts
Teamwork and Social Dynamics among Planners**

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October 1995

AUTHOR

John Austin

REVIEWERS

John Hoesterey (chairperson)

Jim Hammett

Joel Kussman

M. J. LaRock

Richard Lichtkoppler

Michael Rees

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PURPOSE, SCOPE, AND LIMITATIONS

The purpose of this paper is to document some of the lessons learned from the Visitor Experience and Resource Protection (VERP) planning process. VERP is a process to establish visitor carrying capacity. The intent is to manage visitor use to avoid unacceptable impacts to visitor experiences and resource conditions. This document includes only those lessons dealing with subject matter experts, teamwork, and social dynamics among planners. These lessons are not intended to stand alone. The reader is urged to read volume 2, the companion document about the social science technical lessons. There were many other lessons learned from VERP that have not yet been compiled.

The lessons presented in this paper are based on the planning experience at Arches National Park and at other parks such as Grand Canyon, Canyonlands, Mount Rainier, and Yosemite. It describes both what went well and what did not and is meant to provide guidance for future VERP users — what to do and what to avoid.

This is not a paper about complex or highly technical issues. Many of the lessons presented are intuitively obvious; little more than common sense. Some of the lessons are so obvious and so widely applicable that it really should not be necessary to have to state them.

This paper does not represent the consensus opinion of the VERP team. However, the author and reviewers believe, to the best of their knowledge, that each lesson is true.

This paper is neither a training manual nor a handbook. It is intended as an in-house discussion and consensus-building paper. It has not been edited. The lessons are closely related and often overlap.

This document addresses our experiences applying VERP at Arches National Park and at other parks. The initial efforts were not perfect; mistakes were made. It is critical that we acknowledge what types of mistakes can occur, so that future planners can avoid the pitfalls we encountered. Many (perhaps most) of the lessons in this paper were learned the hard way. An attempt has been made to make this paper positive without obscuring the lessons or eliminating mention of the potential pitfalls. The emphasis is on how and why things should be done differently next time. The potential for mistakes is described and the action to avoid them recommended. Describing the potential pitfalls of VERP in detail should assist us in improving the quality of our products.

The author and reviewers are in agreement that all of the lessons in this document have value for implementing VERP. Many of the lessons may have broader applications in various other facets of planning. Some have general relevance for technical, controversial, or highly charged planning situations. Some of the lessons are as simple as addressing the pitfalls of poor communication, failure to obtain closure, group dynamics, or similar social issues. Some relate to the fact that data is playing a more important role in planning. Including such lessons in this document does not imply that these lessons are of particular importance for VERP.

DEALING WITH SUBJECT MATTER EXPERTS

Problem Statement

What is the role of subject matter experts in VERP? What are the potential pitfalls?

Discussion

For Arches, there were experts in areas ranging from management zoning to social science. No one can be an expert in everything. The technical aspects of social science play a critical role in VERP. More so perhaps than in any other aspect of planning. It's difficult to imagine how you could successfully do VERP without social science and statistical expertise on the team. (Although this may have staffing or training implications for the DSC, that is beyond the scope of this paper.)

It can be a challenge for a planner to work with people who have specialized skills. Particularly if the expertise is in some field with which the planner is relatively unfamiliar.

Dealing with technical subject matter experts is a necessary part of the process, but it is not easy. Incorporating their work and expertise requires extra effort on the part of both the specialist and the other team members.

UNDERSTANDING TECHNICAL PEOPLE

TECHNICAL PEOPLE
RESPOND TO QUESTIONS
IN THREE WAYS.



IT IS TECHNICALLY
IMPOSSIBLE.



MEANING: I DON'T FEEL LIKE
DOING IT.

IT DEPENDS...



MEANING: ABANDON ALL HOPE OF
A USEFUL ANSWER.

THE DATA BITS ARE FLEXED
THROUGH A COLLECTIMIZER
WHICH STRIPS THE FLOW-
GATE ARRAYS INTO VIRTUAL
MESSAGE ELEMENTS...



MEANING: I DON'T KNOW.

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Recommendation

VERP is complex and draws on several technical specialties. At least one team member should become conversant enough with the subject to ask intelligent questions and recognize when something may be amiss.

Both subject matter experts and other planners will occasionally point out problems with data or with the way that data is being used. All team members, especially those raising the problem, should consider whether there are alternative solutions. Abiding by that philosophy could go a long way toward alleviating some of the problems encountered in our initial attempts at implementing VERP.

BECOMING CONVERSANT IN TECHNICAL SUBJECT MATTER

Problem Statement

To what extent is it necessary for the team to become conversant in the technical subject matter?

Discussion

It is important that the team make informed decisions. That requires integrating technical expertise into the planning process. This is not a trivial undertaking. You have to be competent to intelligently review the input of technical experts. The ideal situation is if the technical expert is an NPS employee, preferably one familiar with the VERP process. Even in this case, the team must provide some oversight. VERP is not an exact science. Two heads are better than one, especially when it comes to having insights. Anybody can make a mistake or overlook a critical assumption. Informed oversight is particularly helpful at the beginning of the process while everybody's coming up to speed on VERP and the particular application.

Subject matter experts are only human; they have their limitations. It's the responsibility of the team to find these limitations and to do this in a nonthreatening way.

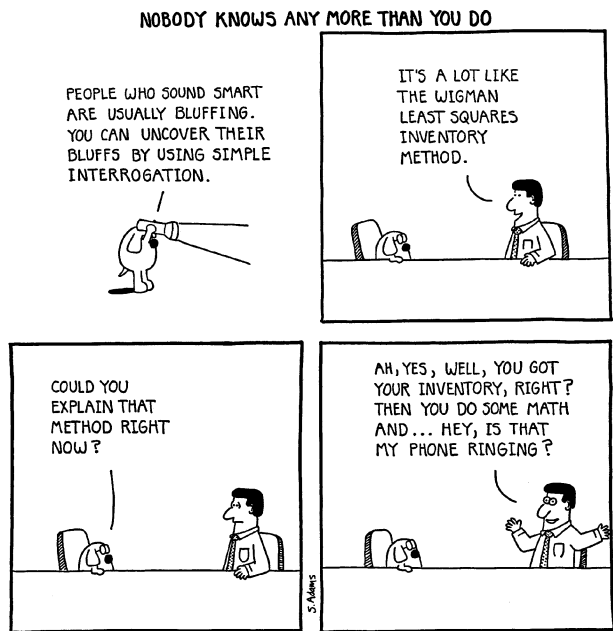
It is rarely practical to become fully knowledgeable in another person's specialty. The team will have to rely on experts to some extent. If you suspect there's something amiss, question them. Questioning is good; very good. Understanding (or attempting to) is good. This is a learning process; similar to that advocated in the DSC reorganization plan. If the team has more than one subject matter expert, they will sometimes disagree. This isn't a problem unique to technical matters. If the team has more than one planner, they too will sometimes disagree.

Recommendation

Questioning and disagreement are healthy. Ideally differences should be resolved; strive for consensus.

If this is not possible or practical, at least acknowledge the divergence of opinion. It's fine to turn to other subject matter experts or consultants. Due to the nature of the problem, you cannot avoid accepting some stuff on faith. But it does not have to be blind faith. Verify their credentials. Make an effort to understand what they are doing; at least enough to be comfortable with it.

It is desirable for some or all of the team members (especially the general planners) to become conversant in each specialty; the overall process will benefit. This may not always be practical. At least one team member must become sufficiently conversant in the technical expert's subject matter to ask intelligent questions.



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TECHNICAL EXPERTS WHO ARE UNFAMILIAR WITH VERP

Problem Statement

To what extent is special care required when the technical expert is relatively unfamiliar with the VERP planning process?

Discussion

There are many potential pitfalls when using a contractor unfamiliar with the VERP process. One of the most dangerous is that they will attempt to apply their favorite approach without determining what approach is most appropriate to the situation. When your only tool is a hammer, all the world looks like a nail.

One statistician may try to force every problem into a situation that can be handled with LOGIT or with a Monte Carlo simulation.

Visitor use surveyors may jump right into designing a traditional survey instrument before determining what questions will later be asked of the data. These mistakes can all result from an expert being more familiar with his or her tools than with the team's needs. A square peg can be forced into a round hole, but you may not be satisfied with the fit.

Extreme caution must be exercised when hiring a consultant or contractor to do the actual planning.

This puts the team in a position of maximum exposure. A consultant will naturally prefer using his or her own particular process. There are plenty of large commercial and quasi-public tourist attractions that are skilled at dealing with crowds. They may indeed be able to provide valuable assistance. But don't turn the *process* over to the consultant. You will get his or her process, not yours. The team may not adequately understand the process nor the underlying assumptions. The team must understand the assumptions, process, and results; otherwise resources may be wasted on employing a consultant. This may have implications for how the contract is written as well as how the team interacts with the contractor. Perhaps the contract should specify certain feedback, review, briefing, or debriefing steps.

Recommendation

Special care is required when the technical expert is relatively unfamiliar with the VERP planning process; especially if he or she is a contractor. A team member must provide oversight even if you have contracted for multiple experts in a single discipline. The contracting officer will appoint a technical representative. This person should be technically proficient and a functioning member of the team. The contractor should become conversant with the VERP process as soon as possible.



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REVIEW OF TECHNICAL FINDINGS

Problem Statement

To what extent should technical findings be accepted on faith?

Discussion

It is generally impractical for all team members to be experts in every field. In an ideal world, technical experts would be infallible and the team would accept their expertise without question. But that is clearly not the case. It is the responsibility of every team member to either accept the expertise or to become sufficiently knowledgeable in the subject to recognize the consequences of rejecting their advice. This lesson does not imply that greater faith should necessarily be placed in those experts employed by the NPS than in those under contract.

Situations will routinely arise in which a team member doesn't understand a subject matter expert. The easiest (but most dangerous) response is to assume the expert is being stubborn, inflexible, close-minded, or otherwise unreasonable. It is easy to fall into the trap of believing it is primarily the responsibility of the specialist to clearly communicate; to make you understand his or her point of view.

Recommendation

It is a joint responsibility to understand the expert's viewpoint. If a team member chooses not to understand, he or she must accept some things on faith and trust the specialist.

Review of technical findings is important. All team members should offer other members the opportunity to review their work.

Reviewing the work of technical experts requires becoming sufficiently conversant in the subject matter to provide an intelligent assessment. This is time consuming; it is often neither necessary nor efficient for the entire team to expend this effort. It is fine for some team members to accept the material on faith. Planners must decide how much they want to learn and how much they want to accept on faith.

The person whose work is being reviewed should recognize that the reviewer's time is valuable and treat it as such. Don't ask someone to review a document unless you intend to seriously consider their review comments.

REJECTING TECHNICAL EXPERTISE

Problem Statement

What must the team do if it decides to reject technical expertise?

Discussion

Because of the nature of VERP, situations will frequently arise in which a technical expert pushes the team into an uncomfortable position. There are several causes for this. VERP forces the team to make difficult decisions; these cannot be postponed for somebody else to handle. VERP requires us to face the consequences of those decisions; management cannot easily change the plan if mistakes are made. To make matters worse, those decisions usually have to be made with inadequate data. Some of the most important decisions have no one right answer.

Few people enjoy being in such a situation. It's natural to want to disagree with a subject matter expert in such a situation. The easiest response is to shoot the messenger. Why did he or she have to open this can of worms? However, denial of the problem does not serve the process well. It is incumbent on the team members to either accept the information on faith or to become sufficiently knowledgeable to intelligently refute the expert.

Team members will disagree. Consensus on every detail is not always possible or necessary. The entire team should be particularly concerned when a technical expert expresses the opinion that the team is making ill-considered decisions. Especially if these decisions might significantly detract from VERP's potential usefulness.

When the area of disagreement is technical concerns, consideration should be given to the technical qualifications of the various parties. If you have two subject matter experts and they are in agreement, then it's particularly imprudent to disregard their comments out of hand. Wishing away concerns (especially when they come from individuals technically qualified to voice an opinion) will not make them go away. Not understanding the importance of technical considerations is inadequate justification for dismissing them.

Wishful thinking will not get you very far. It does not serve the process well to ignore or suppress unpleasant details and disagreements. Wishful thinking is particularly dangerous when data exists to suggest your position is incorrect.

Be careful when disagreement exists about how to use data or a computer model. The analyst should be in a good position to interpret the results and limitations of that data or model. It is very appropriate to question. But a very good justification is required to interpret the data or model in a way that the analyst believes is invalid. Make sure of your facts.

If the team decides to refute a technical expert or remove him or her from part of the process, it becomes incumbent upon other team members to become knowledgeable in that field of expertise.

This works the other way as well. A subject matter expert may voice his or her strong opinion that the team's proposed research is doomed to failure or their interpretation of the data is flawed. The safest recourse in such a situation is to get a second opinion. Ideally you should consult with an expert whose credentials are acceptable to all parties.

Recommendation

This lesson builds on the previous note about a dual responsibility for understanding. There should be a teacher-pupil relationship. The expert cannot just walk away when a team member fails to understand his or her point. Planners cannot disregard or blame an expert because they fail to understand his or her point. They cannot reject or refute the expert's knowledge out of hand. If a technical expert's opinion is rejected, the planners are responsible for documenting their rationale, and the technical expert is responsible for documenting his or her rejected position.

Dissenting opinions should be acknowledged. At the least, team members should understand the opinion and it should be recorded. This is especially true when the matter in dispute is technical, and the technical expert is the one expressing the dissenting opinion.

If you decide to disregard comments from a subject matter expert, your justification should be pretty good and should be recorded.

Rejecting technical expertise requires the planner to assume that burden.

LESSONS NOT REVIEWED

Opportunity for peer review. Works great for revegetation group. Pass/fail grade. Directions for how to improve. Strongest supporters seem to be the GRTE/YELL/GLAC cluster under Jack Nichols.